

12th Annual

Student Academic Conference

Showcasing the work and talents of MSUM students



Support: This conference exists because of the work of the entire university community, both in financial and moral support. Supporters include: Solomon Comstock Fund, Strategic Grant Initiatives Fund, President's Office, Academic Affairs, Student Affairs, Administrative Affairs, Alumni Foundation, Inter Faculty Organization, MSU/AASE, AFSCME, Student Senate, Campus Activities Board, Student Budget Committee, and Sodexo Services.

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Purpose

The purpose of the Student Academic Conference is to showcase the work and talent of MSUM students through presentations, posters and creative works at a one-day conference held annually at MSUM in April in the Comstock Memorial Union. All students are encouraged to submit presentation applications. We strive to accommodate all students who wish to be presenters. Parents, friends, prospective students, alumni, employers and the university community are welcome to attend the conference to witness the excitement of intellectual exchanges among our students.

Sponsors

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www.mnstate.edu/acadconf



The MSUM Honors Program

provides excellent teaching, mentorship, and long-term intellectual development to academically advanced students seeking an interdisciplinary liberal arts program. Emphasizing the development of the student's unique world view and intellectual potential, the program focuses the student's academic talent through small classes that motivate thinking across disciplines.

Benefits of Honors Program

- Small class sizes
- Individualized mentoring with faculty Honors Mentor
- Extra-curricular activities designed for Honors students
- Interdisciplinary and integrated general education experience
- Greater marketability at graduation
- Requirements for Honors Program fulfill Dragon Core



FOR FURTHER INFORMATION,
PLEASE EMAIL
honors@mnstate.edu
OR VISIT
www.mnstate.edu/honors

How the Conference got Started



MSUM'S STUDENT ACADEMIC CONFERENCE

Purpose: Minnesota State University Moorhead's Annual Student Academic Conference (SAC) provides students, graduates and undergraduates, from across academic disciplines with an opportunity to showcase their projects, scholarship, research, and creative activity to faculty, administrators, peers, and local community in a formal setting and provides an opportunity to involve the campus community in this learning and discovery process. The Student Academic Conference features the enormous talent which MSUM student learners bring to the local community and the state.

Origin: The Student Academic Conference was conceived in 1998 through the collaborative efforts of political science professor, Andrew Conteh, and his then student-assistant, Ryan Sylvester who is currently pursuing a graduate degree in Law at the Fordham University Law School in New York City.

Its own day: Since 1998, the Conference has truly become an MSUM Spring celebration evolving students, faculty, and staff. Through the good offices of the Academic Vice President Dr. Bette Midgarden and the University Calendar Committee the Conference day has now been declared a non-instructional day. This decision has enabled students to devote their attention to the conference sessions rather than having to choose between attending classes or the conference. Since the conference is now an all day event, this enables the organizers to accommodate more student applications and to start the sessions early in the morning. Rather than having two sessions after the opening lunch, there is now a session before lunch.

Guiding Principles: The conference organizers remain committed to:

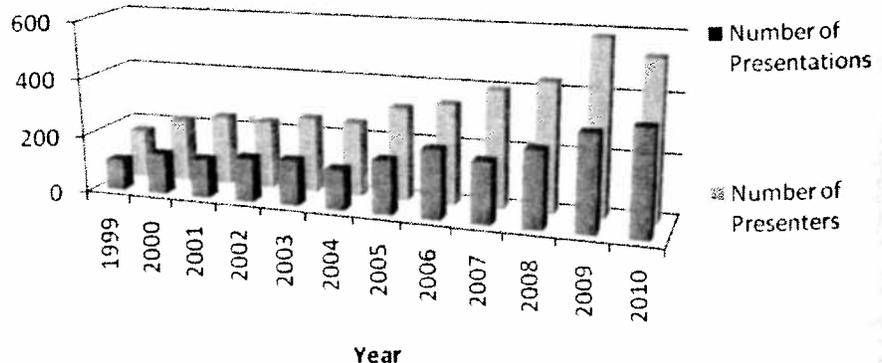
- Ensuring that students are growing as active scholars beyond the learning acquired in the classroom setting.
- Encouraging a multi-disciplinary approach to research projects
- Allowing visitors and guests to explore a panoply of different efforts showing the breadth of opportunities presented in the campus environment
- Setting the pace and being the model for research by students across the Minnesota State Colleges and Universities system.

Support: The Student Academic Conference has enjoyed the support of many faculty, administrators, support staff, and student organizations throughout its history. Without this support, both financial and more importantly, donation of time and creative energy, the Student Academic Conference would not be able to continue to grow each year.

Conference Highlights

2010	354 Presentations / 530 Presenters
2009	325 Presentations / 585 Presenters
2008	258 Presentations / 436 Presenters
2007	208 Presentations / 398 Presenters
2006	233 Presentations / 341 Presenters
2005	184 Presentations / 317 Presenters
2004	139 Presentations / 253 Presenters
2003	156 Presentations / 258 Presenters
2002	151 Presentations / 234 Presenters
2001	133 Presentations / 241 Presenters
2000	139 Presentations / 218 Presenters
1999	107 Presentations / 170 Presenters

Increase in SAC participation by year



Letter from the Chancellor



Dear Minnesota State University Moorhead Students, Colleagues, and Friends:

Once again, I am delighted to join with the Minnesota State University Moorhead academic community to celebrate the accomplishments of all who are a part of the Annual Student Academic Conference.

This year's brings us to the twelfth anniversary of the university's conference, an event that is recognized statewide for the depth of student scholarship and breadth of achievement that are exhibited. I am grateful to witness the growth and continuation of this undertaking, as well as the support it has earned from President Edna Szymanski. Our faculty, staff, and student learners deserve congratulations.

On behalf of the Minnesota State Colleges and University board of Trustees and your Office of the Chancellor colleagues, best wishes for success with the 2010 Annual Student Academic Conference.

Sincerely,

A handwritten signature in cursive script that reads "James H. McCormick".

James H. McCormick

Letter from the President



Greetings:

Our annual Student Academic Conference is a Spring Semester highlight. Since 1998 it has provided an outlet for student research and creative work. Over the years thousands have shared their knowledge in an environment that encourages inquiring minds and faculty mentoring. It's an activity that underscores our Mission Statement:

Minnesota State University Moorhead is a caring community promising all students the opportunity to discover their passions, the rigor to develop intellectually and the versatility to shape a changing world.

The conference offers a stage for new ideas from the next generation of researchers and leaders. It advances intellectual development and challenges students to effectively communicate their knowledge. Defending research in a supportive community of student and faculty scholars is a great way to experience personal and professional growth.

Congratulations to the student participants, faculty mentors, and the Student Academic Conference planners. A very good idea has become a wonderful tradition!

A handwritten signature in cursive script that reads "Edna Mora Szymanski".

Edna Mora Szymanski, Ph.D.
President

Letter from the Vice President of Academic Affairs



Conference Participants:

There are so many reasons that the MSU Moorhead Student Academic Conference became a tradition. Student learning and excellent faculty teaching are what we are about, and nothing is more appropriate for us to celebrate than student achievements in scholarship, research, and creative activity.

It seems that more and more attention is focused on institutional collaborations and partnerships. It is particularly important to keep in mind always that the most vital collaboration is the one between student and teacher, learner and mentor. Students and faculty members at MSU Moorhead have long engaged in creative, meaningful learning experiences beyond the traditional classroom. Today, we all have the opportunity to learn from the results of so many truly special partnerships.

As you make your selections and visit the poster sessions, be certain to ask the student presenters questions about what they have accomplished and what each envisions the next step to be. Also, please take a moment to thank the faculty mentors, without whom the level of student accomplishment you will experience today would never have been achieved.

Year after year the Student Academic Conference has been a stunning success and this year should be no different!

Yours truly,

Bette G. Midgarden

Bette Midgarden
Vice President

Letter from the Vice President of Student Affairs



On behalf of the entire Student Affairs Division, welcome to this year's Student Academic Conference. The tradition of excellent opportunity for undergraduate research continues through this unique campus event. Your participation ensures that you have taken the initiative to further your undergraduate education in a way not found on most campuses. Having personally attended nearly all of the Student Academic Conference for the past decade, it has become clear to me that the depth and breadth of information and learning about unique topics has been well documented through oral and poster presentations. I look forward to again participating in this year's event and hope that your involvement becomes one of the most memorable experiences during your tenure here at MSUM.

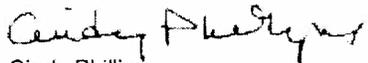
Warren Wiese

Warren Wiese
Vice President of Student Affairs

Letter from the President of IFO

The Faculty Association at MSUM Moorhead is pleased to acknowledge the work of our member, Andrew Conteh, who created and is the inspiration behind this event. We congratulate him and all who have worked to make this 12th Annual Conference possible.

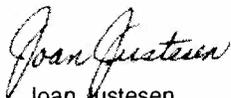
This event has grown in scope over the years and has become a signature event for our University. It is evidence of our dedication to undergraduate education and the importance of student research. Our faculty take pride in working with students in research and preparation of their presentations. We hope all who attend will learn and be impressed by the quality of our students' work and the efforts of the faculty in mentoring them.



Cindy Phillips
President, MSUM Faculty Association

Letter from the Executive Vice President of Alumni Foundation

As I call on friends and alumni of MSUM in the community and the region, I always, with great enthusiasm, tell them about the student academic conference. It is wonderfully organized and conducted and it is such a wonderful undergraduate research opportunity for students. Many other universities do not offer this opportunity. It an honor for the Alumni Foundation to help sponsor this event every year and we wish each and every student the very best!



Joan Justesen
Vice President, Alumni Foundation

Letter from the President of the Student Senate

Greetings,

On behalf of the Minnesota State University Moorhead students, welcome to this year's Student Academic Conference. As the representative body of and for the students, the Senate supports this avenue for student involvement. Over the years this event has become an integral feature of the University community. This conference provides many opportunities for students to participate, from visual presentations to panel discussions. There is something for anyone who has interest in taking their academics above and beyond the classroom. In addition, the diverse amount of information one can gather just by attending this event makes it worthwhile for each and every participant.

A strong focus on academic participation at every level has made the Student Academic Conference a success. This opportunity is made possible by the devotion of Dr. Andrew Conteh and the many staff and students who devote countless hours in preparation. Whether it is on the various planning committees or the presentations given at the conference, every level of the process is student oriented. The opportunities it provides for students to get involved on the campus, as well as the useful research and presentation experience it gives for future careers and education is invaluable. In this regard there is nothing that can compare to the meaningfulness of this occasion.

Sincerely,

Heath Butrum
President
Student Senate

Conference Schedule

TUESDAY, APRIL 20, 2010

7:30 A.M.

**Poster Set-Up—Registration/
Information Table** — CMU Main Lounge

9:30 A.M.

**Presentation Session 1 and Poster
Session 1** —
Various CMU Rooms and
Poster Display Area

10:50 A.M.

Break

11:00 A.M.

Seating for the Luncheon —
CMU Ballroom

11:15 A.M.

Luncheon Starts (Welcome and
Introductions)—CMU Ballroom

12:00 P.M.

Keynote Speaker — CMU Ballroom

Mark Voxland

Mayor – Moorhead, Minnesota

12:25 P.M.

Student Panelists — CMU Ballroom

- College of Arts and Humanities representative will be Luke Holmass.
- College of Business and Industry representative will be Annika Nynas.
- College of Education and Human Services representative will be Eric Hauge.
- College of Social and Natural Science representative will be Kristin Rosenau.

1:00 P.M.

**Presentation Session 2 and Poster
Session 2** —
Various CMU Rooms and
Poster Display Area

2:20 P.M.

Break

2:30 P.M.

**Presentation Session 3 and Poster
Session 3** —
Various CMU Rooms and
Poster Display Area

4:00 P.M.

Closing Ceremony —
CMU Main Lounge

Conference Organizers and Steering Committee

Conference Coordinators



Dr. Andrew Conteh
Professor of Political Science



Richard Lahti
Professor of Chemistry

Conference Organizers

Justin Voels
Computer Science



Kelsey Rehome
Criminal Justice & Psychology



Samuel Sussman
Computer Science

Photo
Not
Available

Past Keynote Speakers

- 2009 Renee Stromme, English & Women's Studies
- 2008 Karen Branden, Ph.D., Sociology
- 2007 Anita Sue Bement Education
- 2006 Tammy J. Miller, CPA, Business
- 2005 Todd Marvin Koel, Ph.D, Biology
- 2004 Thomas C. Proehl, Theatre
- 2003 Dr. Tom Sawyer, Chemistry
- 2002 Kimberly Maluski Sarte, Econ
- 2001 Dr. Paul Spies, Education
- 2000 Dr. Janet Anderson, Education
- 1999 Dr. Shawn Dunkirk, Chemistry

LOGISTICS COMMITTEE

Richard Lahti
Steven Fox
Aaron Quanbeck
Geri Hendrix-Sloan
Jason Anderson
Gina Kelly
Nathan Clarke
Andrew Conteh
Justin Voels
Kelsey Rehome

PROGRAM COMMITTEE

Richard Lahti
Rose Bakke
Chizuko Shastri
Ashish Gupta
Andrew Conteh
Justin Voels
Kelsey Rehome
Ruth Lumb

How to Get Involved?

If you are interested in being a part of the steering committee for the Student Academic Conference next year, a conference volunteer, or interested in being a student organizer, please send an e-mail expressing your interest to aconf@mnstate.edu

Keynote Speaker

Each year an MSUM alumnus is selected to deliver the keynote address to conference attendants. This person is selected by the conference steering committee following a review of nominations received from members of the MSUM campus community. This year's Keynote Speaker is:



Mark Voxland

(MSUM '72) is the current Mayor of the City of Moorhead. He is also the past President of the League of Minnesota Cities, a member of the Greater Fargo Moorhead Economic Development Corporation, a member of the Red River Basin Commission, and owner of Voxland Electric. He is a former member of the Moorhead City Council, has served on the Board of Directors in the League of Minnesota Cities, chaired the Metropolitan Council of Governments and Oakport Joint Powers Committee, and served on the Federal Commission on Railroad Relocation issues. Mark is a member of the Moorhead Kiwanis, Chamber of Commerce, and the Boy Scouts of America. He has received honors and awards from the Boy Scouts of America including: Scoutmaster, Lamb Award (Lutheran), St. George Award (Catholic), Silver Beaver, and Wood Badge. Mark is married to Donna (Olsen) (MSUM '72) and they have three grown children and four grandchildren.

Student Panelists

Each year four student panelists are selected to respond to the keynote address. These four students represent the four academic divisions of the university: Arts & Humanities, Social & Natural Sciences, Business & Industry and Education & Human Services. These students are selected by the dean of each academic division following a review of nominations received from members of the MSUM campus Community. This year's panelists include the following:

Eric Hauge

I was born in St. Paul Minnesota, but moved across the pond to Fargo shortly after. I graduated from North High School in 2007. I was on the bubble whether to go to MSUM or to NDSU, but Teri Walseth convinced me to come to MSUM for a degree in Life Science Education. During my time here, I have been an active member of her Student Advisory Committee. For this committee I attend meetings that keep us up to date on issues that are happening on campus, and what we should keep other students aware of in our departments. After I'm done with my degree in Life Science Education I will either stay to complete a degree in Biology, or I will go off and become an educator of today's youth.

Annika Nynas is a junior from Woodbury, MN pursuing a degree in Mass Communications with an emphasis in Advertising. She is treasurer and secretary of the Advertising Club, and has won several awards for her work at local student advertising competitions. Annika is the 2010 recipient of the American Advertising Federation (AAF), Vance and Betty Stickell Award. This award honors the most outstanding member of MSUM's student chapter of the AAF. She has obtained internships in her field and works at MSUM's student ad agency, Flypaper. Annika is also a member of Dragon Entertainment Group's Marketing and Advertising Committee. As Mass Communications Co-Chair, she actively participates in the Student Advisory Board for the College of Business and Industry. She has made the Dean's List all semesters of her college career and maintains a 4.0 GPA in her major. Annika is a Student Orientation Counselor (SOC) and is involved in the SOC's and Friends organization. Outside of school, Annika works as a dance instructor; teaching ballet, jazz and lyrical dance at Red River Dance and Performing Company in Fargo, ND.

Kristin Rosenau will graduate from Minnesota State University Moorhead with honors this spring, obtaining a bachelor's degree in physics with emphasis in astronomy and a minor in mathematics. During the school year, she works as a teaching assistant and tutor for introductory physics and astronomy courses. The past two summers she has participated in Research Experience for Undergraduates (REU) programs in astrophysics at the University of Wisconsin Madison and solar physics at Montana State University. She also spent a semester studying abroad at Keele University in the United Kingdom. After graduation, Kristin plans to attend graduate school in physics, pursuing a research career in experimental particle astrophysics. In her spare time, Kristin enjoys baking, photography, and traveling the world.

Luke Holmass

I have a full time fascination with watching, reading, and writing about film, and was lucky to find a program here at MSUM that allowed me to pursue that fascination. I developed my initial interest in film in Brooklyn Park, MN, a suburb of Minneapolis, buying and renting films and books on film from a variety of sources, including the excellent local library system, to feed my passion and begin a process of self-education. I came here to MSUM to continue my education in the fall of 2008, one of the few in the area that offered a film emphasis in history and criticism, where my main interests lay. I am heading into the home stretch of finishing my degree in film history and criticism, and am enjoying my studies here. I have made the Dean's List in each of my semesters here at MSUM, and was lucky enough to receive a generous scholarship from the film department for my studies this year. I am looking forward to continuing my film education beyond MSUM in graduate school, and finding my place in the world of film.



White Earth Tribal & Community College Student Abstracts for MSUM Conference

Faculty Advisors: Andrew Favorite – Native American Studies, David DeGroat - History, Karen Goulet - Education, Gwen Reid - Business

**Contact Advisor – Karen Goulet 218-935-0417 ext. 104
karen.goulet@wetcc.org**

POSTERS:

TWO HISTORIES: MYTHS OF AMERICAN HISTORY, AND THE TRUTH OF NATIVE AMERICAN HISTORY – Students: Charles Littlewolf, Jessica Goodwin, Valerie Goodwin, Linda Johnston, Tim Johnston, Alrick Wadena, Melvin brown, Evelyn Bellanger, Rene Prince, Suzie Bailot, Felecia Cellette, Susie Bailot

This will be an overview and timeline of Native American history and how it relates to the myths of American History and the World. For example, the legal and moral justification for European colonization of the “New World”, the Doctrines of Discovery and Conquest, Plenary Power, and the United States Government Fiduciary Trust Responsibility and perceived Native Incompetence.

This would include Federal Indian Policies in the modern era such as the Assimilation Policy, Removal and the Termination policies, the Indian Citizenship Act, and the creation and termination of modern tribal governments. Because of these currents of history, much of Native culture was lost. There has been a cultural rebirth, or renaissance, in the last several decades despite historical efforts to eliminate Native Culture.

FINDING OUR NATIVE AMERICAN HEROES

From obscure to well known there have been many Native American role models. From writers and performers to athletes and more, there have been Native Americans who have strived and succeeded in becoming a heroic face. It is important for Indian communities, and most vital for the children, to know who they are and what they have contributed to us as a people. For my presentation I will show these individuals and highlight their success.

THE NATIVE AMERICAN WAY OF LIFE: THEN AND NOW -CHANGES AND DIFFERENCE – Student: Lindsay Fineday

This research project will explain how much the Native American way of life has gone through great changes throughout history. The project will explain the changes in areas such as: cultural beliefs, survival methods, travel, government, educational methods, and other aspects of culture. The past and the present will be examined and compared.

WHAT WOULD WE DO WITHOUT OUR NATIVE AMERICAN ALLIES? – Student: Charles Littlewolf

This research will inform the audience about the history of Native American Indians and how they have been subjected to military actions that have been placed upon them since the beginning of this country, now known as The United States of America. Through looking at individuals, events, government policies, and educational practices I will examine the complexity of the relationships that the Native people have had with the U.S. government and its military.

This research will include in the many battles and skirmishes that the English, French, and British have had leading up to the creation of the United States of America and the Native experience in those events.

PINE POINT PUBLIC SCHOOL – A HISTORICAL TIMELINE –

Student: Lisa Basswood-Native American Studies

This presentation will provide a timeline about the Pine Point School, which is located in the southeastern part of the White Earth Reservation in Minnesota. This school was the first of its kind to combine the traditional academic education with courses focused specifically on the Ojibwe language, history and traditional way of life. I will begin with the establishment of the original Pine Point Day school and its transformation into the new Pine Point Public school. There have been several changes made to the school through the years—such as the curriculum, the location and administration. This timeline documents the changes made to both the school and its curriculum.

BEING DIFFERENT GIVES YOU INTERESTING POINT OF VIEW –

Student: Mary Jo Schaumburg

Tribal and Community Colleges have a unique perspective regarding how they teach and what they teach. What is it like to attend a Tribal and Community College that centers on re-learning the past and improving the future? Does this affect how the student learns and how they interact with the people around them in

this setting? Learning about the language, history, and culture students start to see and learn a new perspective about their world. Having Non-Native Americans attending a Tribal and Community College enriches the experience for everyone. What are the challenges for a Non-Native student? I want to know how many other people have had this experience? I will research data and information regarding Tribal and Community colleges that serve both a Native and Non-Native student body.

NATIVE AMERICAN CULTURE AND LANGUAGE – Student: Lori Fairbanks
Native American culture and language has decreased over generations. On the White Earth Reservation in Minnesota there are many people who know their culture and speak the Ojibwe language and there are people that do not know about their culture and have never heard the language. There are people who would like to know about their culture and language. In this research I will look for resources and schools that offer this education. There are many people who are willing to share this education. We need to teach our children the culture so they can pass it on to their children.

THERE IS MORE THAN ONE STORY – Students: Sandra Badboy, Lindsey Fineday, Lori Fairbanks, Amber Fox, James Libbey, Glen Sommers
In the history of film and literature, through the lens of the dominant culture, the Native American character has been stereotyped and limited. The Native American has gone from being vilified as the bloodthirsty savage to being romanticized as the harmonious shaman (medicine man). Until recently there has been little room for the diversity of the authentic Native American voice. There has been a persistent indigenous voice that has progressed into a new wave of literature and film of Native American artists now internationally known. Through a Native American lens this project will analyze and review examples of film and literature to look at the history and changes of the various characterizations and voices of Native Americans over time.

UNEMPLOYMENT ON THE RESERVATION: HISTORY AND SEEKING SOLUTIONS FOR THE FUTURE – Student: Sean Jacobson

Unemployment in the United States has been a struggle in the current economy. It also has a major effect on Indian Reservations in the past and present. I will be looking at the history of Reservations and why many Reservations are in poverty and the effect the unemployment rate has in Indian Country. This research project will look towards the future on how to find solutions to this epidemic by seeking examples from various reservations, and how they are making their economy sustainable. Through education and research we can find valuable solutions in the future to provide a better economy to many Indian Reservations that are in poverty.

WHAT'S MY NAME AGAIN? – Student: Evelyn Bellanger

This presentation will give a broad illustration of what many Native Americans endured during the Boarding School era. Through research of my family history and other stories, such as the mandatory name change from traditional to European and forced use of English for all students, I will show how assimilation has affected us up to today. I will give examples of the curriculum used and the physical changes the students went through. There will be handouts available on where the schools were located, Native Tribes, school schedules and some of the effects the policies have had on Native Americans today.

PRESENTATION:

SAVING A TRADITION: FROM CEREMONY TO CONTEMPORARY NATIVE AMERICAN POWWOW – Student: Cliff Stone CMU 208, Session 3, 3:35 PM

The research provided in this presentation is geared toward an understanding, as well as an appreciation of a resilient effort at preserving a history, culture, and heritage of a resurging renaissance of people here in the United States. The Native American Powwow is a part of an ancient ceremonial gathering handed down for 7 generations. The narrator will relive the stories from the past two generations and the ways they were taught before that. There are, however, many versions of these stories that differ in origin from region to region. The version you will hear is from the narrator's own personal learning and experiences dating back to the early 1970's.

Schedule by Room

- **CMU 200B**

- Session 3

- 2:30PM 9 The Diabetic Athlete
 - 2:50PM 19 Youth Gymnastics Injuries
 - 3:10PM 97 Lung Cancer Disparities in Minnesota
 - 3:30PM 41 Are Fetal Alcohol Spectrum Disorder Prevention Programs Successful?

- **CMU 200C**

- 2:30PM 71 Peroxiredoxin, a mitochondrial-specific peroxidase, as a possible key regulator of the β -adrenergic receptor anti-apoptotic pathway

- **CMU 200D**

- 2:30PM 172 Sex Trafficking of Women in Europe
 - 2:50PM 319 Britain's attack on Asylum: A critical analysis of the impact asylum has had on xenophobia and the rise of the political far right in Britain
 - 3:10PM 197 South America United
 - 3:30PM 244 Whale Wars

- **CMU 200E**

- 2:30PM 229 Hiroshima Peace Tour Documentary
 - 2:55PM 199 El realismo mágico en *La casa de los espíritus* por Isabel Allende y *La casa de sano placer* por Alicia Yáñez Cossío

- **CMU 203**

- Session 1

- 9:30AM 303 Unsex Me Here: Gender Role Reversal and Natural Order in Macbeth
 - 9:42AM 160 King Lear: Inspiring More Sympathy than Macbeth
 - 9:54AM 161 A Difference of Character: Contrasting Shakespeare's Disguised Leading Ladies of *The Merchant of Venice* and *Twelfth Night*
 - 10:06AM 228 Blood as a Symbol for Conscience in William Shakespeare's *Macbeth*
 - 10:18AM 293 "King Lear and the Hopelessness of Man"
 - 10:30AM 265 The Impact of Digital Technology on Film Aesthetics and Distribution

- Session 2

- 1:00PM 339 The Show Must Go On: How MSUM Campus News Producers created a show during the 2009 Spring Flood.
 - 1:35PM 306 Horizonlines.org | The online magazine

- Session 3

- 2:30PM 344 The Making of the Documentary Titled "inspired by Nature"
 - 3:05PM 179 Movie Industry Analysis
 - 3:25PM 40 Evaluation of market entry strategies for introducing Natural Family Planning as a substitute for traditional contraceptives in Italy

- **CMU 204**

- Session 1

- 9:30AM 242 Heritability of plasticity in families of a population of the moss, *Funaria hygrometrica*
 - 9:50AM 217 Phenological responses of butterflies and native flowering plants to regional climate shifts
 - 10:10AM 352 Investigating the Effects of Agricultural Nutrient Pollution on Semi-aquatic Bryophytes
 - 10:30AM 236 Effects of UV Light on 3 Species of Liverworts

- Session 2

- 1:00PM 53 "Would That He Were a True Brother": Thomas Becket and the Projection of Authority
 - 1:20PM 8 Experiences in the Production of Independent Short Films
 - 1:40PM 102 America's "Black Regiment": Clerics as Soldiers in the War for Independence
 - 2:00PM 107 Hessian Soldiers: Their Influence on the American Revolution

- Session 3

- 2:30PM 180 Apartheid Africa: The Rise and Fall of Racial Segregation in South Africa
 - 2:50PM 155 Christianity and the Dakota Indians: The Success of Missionaries in Unforeseen Circumstances
 - 3:10PM 82 Justice? A Critical Look at the Leonard Peltier Trial.

- **CMU 205**

- Session 1

- 9:30AM 105 William Shakespeare's influence in the Contemporary World
 - 9:50AM 50 Graphic Design: What is it and What you can do with it?
 - 10:30AM 23 Self Improvement Old Testament Style A Film by Haleigh Overseth

- Session 2

- 1:00PM 287 A Critical Analysis of the Trinity Broadcasting Network Logo
 - 1:20PM 296 Diapers: Stickin it to the Man
 - 1:40PM 174 Rhetorical Critique of Franklin Delano Roosevelt's Pearl Harbor Address to the Nation

- Session 3

- 2:30PM 271 TOMS Shoes: For a Better Tomorrow
 - 2:50PM 44 Facebook: The Good, The Bad, & The Addicting
 - 3:00PM 314 Flippin' for a Cure
 - 3:30PM 203 The Academic and Personal Rewards of Fundraising and Leadership

• **CMU 207**

Session 1

- 9:30AM 154 International Students, Their Challenges, and What MSUM Can Do
- 9:50AM 4 The Corruption of the Residential Treatment Industry
- 10:10AM 33 A culture sold, The negative effects of materialism in hip-hop.
- 10:30AM 2 Hypothetical Analysis and Educational Recommendations: Elementary Student Profile

Session 2

- 1:20PM 270 The Harms of Asperger's Disorder Diagnosis
- 1:40PM 285 Causes of Math Anxiety
- 2:00PM 20 Historical Context: Placing Literature on the Map

Session 3

- 2:30PM 210 The Himalayas in Nepal
- 2:50PM 316 Presentation of a Feasibility Study for Increasing Faculty's Participation at Freshmen Advising.
- 3:10PM 347 Operation Christmas Child
- 3:30PM 101 Leadership Project: LOGAN (Labs Overseeing and Guiding Autism Needs) Group

• **CMU 208**

Session 1

- 9:30AM 126 Sounds of Ecstasy: Music in the Films of Werner Herzog
- 9:50AM 321 Understanding Experimental Cinema
- 10:05AM 336 The Adaptation of American Comic Books to the Screen
- 10:25AM 226 Classical Vocal Technique
- 10:37AM 283 Jazz styles in the 20th Century

Session 2

- 1:00PM 225 The Effects of Sound on the Cinematic Viewer
- 1:40PM 111 Community Video Project Screening and Presentation
- 2:10PM 49 A glimpse into running your own business: Marketing Simulation Research Project

Session 3

- 2:30PM 253 United States Involvement in the Apartheid
- 2:55PM 18 Shinto and the Creation of Modern Japan
- 3:15PM 320 Environmental effects of war on Vietnam

• **CMU 214**

Session 1

- 9:30AM 158 Broadway Musicals in Jazz
- 9:50AM 182 The use of the recorder during the baroque period in England
- 10:10AM 65 Senior Recital Program Note
- 10:30AM 85 The Performance of Appalachian Folk Music as a Means of Preserving an American Folk Music Tradition

Session 2

- 1:20PM 349 The Art of Piano Accompanying
- 1:40PM 243 Franz Schubert: His output and approach to lieder
- 2:00PM 113 Trumpet Repertoire in the 20th Century

Session 3

- 2:30PM 98 Sexually Transmitted Infections in Two College Towns
- 2:50PM 206 Colorectal Cancer: Prevention and Incidence Rates
- 3:10PM 31 Cardiovascular Disease Among Women: An Epidemiological Study
- 3:40PM 112 Why is Breast Cancer an Epidemic in the United States?

• **CMU 216**

Session 1

- 9:30AM 56 Republic of Mauritius – People, Culture and history
- 9:50AM 143 Behavioral Adaptations of International Students in the Fargo/Moorhead Community

Session 2

- 1:00PM 140 Impact on Minnesota lake systems by the evasive aquatic zebra mussel
- 1:20PM 227 Experimental methods used to Determine Rho associated kinase Rock phosphorylation on carboxyl terminus of NHE-1
- 1:40PM 122 Global Bio-conservation and it's Implications
- 2:00PM 124 Ecotourism: Are We Loving The Tropics To Death?

Session 3

- 2:30PM 252 Purification and Biochemical Analysis of the Regulatory Protein of Pyruvate-Phosphate Dikinase
- 2:50PM 220 Characterization of chemical alarm cues in Minnows.
- 3:10PM 121 Biodiversity: How much is enough? How much is a species worth?
- 3:30PM 123 What is the rose and right of developed nations in conserving the tropics?

• **CMU 218**

Session 1

- 9:30AM 192 Proteomic Profiling of Arsenic and Antimony Stress on *Sulfolobus solfataricus*
- 9:50AM 341 Optimization of the synthesis of the semicarbazide adduct of cyanoborane
- 10:10AM 219 Exploratory Screening of Capsaicin-based Compounds as Potential Therapeutic Targets for Human Non-small Cell Lung Cancer
- 10:30AM 330 Titanium Tetrachloride Catalyzed Synthesis of Novel Bisimine Ligands for Lewis Acid Solvation

Session 2

- 1:00PM 138 Electromagnetism: Eddy Currents and Levitation
- 1:20PM 328 Hyperbolic Tessellations and the Art of M. C. Escher
- 2:10PM 329 The Euler Line of a Non-Equilateral Triangle

Session 3

- 2:30PM 201 Study of the Kinematics of a spherical ball between two parallel surfaces.
- 2:50PM 183 Pulse Jet Harmonics
- 3:10PM 202 Gravitational Lensing
- 3:30PM 290 Stellar Light Curves with the VYSOS 5 CCD Camera

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• **CMU 227**

Session 1

- 9:30AM 322 Properties of Similar Triangles
- 9:55AM 327 The Moulton Plane
- 10:20AM 326 Constructible angles and regular polygons

Session 2

- 1:00PM 163 A Model of Productivity Versus Number of Employees
- 1:20PM 323 Three Dimensional Geometry
- 1:45PM 324 The Golden Ratio

Session 3

- 2:30PM 259 Controlling Home Appliances Remotely
- 2:50PM 223 Project Shinryu
- 3:10PM 162 Mathematical Modeling of Evolution in Fruit Fly (*Drosophila melanogaster*) Populations

• **CMU ML**

Session 1

- 9:30AM 6 Teacher Candidate Volunteer Experience at Circle of Life Tribal School, White Earth, Minnesota
- 9:30AM 10 Japan: An Economic Geographical Approach
- 9:30AM 12 Critical Care Nursing
- 9:30AM 13 Students and Stress: Does Social Comparison Make a Difference?
- 9:30AM 14 "The Lottery": Following the Status Quo
- 9:30AM 15 Sickle Cell Trait and the Athlete
- 9:30AM 16 Epidemic of Vitamin D Deficiency
- 9:30AM 21 The Use of Evidence Based Practice for Improving Lung Function/Respiratory Health Post Smoking Cessation
- 9:30AM 22 Assisted Suicide
- 9:30AM 24 Healthcare Reform Through the Legislative Process
- 9:30AM 26 Prevention of Colorectal Cancer
- 9:30AM 27 Tantalizing Geometric Puzzles... Oh My!
- 9:30AM 28 Speedy Math Magic: Revealed!
- 9:30AM 29 An Uneasy Relationship: the International Court of Justice and the United States
- 9:30AM 45 Evaluation of Art
- 9:30AM 46 Relations among Ratings of Artistic Quality, Beauty, and Liking
- 9:30AM 47 Relations among Ratings of Artistic Quality, Emotional Intensity, and Eroticism.
- 9:30AM 51 Alcohol Consumption and the Effects on the Body
- 9:30AM 52 Jehovah's Witnesses and Quality Alternatives to Blood Transfusions
- 9:30AM 54 Forms of Insulin Therapy
- 9:30AM 57 Determining specific site of Rho associated kinase Rock phosphorylation on carboxyl terminus of NHE-1
- 9:30AM 58 Electrochemical Analysis of Nickel Melt in Different Compositions and Temperature
- 9:30AM 59 MSUM Division 1 Hockey Arena
- 9:30AM 60 Pantheon Construction, Paws Place
- 9:30AM 63 Sensory Enhancement: Cochlear Implants for Adults
- 9:30AM 64 On the Border Mexican Grill & Cantina
- 9:30AM 66 Amped Arrows
- 9:30AM 68 A First Look at Transcriptional Regulation of the Regulatory Protein in C4 Plants
- 9:30AM 70 The 500 Building.
- 9:30AM 72 Scorch Commons
- 9:30AM 75 Moonlight Resort
- 9:30AM 77 DGR construction - Construction of Buffalo Wild Wings Building
- 9:30AM 80 Effect of intrasexual competition and interference on nest quality and reproductive success in the labyrinth fish, *Betta burdigala*
- 9:30AM 81 Minnesota State University Moorhead New Residence Hall
- 9:30AM 83 The Relationship Between Spiritual Belief and Health Statuses
- 9:30AM 84 Cultural Nursing Care for Special Needs Children in Jalapa, Nicaragua
- 9:30AM 86 Obesity: America's Growing Concern
- 9:30AM 88 Adult Neuro-Typical Attitudes toward Individuals with Autism
- 9:30AM 89 Pain Assessment in the Pediatric Population
- 9:30AM 90 North Star Construction, Proposed Innovis Medical Office Building Addition
- 9:30AM 91 Risk Factors & Prevention of Nosocomial Pneumonia
- 9:30AM 92 Prevention of deep vein thrombosis in patients following surgery.
- 9:30AM 93 Postpartum Hemorrhage
- 9:30AM 95 Views on Government Spending on Welfare
- 9:30AM 99 Iron-deficiency anemia in women and children worldwide
- 9:30AM 100 Addressing the Needs of English Language Learners in schools through Indirect Service Delivery Models in Speech-Language Pathology
- 9:30AM 103 The influence of similarity of comparison target on the optimistic bias
- 9:30AM 104 Why Income Affects Health Status
- 9:30AM 108 The Correlation among Religion and Mental Health
- 9:30AM 109 The Effects of *Brassica rapa* on White Cabbage Butterfly Larvae

Session 2

- 1:00PM 32 Fish - It's back on the menu: Selenium attenuation of the mercury in Minnesota's game fish.
- 1:00PM 36 Painted Turtle (*Chrysemys picta bellii*) Ecology in Clay County, MN - What Do We Know After Nine Years?
- 1:00PM 114 Triage Nursing as a Practice: How to Determine the Acuity of a Patient
- 1:00PM 116 Gender Discrepancies in Confidence in Medicine
- 1:00PM 118 Mollusk Distribution Within The Saline Lakes On San Salvador Island Bahamas-Establishing A Baseline For Determining Biological Response To Climate And Anthropogenic Change
- 1:00PM 119 Cancer Prevention
- 1:00PM 120 How Sleep May Affect Your Ability to Achieve a Higher Academic Degree and Decrease Performance in School
- 1:00PM 125 Surgical Intervention for Spinal Stenosis

1:00PM	127	Intel X-86(IA-32) family's processor
1:00PM	131	NHE Regulation of Intracellular pH
1:00PM	132	Screen for expression of calcineurin B homologous protein 2 in non-small cell lung cancer
1:00PM	134	Poverty, Health Insurance, and Health Status
1:00PM	135	Defibrillator: A life saving device
1:00PM	137	Prostitution in the United States: The Relationship between Prostitution and Public health Concerns
1:00PM	139	Sexuality Education
1:00PM	141	Investigation of Quercetin as a possible sensitizer for Dye-sensitized solar cells
1:00PM	142	Achondroplasia Puncata X-linked Dominant
1:00PM	144	The Relationship between Health Status and Sleep
1:00PM	147	Education and Domestic violence
1:00PM	149	Causes of Obesity in the Younger U.S. Populations
1:00PM	150	Correlations between increased alcohol consumption and marital status and its effects on men's health
1:00PM	151	China And Africa
1:00PM	152	Who benefited and Who is Benefiting. An Assessment of the Sino-Africa Relationship
1:00PM	153	Who benefited and who is benefiting now? An analysis of Sino-Africa relationship
1:00PM	156	Exercise Affecting Health between Social Classes
1:00PM	157	People Who Can Manage Stress Not Only Feel Healthier, They Are Healthier
1:00PM	164	DVT Protocol
1:00PM	166	Seizures in Children
1:00PM	167	Benefits of Breastfeeding
1:00PM	168	Does Premarital Sex Affect Your Health?
1:00PM	170	The Eeriness of Eye Size in Consumer Robots Varying in Humanness of Appearance
1:00PM	171	Increased Gun Control Needed as Result of Increasing Gun Violence in the United States
1:00PM	173	Japanese Caring for Elderly
1:00PM	175	Discrimination of parental chemical cues by larval convict cichlids
1:00PM	177	Penury and Health
1:00PM	181	The Process of Research in Evidence-Based Nursing Practice
1:00PM	184	Eye Tracking: Cutting-edge research and its application at MSUM
1:00PM	185	Copper(II) Complexes of Pyridine-2,6-bisamide Ligands: The Electronic and Structural Effects of Methyl Groups at Various Positions
1:00PM	187	Studying digene trematode life cycles in the lab
1:00PM	188	Forgotten Slaves: Child Labors around the World.
1:00PM	189	Consistency of Shy-Bold Personality Continuum in Zebrafish
1:00PM	190	Development of genetic markers for the trematode parasite <i>Ornithodiplostomum ptychoceilus</i>
1:00PM	191	How Vital is Education and Income When Considering One's Health
1:00PM	193	Simple BEAM Robotics
1:00PM	194	Preterm Births in the United States
1:00PM	195	Design of an energy-efficient home from construction phase through livable stage
1:00PM	200	A study of the mass to charge ratio of an electron
1:00PM	204	Mental Health and Socioeconomic Status: What's the Connection?
1:00PM	205	Use Of Different Electrical Properties To Estimate Soil Chemistry, Water Content, And Engineering Qualities
1:00PM	207	Tea Masters to Salt Shakers: A Historical look at Ceramic Art in Life
1:00PM	208	Updated Survey of Wild Turkey (<i>Meleagris gallopavo</i>) distribution in Cass (ND) and Clay (MN) Counties (2003-2009)
1:00PM	209	Building a colling unit for a NMR spectrometer
1:00PM	211	Servicescape of the Chiropractic Industry
1:00PM	212	Smoking and its adverse effects on Health
1:00PM	213	The Importance of Bridging the Gap Between Abstinence Only and Preventative Sex Education.
1:00PM	214	The Hangover: How alcohol abuse today affects you tomorrow.
1:00PM	215	Is adding a Technical Communications Minor or Emphasis to Minnesota State University Moorhead's English Major Feasible?
1:00PM	216	Testing the Claims of the Power Balance holographic wristband.
1:00PM	218	Engineering and programming with the BOE-Bot: Balancing a reverse pendulum
1:00PM	221	What Factors Affect the Prevalence of HIV in the United States?
Session 3		
2:30PM	230	Mate attraction: How attractive are single parents?
2:30PM	231	Differential temperature control of individual growth and mortality of midges
2:30PM	232	How does maize wake up? (ie...is dephosphorylation of the catalytic histidine residue non-enzymatic?)
2:30PM	237	A Novel Method to Generate IR Spectra of Solutes in Solution
2:30PM	240	Body Size Correlates to Asymmetric Competition among Fathead Minnows
2:30PM	245	Using Nuclear Magnetic Resonance to Study Hydrogen Diffusion in Fuel Cells
2:30PM	246	Systemic acquired resistance associated modifications to the structural and carbohydrate profile of <i>Cucumis sativus</i> cell wall
2:30PM	247	Overview of the MMIX processor.
2:30PM	248	The Power processor by IBM
2:30PM	249	Experimenting to locate the Mystery RP gene in Maize Leaves
2:30PM	250	Windows Presentation Foundation (WPF)
2:30PM	251	Design of Digital Vax processor
2:30PM	255	The Role of Good Diet And Exercise For Good Health
2:30PM	256	Mapping Planetary Magnetic Fields
2:30PM	257	Going Green: The Efforts of the United States and Japan
2:30PM	258	Improving the Future Generation with STEM
2:30PM	260	How does sunlight regulate C4 photosynthetic pathway in maize leaves?
2:30PM	263	Japanese and American high school systems
2:30PM	264	What Certain Aspects in Life Help Contribute to a Happy Marriage
2:30PM	266	Trauma: Motor Vehicle Accidents
2:30PM	268	Nurse Leadership in Nicaragua
2:30PM	272	Increasing the odds of a healthy pregnancy: The benefits of prenatal care
2:30PM	276	Middle Eastern Ecotopia: Visions for a Future Sustainable Society
2:30PM	277	Columbian Ecotopia: Visions for a Future Sustainable Society

Numbers correspond with abstract listings beginning on page 29

2:30PM	278	Brazilian Ecotopia: Visions for a Future Sustainable Society
2:30PM	279	United Kingdom Ecotopia: Visions for a Future Sustainable Society
2:30PM	280	Ecotopia in China: Visions for a Future Sustainable Society
2:30PM	281	Ecotopia in US: Visions for a Future Sustainable Society
2:30PM	282	Cricket and Lacrosse: Simple Games or Sources of Cultural Identity? Sports in Colonial Societies
2:30PM	284	Chiral Relay: Diastereoselectivity of Nitrile Ylide Cycloadditions Involving Chiral Pyrazolidinones
2:30PM	288	Does A Woman's Income and Age play a role in whether or not she decides to have and Abortion?
2:30PM	291	MSUM ACM - Overview and projects: Cluster and Proteus
2:30PM	292	Effects of Vocabulary Enrichment in Repeated Read-Alouds on Preschoolers' Vocabulary Knowledge
2:30PM	301	No Child left behind
2:30PM	305	Hunger in the United States
2:30PM	307	Climate Change and Collapse in Ancient and Modern Times
2:30PM	308	A Cultural Phenomenon: The Family Vacation
2:30PM	309	All Star Construction Daycare Facility
2:30PM	310	Evaluating Voices in Different Languages
2:30PM	311	The Workings of the Hypothetical DLX Processor
2:30PM	313	Personal experiences with screening for early detection of cognitive impairment
2:30PM	317	Rainbow Transmission Hologram
2:30PM	318	Old Age, Socioeconomic Status, and Health
2:30PM	325	Violent Portrayals and Aggressive Behavior: The Role of Parents
2:30PM	331	Analysis of phenolic acids upon chemically induced SAR in <i>Cucumis sativus</i>
2:30PM	332	Singing the Blues, and Seeing Them, Too: How Music can Influence Emotional Perception
2:30PM	333	Chiral Relay: Diastereoselectivity of Nitrile Imine Cycloadditions Involving Chiral Pyrazolidinones
2:30PM	334	STM spectroscopy
2:30PM	335	Optimized Synthesis of N-substituted Pyrazolidinone Rings
2:30PM	337	The Effect of Music on Helping Behavior in Second Life: An Exploration of Inter-reality
2:30PM	343	MIPS
2:30PM	345	The quality of Life in the USA, Thailand and Turkey: Does Economic Growth Matter?
2:30PM	346	Save Energy and the Environment
2:30PM	348	The Feasibility of an Ethnographic Field School
2:30PM	351	Invasion and hybridization in conspecific <i>Typha</i> (Cattail) at the Rice Creek Field Station (RCFS)

• **CMU UG**

Session 1

9:30AM	273	Demonstrating the 5-E model with a chemistry lesson
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Session 2

1:00PM	274	Demonstrating the 5-E model with a biology lesson
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Session 3

2:30PM	275	Demonstrating the 5-E model with a geology lesson
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• **LO 101**

Session 1

9:30AM	165	An assessment of suicide terror.
9:50AM	300	The American Recovery and Reinvestment Act of 2009
10:10AM	7	The Legacy of the Nuremberg Trials
10:30AM	298	The Role of Human Rights on International Extradition

Session 2

1:00PM	340	Nagomi-Karabakh - Cornerstone in South Caucasus Peace
1:20PM	96	Using Communication Theory To Analyze Corporate Reporting Strategies: A Study Of The Health Care Industry
1:40PM	338	The Politics Behind NASA's Flagship Budgetary Projects
2:00PM	312	The Cap and Trade Bill

Session 3

2:30PM	148	The territorial dispute over Dokdo Takeshima between Japan and South Korea
2:50PM	3	The Importance of Global Remittances to Human Development
3:10PM	299	The Smoking Lamp is Out: The Possibility of a Statewide Smoking Ban in North Dakota
3:30PM	302	Policy Formation in Minnesota

• **LO 102**

Session 1

9:30AM	42	Don't Ask, Don't Tell.
9:50AM	43	Capital Punishment Policy
10:10AM	73	Canadian Border Policy
10:30AM	25	Abolishing the Capitol Gains Tax

Session 2

1:00PM	222	Minnesota Indian Gaming Regulation
1:20PM	294	American Recovery and Reinvestment Act of 2009
1:40PM	35	Federal Regulation of Tobacco
2:00PM	30	Federal Hate Crime Prevention

Session 3

2:30PM	74	The No Child Left Behind Act
2:50PM	315	No Child Left Behind
3:10PM	304	About New Health Care Reform
3:30PM	224	Mercenary Malice: Dangerous Defense Contractors

- **LO 89**
 - Session 1**
 - 9:30AM 159 Examination of Modern Economic Society
 - 9:50AM 94 Elasticity of Rationality
 - 10:10AM 79 Farm By-Products as a Source of Renewable Energy
 - 10:30AM 198 Music Recording Industry Change To Digital Music: Where The Tune Will Come From
 - Session 2**
 - 1:00PM 34 Professional Sports Substitutes and the Demand for Major League Baseball
 - 1:20PM 169 The meteoric rise of the motorcycle industry in Chongqing China
 - 1:40PM 106 Recessionary Religion: The effects of recessionary pressures on religious structure
 - 2:00PM 146 Medical Tourism: Alternatives to the US Healthcare System
 - Session 3**
 - 2:30PM 67 The Impact of Casinos on Dropout Rates in Minnesota
 - 2:50PM 62 Economics and Eli Whitney: Lessons in Intellectual Property Rights
 - 3:10PM 76 The Evolution of a Ever Changing Solid Waste/Recycling Market: A Look at Consumer Welfare
 - 3:30PM 115 Does Money Talk? How The Composition Of Individual Presidential Campaign Donations Impacts

- **LO 90**
 - Session 1**
 - 9:30AM 196 National Identity Crisis in the Third World, specifically in Nepal and how it's effects on National
 - 9:50AM 238 The Correlation Between Education Level and Health Status in the United States
 - 10:10AM 128 Gender Roles by Race: Childrens' Views and Hardships
 - 10:30AM 136 Human Trafficking: A Sociological Analysis
 - Session 2**
 - 1:00PM 286 The Population Policies and Their Effects on Modern China
 - 1:20PM 78 A Literature Review on High suicide rate among Native Americans
 - 1:40PM 48 Feminism From the Perspective of the Male College Student
 - 2:00PM 269 Adjudication and Diversion: The effects on Juvenile's
 - Session 3**
 - 2:30PM 130 The Sociology of Food
 - 2:45PM 55 Minority and Lower-Class Inequalities in Today's Society
 - 2:50PM 145 Adolescent Drug Use and Associated Stigmas
 - 3:10PM 176 Incarceration and the American Prison System
 - 3:30PM 61 Cultural Identity and Mass Media Among Immigrants in the U.S.

- **LO 91**
 - Session 1**
 - 9:30AM 233 Dueling Perspectives of Pomography
 - 9:50AM 38 How Perpetual Punishment Invalidates Proportionality
 - 10:10AM 69 The Subculture of Violence among Male Prisoners in the US
 - Session 2**
 - 1:00PM 110 Adoption
 - 1:20PM 129 The Significant Role of Birth Order
 - 1:40PM 133 Female Drug Sellers and Their Experience Within the Drug Economy
 - 2:00PM 11 Difficulties of HIV prevention education across cultures
 - Session 3**
 - 2:30PM 262 Communication in a Technological Age
 - 2:50PM 234 Cultures Consumed By Consumption: A Critical Review of Affluence in Western Society and the Role of the Citizen/Consumer in Contemporary Democratic Capitalism
 - 3:10PM 261 Sex Offenders Breaking the Myths.
 - 3:30PM 235 New Media

- **LO 93**
 - Session 1**
 - 9:30AM 117 Racial and Cultural Identity in Transracial Adoptees
 - 9:50AM 239 **VIOLATORS ARE SUBJECT TO ARREST:** Unobtrusive Observations of an Interesting Social Situation
 - 10:10AM 289 Politics of the American Climate Security Act
 - 10:30AM 254 Lending Growth in North Dakota
 - Session 2**
 - 1:00PM 342 Gender Gap In US Unemployment
 - 1:20PM 297 Don't Ask, Don't Tell.
 - 1:30PM 37 Holding our Tongues: Immigration, Language Death and Linguistic Human Rights

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Name	Presentation Number	Room	Time	Title
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Aakre, Rebekah	12	CMU ML	9:30AM	Critical Care Nursing
Aanenson, Kierstin	128	LO 90	10:10AM	Gender Roles by Race: Childrens' Views and Hardships
Abdi, Omar	331	CMU ML	2:30PM	Analysis of phenolic acids upon chemically induced SAR in Cucumis sativus
Abeywardene, Nileendra	94	LO 89	9:50AM	Elasticity of Rationality
Abraham, Jeby	314	CMU 205	3:00PM	Flippin' for a Cure
Acharya, Paruj	196	LO 90	9:30AM	National Identity Crisis in the Third World, specifically in Nepal and how it's effects on National
Ackerman, Bryan	112	CMU 214	3:40PM	Why is Breast Cancer an Epidemic in the Unites States?
Adams, Stacey	31	CMU 214	3:10PM	Cardiovascular Disease Among Women: An Epidemiological Study
Adducci, Kathryn	271	CMU 205	2:30PM	TOMS Shoes: For a Better Tomorrow
Akagi, Motoki	159	LO 89	9:30AM	Examination of Modern Economic Society
Al-Kayali, Suzanne	289	LO 93	10:10AM	Politics of the American Climate Security Act
Al-Kayali, Suzanne	48	LO 90	1:40PM	Feminism From the Perspective of the Male College Student
Aleem, Sara	187	CMU ML	1:00PM	Studying digene trematode life cycles in the lab
Aleem, Sara	220	CMU 216	2:50PM	Characterization of chemical alarm cues in Minnows.
Alexander, Michael	10	CMU ML	9:30AM	Japan: An Economic Geographical Approach
Alfstad, Skyler	22	CMU ML	9:30AM	Assisted Suicide
Altendorf, Dana	271	CMU 205	2:30PM	TOMS Shoes: For a Better Tomorrow
Altmann, Sarah	343	CMU ML	2:30PM	MIPS
Amundson, Kate	228	CMU 203	10:06AM	Blood as a Symbol for Conscience in William Shakespeare's Macbeth
Anderson, Tyler	238	LO 90	9:50AM	The Correlation Between Education Level and Health Status in the United States
Anderson, Seth	329	CMU 218	2:10PM	The Euler Line of a Non-Equilateral Triangle
Anderson, Kristina	132	CMU ML	1:00PM	Screen for expression of calcineurin B homologous protein 2 in non-small cell lung cancer
Anderson, Kathryn	344	CMU 203	2:30PM	The Making of the Documentary Titled "inspired by Nature"
Anderson, Kristina	187	CMU ML	1:00PM	Studying digene trematode life cycles in the lab
Apiagyei, Beverly	99	CMU ML	9:30AM	Iron-deficiency anemia in women and children worldwide
Arneson, Nathaniel	143	CMU 216	9:50AM	Behavioral Adaptations of International Students in the Fargo/Moorhead Community
Asadova, Zuleykha	340	LO 101	1:00PM	Nagomi-Karabakh - Cornerstone in South Caucasus Peace
Asplin, Joshua	60	CMU ML	9:30AM	Pantheon Construction, Paws Place
Aukland, Katie	31	CMU 214	3:10PM	Cardiovascular Disease Among Women: An Epidemiological Study
Austing, Jennifer	174	CMU 205	1:40PM	Rhetorical Critique of Franklin Delano Roosevelt's Pearl Harbor Address to the Nation
Austing, Jennifer	101	CMU 207	3:30PM	Leadership Project: LOGAN (Labs Overseeing and Guiding Autism Needs) Group
Ayanlakin, Damilola	260	CMU ML	2:30PM	How does sunlight regulate C4 photosynthetic pathway in maize leaves?
Backer, Ryan	176	LO 90	3:10PM	Incarceration and the American Prison System
Banla, Ismael	341	CMU 218	9:50AM	Optimization of the synthesis of the semicarbazide adduct of cyanoborane
Banla, Ismael	351	CMU ML	2:30PM	Invasion and hybridization in conspecific Typha (Cattail) at the Rice Creek Field Station (RCFS)
Batesole, Anthony	327	CMU 227	9:55AM	The Moulton Plane
Bauers, Allison	179	CMU 203	3:05PM	Movie Industry Analysis
Beck, Leonard	276	CMU ML	2:30PM	Middle Eastern Ecotopia: Visions for a Future Sustainable Society
Beers, Brittany	44	CMU 205	2:50PM	Facebook: The Good, The Bad, & The Addicting
Beers, Brittany	109	CMU ML	9:30AM	The Effects of Brassica rapa on White Cabbage Butterfly Larvae
Bellefeuille, Cory	95	CMU ML	9:30AM	Views on Government Spending on Welfare
Benson, Nathan	299	LO 101	3:10PM	The Smoking Lamp is Out: The Possibility of a Statewide Smoking Ban in North Dakota
Berg, Thomas	205	CMU ML	1:00PM	Use Of Different Electrical Properties To Estimate Soil Chemistry, Water Content, And Engineering Qualities
Berger, Payton	276	CMU ML	2:30PM	Middle Eastern Ecotopia: Visions for a Future Sustainable Society
Berget, Eric	141	CMU ML	1:00PM	Investigation of Quercetin as a possible sensitizer for Dye-sensitized solar cells
Berglund, Luke	310	CMU ML	2:30PM	Evaluating Voices in Different Languages

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Presentation					
Name	Number	Room	Time	Title	
Bertsch, Carrie	101	CMU 207	3:30PM	Leadership Project: LOGAN (Labs Overseeing and Guiding Autism Needs) Group	
Bevans, Patrick	326	CMU 227	10:20AM	Constructible angles and regular polygons	
Beyer, Katie	149	CMU ML	1:00PM	Causes of Obesity in the Younger U.S. Populations	
Beyer, Katie	144	CMU ML	1:00PM	The Relationship between Health Status and Sleep	
Bhandari, Binamrata	99	CMU ML	9:30AM	Iron-deficiency anemia in women and children worldwide	
Bhattacharya, Shouvik	195	CMU ML	1:00PM	Design of an energy-efficient home from construction phase through livable stage	
Bilstad, Erik	64	CMU ML	9:30AM	On the Border Mexican Grill & Cantina	
Bingham, Erika	308	CMU ML	2:30PM	A Cultural Phenomenon: The Family Vacation	
Bjorgaard, Josiah	330	CMU 218	10:30AM	Titanium Tetrachloride Catalyzed Synthesis of Novel Bisimine Ligands for Lewis Acid Solvation	
Bloms, Rachel	335	CMU ML	2:30PM	Optimized Synthesis of N-substituted Pyrazolidinone Rings	
Boche, Alexander	338	LO 101	1:40PM	The Politics Behind NASA's Flagship Budgetary Projects	
Bohnenkamp, Derek	70	CMU ML	9:30AM	The 500 Building.	
Bohrer, Justin	74	LO 102	2:30PM	The No Child Left Behind Act	
Boie, Megan	276	CMU ML	2:30PM	Middle Eastern Ecotopia: Visions for a Future Sustainable Society	
Boman, Andrew	180	CMU 204	2:30PM	Apartheid Africa: The Rise and Fall of Racial Segregation in South Africa	
Borgh, Addie	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?	
Borgh, Addie	276	CMU ML	2:30PM	Middle Eastern Ecotopia: Visions for a Future Sustainable Society	
Borne, Stuart	9	CMU 200B	2:30PM	The Diabetic Athlete	
Bottrell, Joseph	254	LO 93	10:30AM	Lending Growth in North Dakota	
Bouwman, Tiffany	103	CMU ML	9:30AM	The influence of similarity of comparison target on the optimistic bias	
Bowlus, Brittany	86	CMU ML	9:30AM	Obesity: America's Growing Concern	
Branch, Michelle	185	CMU ML	1:00PM	Copper(II) Complexes of Pyridine-2,6-bisamide Ligands: The Electronic and Structural Effects of Methyl Groups at Various Positions	
Branham, Chelsey	6	CMU ML	9:30AM	Teacher Candidate Volunteer Experience at Circle of Life Tribal School, White Earth, Minnesota	
Braton, Paul	90	CMU ML	9:30AM	North Star Construction, Proposed Innovis Medical Office Building Addition	
Braton, Sarah	81	CMU ML	9:30AM	Minnesota State University Moorhead New Residence Hall	
Braun, Kayla	63	CMU ML	9:30AM	Sensory Enhancement: Cochlear Implants for Adults	
Brekke, Carlie	332	CMU ML	2:30PM	Singing the Blues, and Seeing Them, Too: How Music can Influence Emotional Perception	
Brekke, Carlie	184	CMU ML	1:00PM	Eye Tracking: Cutting-edge research and its application at MSUM	
Briard, Alayna	206	CMU 214	2:50PM	Colorectal Cancer: Prevention and Incidence Rates	
Brown, Laura	280	CMU ML	2:30PM	Ecotopia in China: Visions for a Future Sustainable Society	
Bruhn, Jordan	281	CMU ML	2:30PM	Ecotopia in US: Visions for a Future Sustainable Society	
Brunner, Cole	134	CMU ML	1:00PM	Poverty, Health Insurance, and Health Status	
Buckley, Allison	166	CMU ML	1:00PM	Seizures in Children	
Burkel, Alex	279	CMU ML	2:30PM	United Kingdom Ecotopia: Visions for a Future Sustainable Society	
Bury, Susan	36	CMU ML	1:00PM	Painted Turtle (<i>Chrysemys picta bellii</i>) Ecology in Clay County, MN – What Do We Know After Nine Years?	
Bury, Susan	220	CMU 216	2:50PM	Characterization of chemical alarm cues in Minnows.	
Butrum, Sarah	222	LO 102	1:00PM	Minnesota Indian Gaming Regulation	
Butrum, Heath	302	LO 101	3:30PM	Policy Formation in Minnesota	
Camargo, Maria	81	CMU ML	9:30AM	Minnesota State University Moorhead New Residence Hall	
Cameron, Ross	85	CMU 214	10:30AM	The Performance of Appalachian Folk Music as a Means of Preserving an American Folk Music Tradition	
Cappelle, Amanda	294	LO 102	1:20PM	American Recovery and Reinvestment Act of 2009	
Cappelle, Amanda	300	LO 101	9:50AM	The American Recovery and Reinvestment Act of 2009	
Carlson, Joshua	274	CMU UG	1:00PM	Demonstrating the 5-E model with a biology lesson	
Cegla, Heather	290	CMU 218	3:30PM	Stellar Light Curves with the VYSOS 5 CCD Camera	
Chae, Min Joo	148	LO 101	2:30PM	The territorial dispute over Dokdo Takeshima between Japan and South Korea	
Chenard, Claudia	207	CMU ML	1:00PM	Tea Masters to Salt Shakers: A Historical look at Ceramic Art in Life	
Choi, Jin Ah	304	LO 102	3:10PM	About New Health Care Reform	

Numbers correspond with abstract listings beginning on page 29

Presentation				
Name	Number	Room	Time	Title
Christiansen, Trevor	314	CMU 205	3:00PM	Flippin' for a Cure
Christianson, John	121	CMU 216	3:10PM	Biodiversity: How much is enough? How much is a species worth?
Clemens, Pamela	181	CMU ML	1:00PM	The Process of Research in Evidence-Based Nursing Practice
Cole, Matthew	187	CMU ML	1:00PM	Studying digene trematode life cycles in the lab
Cole, Matthew	190	CMU ML	1:00PM	Development of genetic markers for the trematode parasite <i>Ornithodiplostomum ptychoceilius</i>
Colson, Fenner	138	CMU 218	1:00PM	Electromagnetism: Eddy Currents and Levitation
Connery, Russel	279	CMU ML	2:30PM	United Kingdom Ecotopia: Visions for a Future Sustainable Society
Conyers, Courtney	157	CMU ML	1:00PM	People Who Can Manage Stress Not Only Feel Healthier, They Are Healthier
Cook, Andrea	319	CMU 200D	2:50PM	Britain's attack on Asylum: A critical analysis of the impact asylum has had on xenophobia and the rise of the political far right in Britain
Cornwell, Kaleigh	280	CMU ML	2:30PM	Ecotopia in China: Visions for a Future Sustainable Society
Cota, Leandra	278	CMU ML	2:30PM	Brazilian Ecotopia: Visions for a Future Sustainable Society
Craft, Lucinda	86	CMU ML	9:30AM	Obesity: America's Growing Concern
Crocker, Rebecca	19	CMU 200B	2:50PM	Youth Gymnastics Injuries
Dahl, Ethan	337	CMU ML	2:30PM	The Effect of Music on Helping Behavior in Second Life: An Exploration of Inter-reality
Dahlen, Tony	154	CMU 207	9:30AM	International Students, Their Challenges, and What MSUM Can Do
Darko, Frank	221	CMU ML	1:00PM	What Factors Affect the Prevalence of HIV in the United States?
Daugherty, Samantha	199	CMU 200E	2:55PM	El realismo mágico en La casa de los espíritus por Isabel Allende y La casa de sano placer por Alicia Yáñez Cossio
De-Souza, Willie	77	CMU ML	9:30AM	DGR construction - Construction of Buffalo Wild Wings Building
Denzer, Theona	348	CMU ML	2:30PM	The Feasibility of an Ethnographic Field School
deOliveira, Fernanda	336	CMU 208	10:05AM	The Adaptation of American Comic Books to the Screen
Dhakal, Rajesh	201	CMU 218	2:30PM	Study of the Kinematics of a spherical ball between two parallel surfaces.
Dhankher, Aashana	127	CMU ML	1:00PM	Intel X-86(IA-32) family's processor
Dimerson, Quintin	288	CMU ML	2:30PM	Does A Woman's Income and Age play a role in whether or not she decides to have an Abortion?
Dion, Jared	115	LO 89	3:30PM	Does Money Talk? How The Composition Of Individual Presidential Campaign Donations Impacts
Dodd, Nichole	119	CMU ML	1:00PM	Cancer Prevention
Donarski, Heather	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?
Donarski, Jennifer	278	CMU ML	2:30PM	Brazilian Ecotopia: Visions for a Future Sustainable Society
Driscoll, Erin	333	CMU ML	2:30PM	Chiral Relay: Diastereoselectivity of Nitrile Imine Cycloadditions Involving Chiral Pyrazolidinones
Duesterhoeft, Brooks	75	CMU ML	9:30AM	Moonlight Resort
Dusoruth, Vaneesha	316	CMU 207	2:50PM	Presentation of a Feasibility Study for Increasing Faculty's Participation at Freshmen Advising.
Eberhardt, Kristin	200	CMU ML	1:00PM	A study of the mass to charge ratio of an electron
Eichhorn, Tara	36	CMU ML	1:00PM	Painted Turtle (<i>Chrysemys picta bellii</i>) Ecology in Clay County, MN – What Do We Know After Nine Years?
Eichhorn, Tara	208	CMU ML	1:00PM	Updated Survey of Wild Turkey (<i>Meleagris gallopavo</i>) distribution in Cass (ND) and Clay (MN) Counties (2003-2009)
Elfelt, Morgan	208	CMU ML	1:00PM	Updated Survey of Wild Turkey (<i>Meleagris gallopavo</i>) distribution in Cass (ND) and Clay (MN) Counties (2003-2009)
Elfelt, Morgan	162	CMU 227	3:10PM	Mathematical Modeling of Evolution in Fruit Fly (<i>Drosophila melanogaster</i>) Populations
Elfelt, Morgan	36	CMU ML	1:00PM	Painted Turtle (<i>Chrysemys picta bellii</i>) Ecology in Clay County, MN – What Do We Know After Nine Years?
Elfelt, Morgan	352	CMU 204	10:10AM	Investigating the Effects of Agricultural Nutrient Pollution on Semi-aquatic Bryophytes
Ellis, Evan	49	CMU 208	2:10PM	A glimpse into running your own business: Marketing Simulation Research Project
Emerson, Megan	54	CMU ML	9:30AM	Forms of Insulin Therapy
Enniful, Jeffrey	251	CMU ML	2:30PM	Design of Digital Vax processor
Erickson, Justine	269	LO 90	2:00PM	Adjudication and Diversion: The effects on Juvenile's
Evens, Kyle	29	CMU ML	9:30AM	An Uneasy Relationship: the International Court of Justice and the United States
Evglevskikh, Maria	49	CMU 208	2:10PM	A glimpse into running your own business: Marketing Simulation Research Project
Evglevskikh, Maria	40	CMU 203	3:25PM	Evaluation of market entry strategies for introducing Natural Family Planning as a substitute for traditional contraceptives in Italy

Numbers correspond with abstract listings beginning on page 29

Name	Presentation Number	Room	Time	Title
Eyler, Brian	162	CMU 227	3:10PM	Mathematical Modeling of Evolution in Fruit Fly (<i>Drosophila melanogaster</i>) Populations
Fergen, Josh	61	LO 90	3:30PM	Cultural Identity and Mass Media Among Immigrants in the U.S.
Fischbach, David	30	LO 102	2:00PM	Federal Hate Crime Prevention
Flatley, Kelsey	22	CMU ML	9:30AM	Assisted Suicide
Fogel, Leia	298	LO 101	10:30AM	The Role of Human Rights on International Extradition
Forsythe, Benjamin	258	CMU ML	2:30PM	Improving the Future Generation with STEM
Fortmann, Alecia	167	CMU ML	1:00PM	Benefits of Breastfeeding
Franz, Christopher	306	CMU 203	1:35PM	Horizonlines.org The online magazine
Frauenberg, Amy	347	CMU 207	3:10PM	Operation Christmas Child
Freed, Alexander	329	CMU 218	2:10PM	The Euler Line of a Non-Equilateral Triangle
Freed, Alexander	256	CMU ML	2:30PM	Mapping Planetary Magnetic Fields
Freed, Alexander	258	CMU ML	2:30PM	Improving the Future Generation with STEM
Frenzel, Mark	106	LO 89	1:40PM	Recessionary Religion: The effects of recessionary pressures on religious structure
Freudenrich, Brandon	66	CMU ML	9:30AM	Amped Arrows
Frisco, Brittany	194	CMU ML	1:00PM	Preterm Births in the United States
Funk, Kaitlyn	185	CMU ML	1:00PM	Copper(II) Complexes of Pyridine-2,6-bisamide Ligands: The Electronic and Structural Effects of Methyl Groups at Various Positions
Gallo, Nika	275	CMU UG	2:30PM	Demonstrating the 5-E model with a geology lesson
Gebreselassie, Etsehiwot	237	CMU ML	2:30PM	A Novel Method to Generate IR Spectra of Solutes in Solution
Geeslin, David	198	LO 89	10:30AM	Music Recording Industry Change To Digital Music: Where The Tune Will Come From
Geissler, Erin	249	CMU ML	2:30PM	Experimenting to locate the Mystery RP gene in Maize Leaves
George, Thomas	211	CMU ML	1:00PM	Servicescape of the Chiropractic Industry
Germann, Kathleen	190	CMU ML	1:00PM	Development of genetic markers for the trematode parasite <i>Ornithodiplostomum ptychoceilus</i>
Germann, Kathleen	121	CMU 216	3:10PM	Biodiversity: How much is enough? How much is a species worth?
Gette, Megan	123	CMU 216	3:30PM	What is the rose and right of developed nations in conserving the tropics?
Gette, Megan	37	LO 93	1:30PM	Holding our Tongues: Immigration, Language Death and Linguistic Human Rights
Gilles, Enol	77	CMU ML	9:30AM	DGR construction - Construction of Buffalo Wild Wings Building
Gleason, Katelyn	142	CMU ML	1:00PM	Achondroplasia Punctata X-linked Dominant
Glenski, Jennifer	285	CMU 207	1:40PM	Causes of Math Anxiety
Granquist, Derek	309	CMU ML	2:30PM	All Star Construction Daycare Facility
Grenz, Kristin	156	CMU ML	1:00PM	Exercise Affecting Health between Social Classes
Gulbranson, Matthew	239	LO 93	9:50AM	VIOLATORS ARE SUBJECT TO ARREST: Unobtrusive Observations of an Interesting Social Situation
Gulbranson, Matthew	234	LO 91	2:50PM	Cultures Consumed By Consumption: A Critical Review of Affluence in Western Society and the Role of the Citizen/Consumer in Contemporary Democratic Capitalism
Habouch, Amjad	345	CMU ML	2:30PM	The quality of Life in the USA, Thailand and Turkey: Does Economic Growth Matter?
Hadrath, Angella	226	CMU 208	10:25AM	Classical Vocal Technique
Hagstrom, Molly	58	CMU ML	9:30AM	Electrochemical Analysis of Nickel Melt in Different Compositions and Temperature
Haight, Brendan	246	CMU ML	2:30PM	Systemic acquired resistance associated modifications to the structural and carbohydrate profile of <i>Cucumis sativus</i> cell wall
Haley, Chyanee	8	CMU 204	1:20PM	Experiences in the Production of Independent Short Films
Hammes, Daniel	227	CMU 216	1:20PM	Experimental methods used to Determine Rho associated kinase Rock phosphorylation on carboxyl terminus of NHE-1
Hammes, Daniel	57	CMU ML	9:30AM	Determining specific site of Rho associated kinase Rock phosphorylation on carboxyl terminus of NHE-1
Hamness, Katie	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?
Hansana, Matthew	48	LO 90	1:40PM	Feminism From the Perspective of the Male College Student
Hansana, Matthew	83	CMU ML	9:30AM	The Relationship Between Spiritual Belief and Health Statuses
Hanson, Erik	34	LO 89	1:00PM	Professional Sports Substitutes and the Demand for Major League Baseball
Hanson, Tara	292	CMU ML	2:30PM	Effects of Vocabulary Enrichment in Repeated Read-Alouds on Preschoolers' Vocabulary Knowledge
Hanson, Katherine	278	CMU ML	2:30PM	Brazilian Ecotopia: Visions for a Future Sustainable Society

Numbers correspond with abstract listings beginning on page 29

Name	Presentation Number	Room	Time	Title
Harrington, Ashley	203	CMU 205	3:30PM	The Academic and Personal Rewards of Fundraising and Leadership
Harris, Larissa	307	CMU ML	2:30PM	Climate Change and Collapse in Ancient and Modern Times
Hasbargen, Adam	82	CMU 204	3:10PM	Justice? A Critical Look at the Leonard Peltier Trial.
Hashim, Sahra	151	CMU ML	1:00PM	China And Africa
Hashim, Sahra	152	CMU ML	1:00PM	Who benefited and Who is Benefiting. An Assessment of the Sino-Africa Relationship
Haugrud, Philip	242	CMU 204	9:30AM	Heritability of plasticity in families of a population of the moss, <i>Funaria hygrometrica</i>
Haugrud, Philip	218	CMU ML	1:00PM	Engineering and programming with the BOE-Bot: Balancing a reverse pendulum
Haus, Christine	107	CMU 204	2:00PM	Hessian Soldiers: Their Influence on the American Revolution
Heidebrink, Adam	20	CMU 207	2:00PM	Historical Context: Placing Literature on the Map
Heimdahl, Sara	292	CMU ML	2:30PM	Effects of Vocabulary Enrichment in Repeated Read-Alouds on Preschoolers' Vocabulary Knowledge
Helfrich, Carly	124	CMU 216	2:00PM	Ecotourism: Are We Loving The Tropics To Death?
Heller, Amanda	197	CMU 200D	3:10PM	South America United
Heng, Angela	129	LO 91	1:20PM	The Significant Role of Birth Order
Heng, Angela	264	CMU ML	2:30PM	What Certain Aspects in Life Help Contribute to a Happy Marriage
Henrich, Jasmine	324	CMU 227	1:45PM	The Golden Ratio
Herath, Bodini	217	CMU 204	9:50AM	Phenological responses of butterflies and native flowering plants to regional climate shifts
Herbst, Michael	214	CMU ML	1:00PM	The Hangover: How alcohol abuse today affects you tomorrow.
Herland, Sarah	40	CMU 203	3:25PM	Evaluation of market entry strategies for introducing Natural Family Planning as a substitute for traditional contraceptives in Italy
Heyne, Aimee	286	LO 90	1:00PM	The Population Policies and Their Effects on Modern China
Heyne, Cliff	287	CMU 205	1:00PM	A Critical Analysis of the Trinity Broadcasting Network Logo
Hoban, Brianna	67	LO 89	2:30PM	The Impact of Casinos on Dropout Rates in Minnesota
Hoepfner, Sarah	100	CMU ML	9:30AM	Addressing the Needs of English Language Learners in schools through Indirect Service Delivery Models in Speech-Language Pathology
Hoffer, Allison	4	CMU 207	9:50AM	The Corruption of the Residential Treatment Industry
Hoffman, Brianne	266	CMU ML	2:30PM	Trauma: Motor Vehicle Accidents
Hogue, Mitchell	59	CMU ML	9:30AM	MSUM Division 1 Hockey Arena
Hollis, Jessica	86	CMU ML	9:30AM	Obesity: America's Growing Concern
Holm, Paula	323	CMU 227	1:20PM	Three Dimensional Geometry
Holmaas, Luke	126	CMU 208	9:30AM	Sounds of Ecstasy: Music in the Films of Werner Herzog
Holt, Conor	265	CMU 203	10:30AM	The Impact of Digital Technology on Film Aesthetics and Distribution
Holte, Paige	173	CMU ML	1:00PM	Japanese Caring for Elderly
Hoover, Matthew	26	CMU ML	9:30AM	Prevention of Colorectal Cancer
Horton, Ashley	123	CMU 216	3:30PM	What is the rose and right of developed nations in conserving the tropics?
Horton, Ashley	36	CMU ML	1:00PM	Painted Turtle (<i>Chrysemys picta bellii</i>) Ecology in Clay County, MN – What Do We Know After Nine Years?
Houge, Dereck	90	CMU ML	9:30AM	North Star Construction, Proposed Innovis Medical Office Building Addition
Houkom, Seth	124	CMU 216	2:00PM	Ecotourism: Are We Loving The Tropics To Death?
Howland, Katherine	206	CMU 214	2:50PM	Colorectal Cancer: Prevention and Incidence Rates
Iwen, Kimberly	143	CMU 216	9:50AM	Behavioral Adaptations of International Students in the Fargo/Moorhead Community
Jeon, Haewoong	326	CMU 227	10:20AM	Constructible angles and regular polygons
Jetvig, Michelle	114	CMU ML	1:00PM	Triage Nursing as a Practice: How to Determine the Acuity of a Patient
Johnk, Casey	81	CMU ML	9:30AM	Minnesota State University Moorhead New Residence Hall
Johnson, Anno	84	CMU ML	9:30AM	Cultural Nursing Care for Special Needs Children in Jalapa, Nicaragua
Johnson, Matthew	101	CMU 207	3:30PM	Leadership Project: LOGAN (Labs Overseeing and Guiding Autism Needs) Group
Johnson, Zachary	296	CMU 205	1:20PM	Diapers: Stickin it to the Man
Johnson, Darren	165	LO 101	9:30AM	An assessment of suicide terror.
Johnson, Courtney	44	CMU 205	2:50PM	Facebook: The Good, The Bad, & The Addicting
Johnson, Lezlie	339	CMU 203	1:00PM	The Show Must Go On: How MSUM Campus News Producers created a show during the 2009 Spring Flood.

Numbers correspond with abstract listings beginning on page 29

Name	Presentation Number	Room	Time	Title
Jones, Danielle	13	CMU ML	9:30AM	Students and Stress: Does Social Comparison Make a Difference?
Jones, Courtney	271	CMU 205	2:30PM	TOMS Shoes: For a Better Tomorrow
Jorgenson, Renek	140	CMU 216	1:00PM	Impact on Minnesota lake systems by the evasive aquatic zebra mussel
Kamel, Ashraf	235	LO 91	3:30PM	New Media
Kamel, Ashraf	239	LO 93	9:50AM	VIOLATORS ARE SUBJECT TO ARREST: Unobtrusive Observations of an Interesting Social Situation
Kanagi, Buba	152	CMU ML	1:00PM	Who benefited and Who is Benefiting. An Assessment of the Sino-Africa Relationship
Kanagi, Buba	153	CMU ML	1:00PM	Who benefited and who is benefiting now? An analysis of Sino-Africa relationship
Kanagi, Buba	151	CMU ML	1:00PM	China And Africa
Kang, Haina	148	LO 101	2:30PM	The territorial dispute over Dokdo Takeshima between Japan and South Korea
Kapsner, Kayla	131	CMU ML	1:00PM	NHE Regulation of Intracellular pH
Karki, Bibhusha	345	CMU ML	2:30PM	The quality of Life in the USA, Thailand and Turkey: Does Economic Growth Matter?
Kasowski, Tenniel	22	CMU ML	9:30AM	Assisted Suicide
Kelly, Kaitlin	43	LO 102	9:50AM	Capital Punishment Policy
Kerestes, Andrea	104	CMU ML	9:30AM	Why Income Affects Health Status
Khadka, Binamra	210	CMU 207	2:30PM	The Himalayas in Nepal
Khadka, Ayush	210	CMU 207	2:30PM	The Himalayas in Nepal
Kidder, Kyle	24	CMU ML	9:30AM	Healthcare Reform Through the Legislative Process
Killebrew, Michelle	175	CMU ML	1:00PM	Discrimination of parental chemical cues by larval convict cichlids
Kim, Taehyun	175	CMU ML	1:00PM	Discrimination of parental chemical cues by larval convict cichlids
Kim, Kyungyun	325	CMU ML	2:30PM	Violent Portrayals and Aggressive Behavior: The Role of Parents
Kirchoff, Kristin	112	CMU 214	3:40PM	Why is Breast Cancer an Epidemic in the Unites States?
Kirkwood, Beau	274	CMU UG	1:00PM	Demonstrating the 5-E model with a biology lesson
Klick, Ryan	90	CMU ML	9:30AM	North Star Construction, Proposed Innovis Medical Office Building Addition
Kline, Kelli	204	CMU ML	1:00PM	Mental Health and Socioeconomic Status: What's the Connection?
Knecht, Travis	158	CMU 214	9:30AM	Broadway Musicals in Jazz
Kneeland, Sarah	243	CMU 214	1:40PM	Franz Schubert: His output and approach to lieder
Knight, Taylor	216	CMU ML	1:00PM	Testing the Claims of the Power Balance holographic wristband.
Koch, Courtney	102	CMU 204	1:40PM	America's "Black Regiment": Clerics as Soldiers in the War for Independence
Kohtala, Laura	322	CMU 227	9:30AM	Properties of Similar Triangles
Korczak, Andrea	322	CMU 227	9:30AM	Properties of Similar Triangles
Koskela, Amanda	123	CMU 216	3:30PM	What is the rose and right of developed nations in conserving the tropics?
Kramer, Clayton	146	LO 89	2:00PM	Medical Tourism: Alternatives to the US Healthcare System
Krump, Kara	91	CMU ML	9:30AM	Risk Factors & Prevention of Nosocomial Pneumonia
LaFollette, Andria	278	CMU ML	2:30PM	Brazilian Ecotopia: Visions for a Future Sustainable Society
Lakner, Mitchell	232	CMU ML	2:30PM	How does maize wake up? (ie....is dephosphorylation of the catalytic histidine residue non-enzymatic?)
LaPlante, Ashley	36	CMU ML	1:00PM	Painted Turtle (<i>Chrysemys picta bellii</i>) Ecology in Clay County, MN – What Do We Know After Nine Years?
Larsgaard, Richard	60	CMU ML	9:30AM	Pantheon Construction, Paws Place
Larson, Drew	113	CMU 214	2:00PM	Trumpet Repertoire in the 20th Century
Lazur, Brittany	44	CMU 205	2:50PM	Facebook: The Good, The Bad, & The Addicting
Le Stradic, Joran	101	CMU 207	3:30PM	Leadership Project: LOGAN (Labs Overseeing and Guiding Autism Needs) Group
Le Stradic, Joran	154	CMU 207	9:30AM	International Students, Their Challenges, and What MSUM Can Do
Leaf, Veronica	191	CMU ML	1:00PM	How Vital is Education and Income When Considering One's Health
LeClaire, Simone	321	CMU 208	9:50AM	Understanding Experimental Cinema
Lee, Eun Kyung	249	CMU ML	2:30PM	Experimenting to locate the Mystery RP gene in Maize Leaves
Leuthardt, Chelsie	233	LO 91	9:30AM	Dueling Perspectives of Pornography
Lewis, Mason	53	CMU 204	1:00PM	"Would That He Were a True Brother": Thomas Becket and the Projection of Authority
Lewis, Derrick	281	CMU ML	2:30PM	Ecotopia in US: Visions for a Future Sustainable Society

Numbers correspond with abstract listings beginning on page 29

Name	Presentation Number	Room	Time	Title
Lindsay, Maria	284	CMU ML	2:30PM	Chiral Relay: Diastereoselectivity of Nitrile Ylide Cycloadditions Involving Chiral Pyrazolidinones
Livingood, Jennifer	184	CMU ML	1:00PM	Eye Tracking: Cutting-edge research and its application at MSUM
Lloyd, Casey	170	CMU ML	1:00PM	The Eeriness of Eye Size in Consumer Robots Varying in Humanness of Appearance
Lloyd, Casey	337	CMU ML	2:30PM	The Effect of Music on Helping Behavior in Second Life: An Exploration of Inter-reality
Lodu, Rose	172	CMU 200D	2:30PM	Sex Trafficking of Women in Europe
Lohse, Tana	99	CMU ML	9:30AM	Iron-deficiency anemia in women and children worldwide
Lohse, Tana	120	CMU ML	1:00PM	How Sleep May Affect Your Ability to Achieve a Higher Academic Degree and Decrease Performance in School
Lothspeich, Brittany	194	CMU ML	1:00PM	Preterm Births in the United States
Lukes, Zachary	96	LO 101	1:20PM	Using Communication Theory To Analyze Corporate Reporting Strategies: A Study Of The Health Care Industry
Lund, Aaron	271	CMU 205	2:30PM	TOMS Shoes: For a Better Tomorrow
Lundin, Nathaniel	225	CMU 208	1:00PM	The Effects of Sound on the Cinematic Viewer
Lunn, Whitney	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?
Mabb, Brandon	221	CMU ML	1:00PM	What Factors Affect the Prevalence of HIV in the United States?
Mack, Nathan	3	LO 101	2:50PM	The Importance of Global Remittances to Human Development
MacRae, Katie	136	LO 90	10:30AM	Human Trafficking: A Sociological Analysis
MacRae, Katie	137	CMU ML	1:00PM	Prostitution in the United States: The Relationship between Prostitution and Public health Concerns
Maddock, Austin	211	CMU ML	1:00PM	Servicescape of the Chiropractic Industry
Maiers, Marissa	318	CMU ML	2:30PM	Old Age, Socioeconomic Status, and Health
Manandhar, Lumu	68	CMU ML	9:30AM	A First Look at Transcriptional Regulation of the Regulatory Protein in C4 Plants
Manga Matuba, Nana	154	CMU 207	9:30AM	International Students, Their Challenges, and What MSUM Can Do
Manga Matuba, Nana	32	CMU ML	1:00PM	Fish - It's back on the menu: Selenium attenuation of the mercury in Minnesota's game fish.
Manohar, Nivedha	260	CMU ML	2:30PM	How does sunlight regulate C4 photosynthetic pathway in maize leaves?
Marsh, Daniel	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?
Martens, Mikayla	203	CMU 205	3:30PM	The Academic and Personal Rewards of Fundraising and Leadership
Martinson, Sarah	123	CMU 216	3:30PM	What is the rose and right of developed nations in conserving the tropics?
Martz, Brooke	121	CMU 216	3:10PM	Biodiversity: How much is enough? How much is a species worth?
Mathiowetz, Sarah	89	CMU ML	9:30AM	Pain Assessment in the Pediatric Population
Matson, Nathan	339	CMU 203	1:00PM	The Show Must Go On: How MSUM Campus News Producers created a show during the 2009 Spring Flood.
Matson, Nathan	344	CMU 203	2:30PM	The Making of the Documentary Titled "inspired by Nature"
Mattis, Douglas	229	CMU 200E	2:30PM	Hiroshima Peace Tour Documentary
Maw, Natasha	310	CMU ML	2:30PM	Evaluating Voices in Different Languages
May, Brandon	97	CMU 200B	3:10PM	Lung Cancer Disparities in Minnesota
McGeary, Julie	140	CMU 216	1:00PM	Impact on Minnesota lake systems by the evasive aquatic zebra mussel
McGregor, Jason	75	CMU ML	9:30AM	Moonlight Resort
McGregor, Sondra	331	CMU ML	2:30PM	Analysis of phenolic acids upon chemically induced SAR in Cucumis sativus
McIntire, Leah	220	CMU 216	2:50PM	Characterization of chemical alarm cues in Minnows.
Medalen, Emilie	16	CMU ML	9:30AM	Epidemic of Vitamin D Deficiency
Merkens, Anna	268	CMU ML	2:30PM	Nurse Leadership in Nicaragua
Merritt, Anna	139	CMU ML	1:00PM	Sexuality Education
Merritt, Anna	145	LO 90	2:50PM	Adolescent Drug Use and Associated Stigmas
Messelt, Justine	52	CMU ML	9:30AM	Jehovah's Witnesses and Quality Alternatives to Blood Transfusions
Meyer, Kelsie	58	CMU ML	9:30AM	Electrochemical Analysis of Nickel Melt in Different Compositions and Temperature
Mihaylov, Deyan	334	CMU ML	2:30PM	STM spectroscopy
Mikheev, Yury	250	CMU ML	2:30PM	Windows Presentation Foundation (WPF)
Milde, Stefani	149	CMU ML	1:00PM	Causes of Obesity in the Younger U.S. Populations
Miller, Rebecca	281	CMU ML	2:30PM	Ecotopia in US: Visions for a Future Sustainable Society
Miller, Ross	179	CMU 203	3:05PM	Movie Industry Analysis

Numbers correspond with abstract listings beginning on page 29

Name	Presentation Number	Room	Time	Title
Minion, Jennifer	199	CMU 200E	2:55PM	El realismo mágico en La casa de los espíritus por Isabel Allende y La casa de sano placer por Alicia Yáñez Cossío
Moe, Rachael	261	LO 91	3:10PM	Sex Offenders Breaking the Myths.
Moore, Christopher	245	CMU ML	2:30PM	Using Nuclear Magnetic Resonance to Study Hydrogen Diffusion in Fuel Cells
Moorhouse, Amy	44	CMU 205	2:50PM	Facebook: The Good, The Bad, & The Addicting
Moorhouse, Amy	109	CMU ML	9:30AM	The Effects of Brassica rapa on White Cabbage Butterfly Larvae
Morseth, Zachary	141	CMU ML	1:00PM	Investigation of Quercetin as a possible sensitizer for Dye-sensitized solar cells
Moses, Jenna	28	CMU ML	9:30AM	Speedy Math Magic: Revealed!
Moses, Jenna	27	CMU ML	9:30AM	Tantalizing Geometric Puzzles... Oh My!
Murphy, Bryan	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?
Neibert, Heidi	253	CMU 208	2:30PM	United States Involvement in the Apartheid
Neill, Andrew	111	CMU 208	1:40PM	Community Video Project Screening and Presentation
Nelson, Alyssa	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?
Nelson, Amber	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?
Nelson, Whitney	271	CMU 205	2:30PM	TOMS Shoes: For a Better Tomorrow
Nelson, Meghan	69	LO 91	10:10AM	The Subculture of Violence among Male Prisoners in the US
Nelson, Kelsey	73	LO 102	10:10AM	Canadian Border Policy
Ness, Linsey	58	CMU ML	9:30AM	Electrochemical Analysis of Nickel Melt in Different Compositions and Temperature
Ness, Linsey	275	CMU UG	2:30PM	Demonstrating the 5-E model with a geology lesson
Nguyen, Tony	252	CMU 216	2:30PM	Purification and Biochemical Analysis of the Regulatory Protein of Pyruvate-Phosphate Dikinase
Nielsen, Linda	312	LO 101	2:00PM	The Cap and Trade Bill
Niraula, Aarati	97	CMU 200B	3:10PM	Lung Cancer Disparities in Minnesota
Niraula, Aarati	212	CMU ML	1:00PM	Smoking and its adverse effects on Health
Nistler, Justin	239	LO 93	9:50AM	VIOLATORS ARE SUBJECT TO ARREST: Unobtrusive Observations of an Interesting Social Situation
Nistler, Justin	139	CMU ML	1:00PM	Sexuality Education
Nistler, Justin	262	LO 91	2:30PM	Communication in a Technological Age
O'Brien, Dylan	46	CMU ML	9:30AM	Relations among Ratings of Artistic Quality, Beauty, and Liking
O'Brien, Dylan	47	CMU ML	9:30AM	Relations among Ratings of Artistic Quality, Emotional Intensity, and Eroticism.
O'Brien, Dylan	45	CMU ML	9:30AM	Evaluation of Art
Obertoh, Andrea	257	CMU ML	2:30PM	Going Green: The Efforts of the United States and Japan
Ogaard, Joshua	328	CMU 218	1:20PM	Hyperbolic Tessellations and the Art of M. C. Escher
Olds, Amber	215	CMU ML	1:00PM	Is adding a Technical Communications Minor or Emphasis to Minnesota State University Moorhead's English Major Feasible?
Olson, Matthew	171	CMU ML	1:00PM	Increased Gun Control Needed as Result of Increasing Gun Violence in the United States
Olson, Aaron	70	CMU ML	9:30AM	The 500 Building.
Olson, Travis	64	CMU ML	9:30AM	On the Border Mexican Grill & Cantina
Olson, Justin	36	CMU ML	1:00PM	Painted Turtle (<i>Chrysemys picta bellii</i>) Ecology in Clay County, MN – What Do We Know After Nine Years?
Olson, Alaina	31	CMU 214	3:10PM	Cardiovascular Disease Among Women: An Epidemiological Study
Olson, Alicia	281	CMU ML	2:30PM	Ecotopia in US: Visions for a Future Sustainable Society
Olson, Robert	46	CMU ML	9:30AM	Relations among Ratings of Artistic Quality, Beauty, and Liking
Olson, Robert	45	CMU ML	9:30AM	Evaluation of Art
Olson, Danielle	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?
Omonuwa, Imade	315	LO 102	2:50PM	No Child Left Behind
Orm, Noeuth	263	CMU ML	2:30PM	Japanese and American high school systems
Osborn, Amanda	301	CMU ML	2:30PM	No Child left behind
Otteson, Tyler	327	CMU 227	9:55AM	The Moulton Plane
Overseth, Haleigh	23	CMU 205	10:30AM	Self Improvement Old Testament Style A Film by Haleigh Overseth
Page, Trisha	88	CMU ML	9:30AM	Adult Neuro-Typical Attitudes toward Individuals with Autism
Page, Derek	46	CMU ML	9:30AM	Relations among Ratings of Artistic Quality, Beauty, and Liking

Numbers correspond with abstract listings beginning on page 29

Presentation				
Name	Number	Room	Time	Title
Page, Derek	45	CMU ML	9:30AM	Evaluation of Art
Page, Trisha	103	CMU ML	9:30AM	The influence of similarity of comparison target on the optimistic bias
Page, Trisha	101	CMU 207	3:30PM	Leadership Project: LOGAN (Labs Overseeing and Guiding Autism Needs) Group
Paudel, Sunil	188	CMU ML	1:00PM	Forgotten Slaves: Child Labors around the World.
Pavek, Nathan	59	CMU ML	9:30AM	MSUM Division 1 Hockey Arena
Penuel, Chelsey	124	CMU 216	2:00PM	Ecotourism: Are We Loving The Tropics To Death?
Persson, Danielle	41	CMU 200B	3:30PM	Are Fetal Alcohol Spectrum Disorder Prevention Programs Successful?
Pescion, Brent	64	CMU ML	9:30AM	On the Border Mexican Grill & Cantina
Petersen-Menefee, Natalie	282	CMU ML	2:30PM	Cricket and Lacrosse: Simple Games or Sources of Cultural Identity? Sports in Colonial Societies
Peterson, Marissa	297	LO 93	1:20PM	Don't Ask, Don't Tell.
Peterson, Elsie	161	CMU 203	9:54AM	A Difference of Character: Contrasting Shakespeare's Disguised Leading Ladies of The Merchant of Venice and Twelfth Night
Peterson, George	38	LO 91	9:50AM	How Perpetual Punishment Invalidates Proportionality
Peterson, David	328	CMU 218	1:20PM	Hyperbolic Tessellations and the Art of M. C. Escher
Peterson, Sarah	292	CMU ML	2:30PM	Effects of Vocabulary Enrichment in Repeated Read-Alouds on Preschoolers' Vocabulary Knowledge
Phelps, Sabrina	272	CMU ML	2:30PM	Increasing the odds of a healthy pregnancy: The benefits of prenatal care
Pieschke, Renee	155	CMU 204	2:50PM	Christianity and the Dakota Indians: The Success of Missionaries in Unforeseen Circumstances
Pilon, Nicolette	203	CMU 205	3:30PM	The Academic and Personal Rewards of Fundraising and Leadership
Pitcher, Nathan	283	CMU 208	10:37AM	Jazz styles in the 20th Century
Pitz, Andrea	220	CMU 216	2:50PM	Characterization of chemical alarm cues in Minnows.
Pitz, Andrea	122	CMU 216	1:40PM	Global Bio-conservation and it's Implications
Poudyal, Christina	335	CMU ML	2:30PM	Optimized Synthesis of N-substituted Pyrazolidinone Rings
Power, Amber	279	CMU ML	2:30PM	United Kingdom Ecotopia: Visions for a Future Sustainable Society
Price, Kirby	311	CMU ML	2:30PM	The Workings of the Hypothetical DLX Processor
Priebe, Kathleen	63	CMU ML	9:30AM	Sensory Enhancement: Cochlear Implants for Adults
Pruitt, Katie	164	CMU ML	1:00PM	DVT Protocol
Purrier, Jacob	320	CMU 208	3:15PM	Environmental effects of war on Vietnam
Quehl, Jonathan	203	CMU 205	3:30PM	The Academic and Personal Rewards of Fundraising and Leadership
Radenic, Sonny	189	CMU ML	1:00PM	Consistency of Shy-Bold Personality Continuum in Zebrafish
Rahman, Fariha	346	CMU ML	2:30PM	Save Energy and the Environment
Rapacz, Nicolas	42	LO 102	9:30AM	Don't Ask, Don't Tell.
Rastedt, Danielle	192	CMU 218	9:30AM	Proteomic Profiling of Arsenic and Antimony Stress on <i>Sulfolobus solfataricus</i>
Rastedt, DeAnna	36	CMU ML	1:00PM	Painted Turtle (<i>Chrysemys picta bellii</i>) Ecology in Clay County, MN – What Do We Know After Nine Years?
Rastedt, DeAnna	123	CMU 216	3:30PM	What is the rose and right of developed nations in conserving the tropics?
Rawal, Elizabeth	255	CMU ML	2:30PM	The Role of Good Diet And Exercise For Good Health
Rehder, Jessica	231	CMU ML	2:30PM	Differential temperature control of individual growth and mortality of midges
Reinholz, Kayla	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?
Reishus, Erica	305	CMU ML	2:30PM	Hunger in the United States
Reiswig, Allegra	160	CMU 203	9:42AM	King Lear: Inspiring More Sympathy than Macbeth
Rembrandt, Lyric	65	CMU 214	10:10AM	Senior Recital Program Note
Remhof, Jessica	292	CMU ML	2:30PM	Effects of Vocabulary Enrichment in Repeated Read-Alouds on Preschoolers' Vocabulary Knowledge
Rensvold, Tanya	324	CMU 227	1:45PM	The Golden Ratio
Reynolds, Leagha	277	CMU ML	2:30PM	Columbian Ecotopia: Visions for a Future Sustainable Society
Richards, Gary	77	CMU ML	9:30AM	DGR construction - Construction of Buffalo Wild Wings Building
Richgels, Matthew	18	CMU 208	2:55PM	Shinto and the Creation of Modern Japan
Rigge, Adam	118	CMU ML	1:00PM	Mollusk Distribution Within The Saline Lakes On San Salvador Island Bahamas-Establishing A Baseline For Determining Biological Response To Climate And Anthropogenic Change
Rijal, Durga	279	CMU ML	2:30PM	United Kingdom Ecotopia: Visions for a Future Sustainable Society

Numbers correspond with abstract listings beginning on page 29

Presentation					
Name	Number	Room	Time	Title	
Ringgold, Jennifer	36	CMU ML	1:00PM	Painted Turtle (<i>Chrysemys picta bellii</i>) Ecology in Clay County, MN – What Do We Know After Nine Years?	
Roers, Rebecca	268	CMU ML	2:30PM	Nurse Leadership in Nicaragua	
Rohrich, Leslie	51	CMU ML	9:30AM	Alcohol Consumption and the Effects on the Body	
Rolando, Dominique	154	CMU 207	9:30AM	International Students, Their Challenges, and What MSUM Can Do	
Rolando, Dominique	56	CMU 216	9:30AM	Republic of Mauritius – People, Culture and history	
Ronningen, Ebonee	177	CMU ML	1:00PM	Penury and Health	
Rosenau, Kristin	317	CMU ML	2:30PM	Rainbow Transmission Hologram	
Ross, Janelle	163	CMU 227	1:00PM	A Model of Productivity Versus Number of Employees	
Roy, Lyndsey	292	CMU ML	2:30PM	Effects of Vocabulary Enrichment in Repeated Read-Alouds on Preschoolers' Vocabulary Knowledge	
Ruckdashel, Steven	258	CMU ML	2:30PM	Improving the Future Generation with STEM	
Ryg, Cole	344	CMU 203	2:30PM	The Making of the Documentary Titled "inspired by Nature"	
Sailer, Cory	189	CMU ML	1:00PM	Consistency of Shy-Bold Personality Continuum in Zebrafish	
Saqlain, Murshid	193	CMU ML	1:00PM	Simple BEAM Robotics	
Saunders, Nicole	49	CMU 208	2:10PM	A glimpse into running your own business: Marketing Simulation Research Project	
Saylor, Todd	211	CMU ML	1:00PM	Servicescape of the Chiropractic Industry	
Schaefer, Brandon	60	CMU ML	9:30AM	Pantheon Construction, Paws Place	
Schaefer, Suzanne	21	CMU ML	9:30AM	The Use of Evidence Based Practice for Improving Lung Function/Respiratory Health Post Smoking Cessation	
Schafer, Sara	277	CMU ML	2:30PM	Columbian Ecotopia: Visions for a Future Sustainable Society	
Scheidecker, Courtney	280	CMU ML	2:30PM	Ecotopia in China: Visions for a Future Sustainable Society	
Schlueter, Nicole	240	CMU ML	2:30PM	Body Size Correlates to Asymmetric Competition among Fathead Minnows	
Schmitz, Heidi	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?	
Schrapp, Sarah	97	CMU 200B	3:10PM	Lung Cancer Disparities in Minnesota	
Schreifels, Michael	8	CMU 204	1:20PM	Experiences in the Production of Independent Short Films	
Schutt, Amy	7	LO 101	10:10AM	The Legacy of the Nuremberg Trials	
Scott, Rebecca	168	CMU ML	1:00PM	Does Premarital Sex Affect Your Health?	
Seim, Thomas	116	CMU ML	1:00PM	Gender Discrepancies in Confidence in Medicine	
Seim, Thomas	117	LO 93	9:30AM	Racial and Cultural Identity in Transracial Adoptees	
Seim, Thomas	239	LO 93	9:50AM	VIOLATORS ARE SUBJECT TO ARREST: Unobtrusive Observations of an Interesting Social Situation	
Serbus, Tyler	309	CMU ML	2:30PM	All Star Construction Daycare Facility	
Sharp, Jessica	44	CMU 205	2:50PM	Facebook: The Good, The Bad, & The Addicting	
Sherchan, Shikha	98	CMU 214	2:30PM	Sexually Transmitted Infections in Two College Towns	
Shinnaberry, Rhonda	184	CMU ML	1:00PM	Eye Tracking: Cutting-edge research and its application at MSUM	
Shores, Zachary	291	CMU ML	2:30PM	MSUM ACM - Overview and projects: Cluster and Proteus	
Shores, Zachary	248	CMU ML	2:30PM	The Power processor by IBM	
Shrestha, Deepsha	202	CMU 218	3:10PM	Gravitational Lensing	
Shrestha, Muna	212	CMU ML	1:00PM	Smoking and its adverse effects on Health	
Sieben, James	25	LO 102	10:30AM	Abolishing the Capitol Gains Tax	
Simmons, Ashley	2	CMU 207	10:30AM	Hypothetical Analysis and Educational Recommendations: Elementary Student Profile	
Sitaula, Shashank	259	CMU 227	2:30PM	Controlling Home Appliances Remotely	
Slusser, Andrea	57	CMU ML	9:30AM	Determining specific site of Rho associated kinase Rock phosphorylation on carboxyl terminus of NHE-1	
Slusser, Andrea	71	CMU 200C	2:30PM	Peroxiredoxin, a mitochondrial-specific peroxidase, as a possible key regulator of the β -adrenergic receptor anti-apoptotic pathway	
Smith, Robin	183	CMU 218	2:50PM	Pulse Jet Harmonics	
Smith, Heather	149	CMU ML	1:00PM	Causes of Obesity in the Younger U.S. Populations	
Smith, Heather	147	CMU ML	1:00PM	Education and Domestic violence	
Smith, Michael	306	CMU 203	1:35PM	Horizonlines.org The online magazine	
Sorensen, Heather	221	CMU ML	1:00PM	What Factors Affect the Prevalence of HIV in the United States?	

Numbers correspond with abstract listings beginning on page 29

Presentation				
Name	Number	Room	Time	Title
Sorensen, Heather	213	CMU ML	1:00PM	The Importance of Bridging the Gap Between Abstinence Only and Preventative Sex Education.
Souers, Daniel	150	CMU ML	1:00PM	Correlations between increased alcohol consumption and marital status and its effects on men's health
Spencer, Jennifer	125	CMU ML	1:00PM	Surgical Intervention for Spinal Stenosis
Srock, Josiah	200	CMU ML	1:00PM	A study of the mass to charge ratio of an electron
Srock, Josiah	218	CMU ML	1:00PM	Engineering and programming with the BOE-Bot: Balancing a reverse pendulum
Srock, Josiah	163	CMU 227	1:00PM	A Model of Productivity Versus Number of Employees
Stalboerger, Alex	124	CMU 216	2:00PM	Ecotourism: Are We Loving The Tropics To Death?
Starkey, Carson	224	LO 102	3:30PM	Mercenary Malice: Dangerous Defense Contractors
Stephany, Erin	22	CMU ML	9:30AM	Assisted Suicide
Stessen, Cory	36	CMU ML	1:00PM	Painted Turtle (<i>Chrysemys picta bellii</i>) Ecology in Clay County, MN – What Do We Know After Nine Years?
Stessen, Cory	121	CMU 216	3:10PM	Biodiversity: How much is enough? How much is a species worth?
Stieg, Kyle	35	LO 102	1:40PM	Federal Regulation of Tobacco
Stine, Rebecca	184	CMU ML	1:00PM	Eye Tracking: Cutting-edge research and its application at MSUM
Strong, Amanda	28	CMU ML	9:30AM	Speedy Math Magic: Revealed!
Strong, Amanda	27	CMU ML	9:30AM	Tantalizing Geometric Puzzles... Oh My!
Sullinger, Zachary	309	CMU ML	2:30 PM	All Star Construction Daycare Facility
Suppa, Kaitlyn	22	CMU ML	9:30AM	Assisted Suicide
Sussman, Samuel	291	CMU ML	2:30PM	MSUM ACM - Overview and projects: Cluster and Proteus
Sussman, Samuel	247	CMU ML	2:30PM	Overview of the MMIX processor.
Sutrisno, Randy	80	CMU ML	9:30AM	Effect of intrasexual competition and interference on nest quality and reproductive success in the labyrinth fish, <i>Betta burdigala</i>
Sutrisno, Randy	124	CMU 216	2:00PM	Ecotourism: Are We Loving The Tropics To Death?
Swanson, Christopher	223	CMU 227	2:50PM	Project Shinryu
Swanson, Jared	323	CMU 227	1:20PM	Three Dimensional Geometry
Swart, Jonathan	76	LO 89	3:10PM	The Evolution of a Ever Changing Solid Waste/Recycling Market: A Look at Consumer Welfare
Sweep, Alex	75	CMU ML	9:30AM	Moonlight Resort
Swendsen, Eric	66	CMU ML	9:30AM	Amped Arrows
Takagi, Ryu	244	CMU 200D	3:30PM	Whale Wars
Tao, Huanan	277	CMU ML	2:30PM	Columbian Ecotopia: Visions for a Future Sustainable Society
Tauer, Samantha	14	CMU ML	9:30AM	"The Lottery": Following the Status Quo
Teigland, James	62	LO 89	2:50PM	Economics and Eli Whitney: Lessons in Intellectual Property Rights
Templeton, Sean	293	CMU 203	10:18AM	"King Lear and the Hopelessness of Man"
Teo, Wesley	193	CMU ML	1:00PM	Simple BEAM Robotics
Ternes, Karmen	313	CMU ML	2:30PM	Personal experiences with screening for early detection of cognitive impairment
Thanel, Sara	213	CMU ML	1:00PM	The Importance of Bridging the Gap Between Abstinence Only and Preventative Sex Education.
Thanel, Sara	41	CMU 200B	3:30PM	Are Fetal Alcohol Spectrum Disorder Prevention Programs Successful?
Thielke, Lisa	84	CMU ML	9:30AM	Cultural Nursing Care for Special Needs Children in Jalapa, Nicaragua
Thomas, Christopher	72	CMU ML	9:30AM	Scorch Commons
Thomas, Isaac	169	LO 89	1:20PM	The meteoric rise of the motorcycle industry in Chongqing China
Thompson, Cami	280	CMU ML	2:30PM	Ecotopia in China: Visions for a Future Sustainable Society
Thompson, Jena	79	LO 89	10:10AM	Farm By-Products as a Source of Renewable Energy
Thompson, Melinda	277	CMU ML	2:30PM	Columbian Ecotopia: Visions for a Future Sustainable Society
Thorstad, Kai	303	CMU 203	9:30AM	Unsex Me Here: Gender Role Reversal and Natural Order in Macbeth
Tichy, Andrew	339	CMU 203	1:00PM	The Show Must Go On: How MSUM Campus News Producers created a show during the 2009 Spring Flood.
Toliver, Zachary	33	CMU 207	10:10AM	A culture sold, The negative effects of materialism in hip-hop.
Tollefson, Christopher	182	CMU 214	9:50AM	The use of the recorder during the baroque period in England
Trautner, Joshua	236	CMU 204	10:30AM	Effects of UV Light on 3 Species of Liverworts
Trippier, Rebecca	110	LO 91	1:00PM	Adoption

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Name	Presentation Number	Room	Time	Title
Turner, Jesse	59	CMU ML	9:30AM	MSUM Division 1 Hockey Arena
Undersander, Kiaja	36	CMU ML	1:00PM	Painted Turtle (<i>Chrysemys picta bellii</i>) Ecology in Clay County, MN – What Do We Know After Nine Years?
Undersander, Kiaja	208	CMU ML	1:00PM	Updated Survey of Wild Turkey (<i>Meleagris gallopavo</i>) distribution in Cass (ND) and Clay (MN) Counties (2003-2009)
Vadnie, Kayla	194	CMU ML	1:00PM	Preterm Births in the United States
Vetter, Todd	72	CMU ML	9:30AM	Scorch Commons
Villagomez, Kayla	93	CMU ML	9:30AM	Postpartum Hemorrhage
Vistad, Robert	133	LO 91	1:40PM	Female Drug Sellers and Their Experience Within the Drug Economy
Vossler, Jacob	187	CMU ML	1:00PM	Studying digene trematode life cycles in the lab
Wald, Cheryl	50	CMU 205	9:50AM	Graphic Design: What is it and What you can do with it?
Walker, Marques	55	LO 90	2:45PM	Minority and Lower-Class Inequalities in Today's Society
Walkup, Gina	280	CMU ML	2:30PM	Ecotopia in China: Visions for a Future Sustainable Society
Wallace, Andrea	135	CMU ML	1:00PM	Defibrillator: A life saving device
Walls, Michael	122	CMU 216	1:40PM	Global Bio-conservation and it's Implications
Walsh, Ryan	273	CMU UG	9:30AM	Demonstrating the 5-E model with a chemistry lesson
Walters, Jared	270	CMU 207	1:20PM	The Harms of Asperger's Disorder Diagnosis
Ware, Diane	162	CMU 227	3:10PM	Mathematical Modeling of Evolution in Fruit Fly (<i>Drosophila melanogaster</i>) Populations
Warner, Sarah	122	CMU 216	1:40PM	Global Bio-conservation and it's Implications
Warzecha, Isaac	66	CMU ML	9:30AM	Amped Arrows
Watson, David	349	CMU 214	1:20PM	The Art of Piano Accompanying
Weidman, Cory	216	CMU ML	1:00PM	Testing the Claims of the Power Balance holographic wristband.
Weidman, Cory	219	CMU 218	10:10AM	Exploratory Screening of Capsaicin-based Compounds as Potential Therapeutic Targets for Human Non-small Cell Lung Cancer
Weightman, William	105	CMU 205	9:30AM	William Shakespeare's influence in the Contemporary World
Weir, Nicholas	209	CMU ML	1:00PM	Building a colling unit for a NMR spectrometer
Weir, Nicholas	193	CMU ML	1:00PM	Simple BEAM Robotics
Wein, Gabrielle	279	CMU ML	2:30PM	United Kingdom Ecotopia: Visions for a Future Sustainable Society
Wenaas, Amber	108	CMU ML	9:30AM	The Correlation among Religion and Mental Health
Wenaas, Amber	130	LO 90	2:30PM	The Sociology of Food
Wendlick, Brooke	347	CMU 207	3:10PM	Operation Christmas Child
Wenzel, Hayley	206	CMU 214	2:50PM	Colorectal Cancer: Prevention and Incidence Rates
Wermager, Lexi	221	CMU ML	1:00PM	What Factors Affect the Prevalence of HIV in the United States?
Wichmann, Marsha	230	CMU ML	2:30PM	Mate attraction: How attractive are single parents?
Wickersham, Amanda	273	CMU UG	9:30AM	Demonstrating the 5-E model with a chemistry lesson
Williams, Christopher	291	CMU ML	2:30PM	MSUM ACM - Overview and projects: Cluster and Proteus
Willits, Christina	28	CMU ML	9:30AM	Speedy Math Magic: Revealed!
Willits, Christina	27	CMU ML	9:30AM	Tantalizing Geometric Puzzles... Oh My!
Winans, Michael	122	CMU 216	1:40PM	Global Bio-conservation and it's Implications
Wong, Ryan	276	CMU ML	2:30PM	Middle Eastern Ecotopia: Visions for a Future Sustainable Society
Wood, Shannon	41	CMU 200B	3:30PM	Are Fetal Alcohol Spectrum Disorder Prevention Programs Successful?
Woods, Rebecca	92	CMU ML	9:30AM	Prevention of deep vein thrombosis in patients following surgery.
Wynne, Patrick	111	CMU 208	1:40PM	Community Video Project Screening and Presentation
Yellow Bird, Willard	78	LO 90	1:20PM	A Literature Review on High suicide rate among Native Americans
Young, Charley	15	CMU ML	9:30AM	Sickle Cell Trait and the Athlete
Zhao, Chenchen	347	CMU 207	3:10PM	Operation Christmas Child
Zilka, Tiffany	342	LO 93	1:00PM	Gender Gap In US Unemployment
Zimmerman, Tracy	84	CMU ML	9:30AM	Cultural Nursing Care for Special Needs Children in Jalapa, Nicaragua
Zimmerman, Margaret	68	CMU ML	9:30AM	A First Look at Transcriptional Regulation of the Regulatory Protein in C4 Plants

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Abstracts

2
Hypothetical Analysis and Educational Recommendations: Elementary Student Profile
Ashley Simmons • SPED • Brian Smith • CMU 207 • 10:30AM
This is a theoretical case study based on educational psychology. The study examines fictitious student, Oliver, and consists of analyses, applications, and recommendations for intervention. Influences include applicable theories of Piaget, Vygotsky, Erikson, Kohlberg, and Moshman.

3
The Importance of Global Remittances to Human Development
Nathan Mack • POL • Andrew Conteh • LO 101 • 2:50PM
In this essay, I attempt to elucidate the importance of global remittances to human development.

4
The Corruption of the Residential Treatment Industry
Allison Hoffer • CMST • Merrie Holtan • CMU 207 • 9:50AM
This speech investigates Residential Treatment Centers (RTCs) and their role in treating children and adolescents. RTCs are defined, and the reasons a child or adolescent would be admitted to such an institution like this are explained. The roots of these programs are presented, and the changes between then and now are outlined. Experiences are shared and shocking details about the corruption of this industry are revealed. What is working in this industry is discussed along with what needs to be changed. Ideas on how to change the way the RTC system works are presented.

6
Teacher Candidate Volunteer Experience at Circle of Life Tribal School, White Earth, Minnesota
Chelsey Branham • SPED • Camille Brandt • CMU ML • 9:30AM
MSUM teacher candidates have been volunteering at White Earth Circle of Life K-12 tribal school for the 2009 - 2010 school year. Students and their faculty have taken a leadership role in the development of a partnership whereby students and faculty have been able to work with children in grades one through four in math, reading, and creative writing. Students in the Circle of Life school represent diverse families living on or near the White Earth reservation. The school population contains students who are at risk for learning problems and/or who have been identified as having learning problems. The students attend class for full days in the school. The curriculum includes traditional subject matter as well as culturally significant content matter. Candidates have employed instructional decision making techniques while implementing teaching tools and instructional strategies, including the use of informal assessment, observation, collaboration, small group instruction, and motivation. The classroom teachers have used this time away from the classroom for collaboration, for assessment, and for planning a guided reading resource center. Teacher candidates will presenting on this project as an outreach and information poster session.

7
The Legacy of the Nuremberg Trials
Amy Schutt • POL • Andrew Conteh • LO 101 • 10:10AM
This paper examines the legacy of international human rights law as a result of the Nuremberg trials. International law was silent on the issue of individual accountability for human rights violations for most of history. At the Nuremberg trials, the first steps were taken toward international accountability and international human rights crimes were defined. In the decades after the Nuremberg trials, international human rights law has been codified and ad-hoc criminal tribunals were established in countries such as Yugoslavia and Rwanda to deal with human rights violations. The International Criminal Court was established to become a permanent version of the Nuremberg trials in a global context. The problem of ex post facto laws regarding international criminal responsibility has been rectified in the International Criminal Court. However, despite the immense development of international human rights law, criticism of international tribunals still proves valid today. Without an enforcer of international law or unlimited resources to fund the court, the system of punishing human rights violations remains imperfect.

8
Experiences in the Production of Independent Short Films
Chayannee Haley, Michael Schreifels • HON • Annette Morrow • CMU 204 • 1:20PM

Film offers a powerful means of conveying meaning and emotion. The creation of quality films can be a daunting task, however. The nature of the medium is one of extreme complexity. Independent film, with its budgetary and time constraints, presents a whole new set of challenges. From this rises the necessity of meticulous planning, extensive cooperation, and creative solutions. Throughout all three stages of filmmaking—pre-production, production, and post-production—it is imperative that momentum is maintained and flexibility is embraced.

9
The Diabetic Athlete
Stuart Borne • AT • Christopher Huot • CMU 200B • 2:30PM
Diabetes is a disease that affects millions of people every year. People who have diabetes and participate in competitive sports present challenges to themselves and to their healthcare providers. It is important to educate healthcare providers and the athletes on the complications of diabetics who compete in sports. Understanding how to manage these demands can greatly reduce the risk of further complications.

10
Japan: An Economic Geographical Approach
Michael Alexander • GEOS • Paul Sando • CMU ML • 9:30AM
Japan is a magnificent country that is growing at an unstoppable speed to success. In my presentation, I will talk about various aspects concerning Japan. I will inquire about globalization development while also talking about the historical development of the country and how it has reached to its success today. I will talk about the economic trade pattern which leads to their economic growth, which leads them to have one of the most outstanding economies in the world. I will talk about the steady population growth and how it affects their culture. Japan, being the lowest crime country in the world, I will also elaborate on how the Japanese cultural background makes this possible.

11
Difficulties of HIV prevention education across cultures
Rebekah Aakre • SOC • Deborah White • LO 91 • 2:00PM
This research addresses the challenge of developing HIV prevention interventions across cultures. It identifies difficulties in HIV prevention education across cultures and identifies some of the best methods to teach HIV prevention education. It tackles the issues of government obstacles, power differential, and reasons why HIV/AIDS continues to be an epidemic in our world. Twenty five peer reviewed journals on HIV/AIDS prevention programs were analyzed and summarized in this literature review. As a result of the analysis, one can conclude that an individual's culture and belief system are the most important factors that need to be addressed when educating on HIV prevention. It was also shown that receiving education from a person of a similar culture and background provided a level of trust that increased the ability for an individual to receive the information on HIV. When developing HIV prevention programs, educators need to be aware of the groups' culture and belief system in order for education to be accepted and acted upon.

12
Critical Care Nursing
Rebekah Aakre • NURS • Donna Clark • CMU ML • 9:30AM
Critical Care Nursing is paramount to nursing today and will continue to be because individuals persist to experience health problems and need care that is life saving. As technology grows, interventions to save people's lives expand and are implemented into a critical care setting. Nurses who work in a critical care setting need to assess and monitor the patient closely in order to identify slight changes in a patient's condition that need immediate intervention. It is their duty and responsibility to initiate the intervention as soon as possible. Patients that are cared for in a critical care setting may include but not limited to patients that have had a major invasive surgery, accident and trauma patients, patients with multiple organ failure, or patients that are intubated and need close monitoring. For the majority of the time, patients who are on a critical care unit tend to be medically unstable, require constant cardiac and respiratory monitoring and continual adjustment of treatments such as titration and dosing of intravenous medications. Because of the critical nature of the patients, nurses are

often confronted with end-of-life issues and ethical dilemmas related to, withdrawing or withholding medical futile care. This synthesis paper seeks to describe what critical care nursing is and the benefits of it. It is an analysis of peer reviewed journals on critical care nursing and describes my own clinical experiences on an intensive care unit.

13
Students and Stress: Does Social Comparison Make a Difference?

Danielle Jones • PSY • Rochelle Bergstrom • CMU ML • 9:30AM
Although a vast amount of research has examined social comparison theory, not much attention has been focused on social comparisons among college students, specifically comparisons involving daily stressors. In this study participants will be given descriptions of confederate students that indicate either stressful or easy-going semesters. Participants will take a perceived stress test. The participants who read the high-stressor student descriptions are expected to have lower perceived stress scores than those who read the low-stressor student descriptions. This research will have implications for both social comparison and college stress research.

14
"The Lottery": Following the Status Quo

Samantha Tauer • ENGL • Linda Lein • CMU ML • 9:30AM
The paper I wrote was for a cultural context essay for Eng. 202. The title of my paper is "The Lottery": Following the Status Quo," and my paper is an analysis of how Shirley Jackson's story relates to unspeakable crimes. Crimes that happened in the past and that are still happening today. Here's a little part from my intro... "The words, 'the lottery,' immediately bring to mind the conventional idea of a lucky jack-pot winner, but Shirley Jackson had a different image. Jackson created a shocking short story that revealed the lottery as a tradition that the townspeople were either unwilling or afraid to give up. In Shirley Jackson's story, "The Lottery," written three years after the liberation of Jews in Auschwitz, the townspeople's unspeakable crimes or "banality of evil" exposed the dark side of human nature; it is a protest against totalitarian governments like Nazi Germany. The wickedness of the common man or woman on the street can be just as shocking and horrifying as the shocking crimes of a serial killer." It would be an individual presentation with a poster display and/or PowerPoint. I would like to present some background information on the author of "The Lottery" Shirley Jackson, and then pull some citations out of my paper to put on the board and/or PowerPoint then possibly add some new information on what is happening today in our world. For example "The Festivals of Death" that occurred in Panduhuma, India. In India many were stoned to death just like in the story "The Lottery." I think it would be a very interesting twist for those who stop by my booth for discussion.

15
Sickle Cell Trait and the Athlete

Charley Young • AT • Christopher Huot • CMU ML • 9:30AM
Sickle cell disease is devastating to the patient, patient's family and friends. It is an inherited autosomal recessive disease which means it is inherited by both parents. It results in an abnormal hemoglobin called hemoglobin S which has adverse affects on the body. It is possible to inherit a normal hemoglobin and an abnormal hemoglobin, this is called sickle cell trait. With sickle cell trait the patient can live a somewhat normal life with some risk factors but can still transmit the disease to their offspring. Patients with sickle cell anemia live a very difficult life with constant treatments and no real cure. Sickle cell trait has taken lives in the athletic population and needs to be understood by anyone who deals with athletics on a daily basis.

16
Epidemic of Vitamin D Deficiency

Emilie Medalen • AT • Christopher Huot • CMU ML • 9:30AM
The focus of this poster presentation is vitamin D deficiency and how it relates to disease, illness, injury, and athletic performance. In recent years, researchers have discovered some incredible information pertaining to vitamin D and its function in the body. Vitamin D is an amazing nutrient our body can make itself and is involved with over 200 different tissues in the body. Although there are three different methods to obtain vitamin D, one billion adults and children worldwide are estimated to be deficient or insufficient. Researchers are calling vitamin D deficiency an endemic and an epidemic that is too often undiagnosed. Some see vitamin D deficiency in adults as a rule rather than the exception. Since vitamin D acts as a steroid hormone, it has the ability to aid the body in the treatment or prevention of chronic illnesses, certain types of cancer, and autoimmune, cardiovascular, and infectious diseases. The fact that vitamin D deficiency is linked to a number of diseases exemplifies its importance to the body. Despite its importance,

the majority of researchers agree that the current RDA should be much higher. The treatment of vitamin D deficiency is relatively simple and largely depends on the cause of deficiency. Three available options are sunlight, artificial sunlight, and supplementation. Since vitamin D has such a crucial role in bone health and the deterrence of autoimmune and chronic diseases, experts feel it is also probable that vitamin D affects the health and performance of athletes. Evidence proposes that ample treatment of vitamin D deficient athletes may see improvement in their athletic performance. However, the benefits of receiving sufficient amounts of vitamin D are abundant and crucial to everyone's health.

18
Shinto and the Creation of Modern Japan

Matthew Richgels • HIST • Henry Chan • CMU 208 • 2:55PM
Shinto and the Creation of Modern Japan is a paper that takes a look at how Shinto, Japan's indigenous religion, was employed in the creation of the Modern Japanese nation state. The paper demonstrates how the Japanese used Shinto to justify the overthrow of the Tokugawa Shogunate in 1867, as well as how Shinto was used by the new Imperial government to create a national identity and bring unity to the country, and how Shinto's religious beliefs and ideology were used to not only legitimize imperialist expansion, but to make it more attractive.

19
Youth Gymnastics Injuries

Rebecca Crocker • AT • Christopher Huot • CMU 200B • 2:50PM
Gymnastics is a very glamorous to the public eye but it actually is a very complex and challenging sport. Youth gymnasts go through many different hardships to try to reach their dreams. I will be focusing on the injury aspects of this sport and the high injury rate associated with gymnastics. First I will explain basic anatomy and different injuries that occur frequently. I will also explain preventable measures that are being developed to help decrease the injury rates. I hope my presentation will show people that gymnastics isn't all that glamorous behind the scenes.

20
Historical Context: Placing Literature on the Map

Adam Heidebrink • ENGL • Katherine Meiners • CMU 207 • 2:00PM
Modern technology has provided new methods of analyzing the historical context of previous eras. By digitizing the studies from various fields (humanities, science, etc) and organizing the data onto maps, scholars can more advantageously explore these time periods, providing researchers with new perspectives and consequently new relationships between the disciplines. The same electronic mapping techniques used today in enterprises such as Google Maps can be channeled into creating virtual reconstructions of historical locations and their respective literary neighborhoods. This visual restoration of the past enables more in-depth focus on the social-temporal occurrences of the time that may have been overlooked by traditional text-based historical and biographical studies. Many aspects of these historical literary movements have been well represented by the universal canon of authors that form the basis of English scholarship; however, some facets remained unobserved. Historical mapping will strengthen existing contextual research by uniting several individual efforts into a single database. One primary example of this technology in development is Allison Muri's Grub Street Project. Using a digitized copy of Richard Horwood's map of Georgian London (drawn 1792-1799), we are able to explore the streets and neighborhoods of 18th century London with accuracy. Grub Street's interface presently provides the user with the ability to label, annotate, and cross-reference data that is relevant to Enlightenment studies. People are a product of their environment, and this technology restores that element of history; scholars can now virtually trace the lives of Alexander Pope, Jonathan Swift, Addison and Steele, and others through literary London, forming connections between authors and their immediate surroundings. The theoretical implications of this technology are immense. Historical topography establishes an organized method of amassing and categorizing related research. Imagine selecting a literary figure of your choice, toggling on your desired contexts and watching the significant events pertinent to those studies be displayed exactly when and where they occurred in space and time. From there, imagine clicking through to scholarly articles, eBooks, and critical analyses of the selected event. By aligning our studies with technological advancement, English scholars have the entire historical world at their fingertips.

21
The Use of Evidence Based Practice for Improving Lung Function/ Respiratory Health Post Smoking Cessation

Suzanne Schaefer • NURS • Barbara Matthees • CMU ML • 9:30AM
According to the Centers for Disease Control currently 21% of the adult

population of the United States smokes cigarettes. Along with that, 20% of high school students admit to smoking in the last thirty days. 443,000 deaths occur annually as a result of tobacco related illnesses and tobacco has a financial impact as well. If losses of productivity as a result of death and health care costs are combined, tobacco costs this nation \$193 billion annually. Smoking has many detrimental effects on the human body. One of the most evident effects is the decrease in respiratory function in those who smoke and for those around them. Chronic Obstructive Pulmonary Disease (COPD) is a highly prevalent disease for smokers. Patients with COPD have structural lung damage which cannot be reversed but can be slowed by smoking cessation. The question then lies in the area of rehabilitation. Can the respiratory function and/or the lungs themselves be rehabilitated after smoking for some length of time? According to a study in the European Respiratory Journal, within 1-2 months of cessation wheezing and coughing experienced by these ex-smokers can be reduced to the level of nonsmokers. By using evidenced-based practice a collaborative team of healthcare providers can develop a plan to improve the respiratory function and cessation success of this population. Respiratory therapy, physical therapy, nursing, as well as the physician are instrumental in this collaboration. Education, pre-cessation and post-cessation testing, pharmacologic strategies, incentive spirometry, etc., are ways the healthcare team can provide support in accomplishing this difficult task. This presentation will explore these practices, their goals, and their outcomes.

**22
Assisted Suicide**

Kyler Alfstad, Kelsey Flatley, Tenniel Kasowski, Erin Stephany, Kaitlyn Suppa • CCGE • Jarilyn Gess • CMU ML • 9:30AM
The point of our poster session is to show the pros and cons of assisted suicide. We want people to understand the difficult decisions that some families may have to make some day. We think that it is important for people to have an opinion and know the risks and benefits to their beliefs.

**23
Self Improvement Old Testament Style A Film by Haleigh Overseth
Haleigh Overseth • FILM • Kyja Kristjansson-Nelson • CMU 205 • 10:30AM**

This film is meant to be an entertaining social commentary on religious extremism and the 'immaturity' of institutional traditions. Bunny and Steph are completely fictional characters and the story is entirely of the scriptwriter's original conception. Any resemblance to actual persons, events or other works of art or literature is incidental, save the use of allusions for additional cultural or intellectual significance supportive of the goal to entertain.

**24
Healthcare Reform Through the Legislative Process
Kyle Kidder • POL • Barbara Headrick • CMU ML • 9:30AM**
Please include this presentation among the panels for Dr. Headrick's POL 341 Public Policy class. The topic of discussion will be healthcare reform, where its at, how it got there, and where it is likely to go. We request panels made up of members of the class. Thank you.

**25
Abolishing the Capitol Gains Tax
James Sieben • POL • Barbara Headrick • LO 102 • 10:30AM**
Please include this presentation among the panels for Dr. Headrick's POL 341 Public Policy class. We request panels made up of members of the class. Thank you. I plan to do a presentation based on President Obama's proposal to eliminate the Capitol Gains tax. This proposal, which was stated in his state of the union address, could be a key stimulant to the economy and to bipartisan policy. There are many positives and negatives to this policy and this presentation will discuss those in detail.

**26
Prevention of Colorectal Cancer
Matthew Hoover • NURS • Donna Clark • CMU ML • 9:30AM**
"Risks factors for the development of colorectal cancer (CRC) include genetic predisposition, personal and dietary factors, and inflammatory bowel disease". (Ignatavicius & Workman, 2006) At a young age, many people do not think of preventing CRC but this is when much of the prevention should be taking place. There are many ways to modify a lifestyle to lessen the chances of getting CRC. Diet modifications are one step; the diet should be high in fiber and low in fat with decreased amounts of refined carbohydrates. Other factors that can lessen the risks include increased physical exercise and taking daily multivitamins. Screening for CRC should be initiated at age 50 and should include a

colonoscopy. Colonoscopies have many benefits that other colon cancer tests do not. For instance, they provide a look inside the colon, can find polyps as well as remove them during the procedure, and can test polyps to see if they are cancerous. Other tests that could be used to screen for CRC include fecal occult blood test (FOBT) done every year after the age of 50, flexible sigmoidoscopy done every five years, and a double-contrast barium enema which is also done every five years. Symptoms of CRC are rare in the early stages of the disease. Some symptoms may include a "change in bowel habits; blood in your stool; persistent abdominal discomfort, such as gas, cramping or pain; weakness or fatigue; and unexplained weight loss". (Mayoclinic.org)

**27
Tantalizing Geometric Puzzles... Oh My!
Jenna Moses, Amanda Strong, Christina Willits • MAED • Geok Ng • CMU ML • 9:30AM**

You will have the chance to explore an ancient Chinese puzzle using geometric shapes. Information will be presented in a hands-on, minds-on format.

**28
Speedy Math Magic: Revealed!
Jenna Moses, Amanda Strong, Christina Willits • MAED • Geok Ng • CMU ML • 9:30AM**
We will reveal a mathematical trick that allows you to multiply certain numbers quickly and without the use of a calculator.

**29
An Uneasy Relationship: the International Court of Justice and the United States
Kyle Evens • POL • Andrew Conteh • CMU ML • 9:30AM**

This work discusses the relationship between the ICJ and the United States. The focus will be specifically in regards to the compulsory jurisdiction and the controversies created by the United States as a result of that jurisdiction. The work examines the issue of US "exceptionalism" in international affairs and how this affects the ability of the ICJ to conduct its duties. The methodology of this research is a study of the historical relationship between the US and ICJ since its foundation in 1945. This relationship has fundamentally changed due to two cases of US disagreement with the ICJ: the 1984 case involving the mining of Nicaraguan harbors and the USS Vincennes incident on July 3, 1988. These controversies show that by acting in defiance of international law the United States has weakened the image of public international law. The implications of these actions have become apparent with the policies of recent Presidential administrations and their treatment of international law.

**30
Federal Hate Crime Prevention
David Fischbach • POL • Barbara Headrick • LO 102 • 2:00PM**
Please include this presentation among the panels for Dr. Headrick's POL 341 Public Policy class. We request panels made up of members of the class. Thankyou. I will talk about the Federal Matthew Shepard and James Byrd, Jr. Hate Crime Prevention Act. Where did it originate? Why was it debated? What are the immediate issues addressed by it? etc.

**31
Cardiovascular Disease Among Women: An Epidemiological Study
Stacey Adams, Katie Aukland, Alaina Olson • COMH • Gina Kelly • CMU 214 • 3:10PM**

Cardiovascular Disease continues to be the number one killer of adults within the United States. An examination of secondary data will provide facts and statistics pertinent to the research. The research will compare data from the United States to the state of Minnesota. The goal of this study is to concentrate efforts on strategies for increased awareness and education among women regarding cardiovascular health.

**32
Fish - It's back on the menu: Selenium attenuation of the mercury in Minnesota's game fish.**

Nana Manga Matuba • CHEM • Richard Lahti • CMU ML • 1:00PM
340g of fish per week as the maximum fish quantity recommended for a pregnant woman by the Minnesota department of health to avoid mercury poisoning which may have substantial effect on the fetus' neurological development. Research has shown that high level of mercury consumption by the mother during the pregnancy may lead to serious neurological defect for the child. Other researchers of heavy metal effects have found that selenium works to counteract mercury's destructive impact by lowering its toxicity. In addition, researchers found that pregnant women, who had more than 340g of fish, carried less risk

of mercury poisoning if the level of selenium was high enough to counteract the mercury effect. Since MN waters are high in selenium traditional consumption advisories should be revised to reflect this decreased risk. This result shows that by balancing level of mercury and selenium, pregnant women will be able once again to benefit from proteins through fish consumption.

33

A culture sold, The negative effects of materialism in hip-hop.
Zachary Toliver • CMST • Merrie Hoitan • CMU 207 • 10:10AM

Within our time together I wish to reveal how materialistic hip hop damages the morality of the inner city and how we can overcome the stigmas of main stream hip hop. 1st Main Point: Mainstream Media hip hop contains unhealthy imagery of materialism that cripples the creativity of the music. Hip hop that most know today is consumed by materialism and filled with catchy shallow Lyrics. Inner city and "ghetto kids" are fueled by this imagery, these are the role models for these children. If Hip hop doesn't change, it will be a lost art form with no creativity to offer listeners and no voice for the people stuck in poverty and ghettos. 2nd Main point: Hip hop as a whole needs more influence from lyrically talented and intellectual rappers that portray the real struggles of life in poverty. Certain Hip hop legends, even though very widely known, still send out good messages for hip hop. Conclusion I hope to have informed the audience on the negativity of materialistic, mainstream Hip hop. I also hope to have persuaded them to look into the alternatives to this sickly realm of hip hop I have mentioned and stop feeding the media crazed beast. I wish for no one to forget that like any other music throughout history, hip hop tells stories of realities. This process of artful story telling is being destroyed by materialism eating away at the morality of the inner city.

34

Professional Sports Substitutes and the Demand for Major League Baseball

Erik Hanson • ECON • Tonya Hansen • LO 89 • 1:00PM

This paper discusses the determinants of Major League Baseball attendance. Specifically, it looks into the way in which substitute professional sports teams impact the demand for Major League Baseball. Previous work has shown that Major League Baseball attendance is influenced heavily by the distance between teams and their nearest Major League Baseball substitute. This paper takes the view that consumers do not limit their Major League Baseball substitutes to other franchises in the league. Instead, fans can choose to attend other professional sporting events as substitutes for baseball. Therefore, the discussion of substitutability will be expanded to account for the presence of the other three major North American sports – the National Hockey League, the National Basketball Association, and the National Football League. The results of this paper indicate the strength of substitutability for the four major North American sports on Major League Baseball attendance. This paper also contains potentially interesting policy implications for Major League Baseball teams, professional sports leagues, and the cities that are home to professional sports franchises.

35

Federal Regulation of Tobacco

Kyle Stieg • POL • Barbara Headrick • LO 102 • 1:40PM

My topic is the Federal Regulation of Tobacco. I will be telling who the major players are and what side they are on and why, where the policy originated, why the policy was debated, what the prospects for this policy are, what is the immediate issue(s) addressed by the policy and what it's broader implications are, and how politics has affected the policy process throughout.

36

Painted Turtle (*Chrysemys picta bellii*) Ecology in Clay County, MN – What Do We Know After Nine Years?

Susan Bury, Tara Eichhorn, Morgan Elfelt, Ashley Horton, Ashley LaPlante, Justin Olson, DeAnna Rastedt, Jennifer Ringgold, Cory Stessen, Klaja Undersander • BIOL • Donna Stockrahm • CMU ML • 1:00PM

In a long-term study, 750+ painted turtles (*Chrysemys picta bellii*) have been live-trapped from 2001-2009 in Clay County, MN, to study growth rates, survival, population characteristics, and movements. Traps were placed in 2 sloughs, approximately 1 km apart and 2.7 ha and 6.2 ha in size. Turtles were weighed, sexed, measured, marked (by scute notches and/or PIT tags), and released on the shoreline of the slough of capture. Combined data from all years showed total captures (original captures plus recaptures) now approach 3,000, most turtles were recaptured multiple years, and 2 turtles were recaptured every year. We also noted from 2001-2008 that males were recaptured twice as many times as

females and were twice as likely to be caught in both sloughs. This "skewed" sex ratio in recaptures could be due to more movement in males, differential trappability, aggression, etc. To investigate the trappability/aggression issues, in 2009 we placed 2 identical traps at each trapping station so if 1 trap was occupied by a "dominant male", the second trap could be free for others to enter. Preliminary data review, however, shows no obvious trends. We used radiotelemetry in 2009 to further investigate movements. One male turtle visited 3 different sloughs near our smaller study slough. In 2009, we also noted a drastic decrease in turtle captures in our smaller slough, possibly due to the introduction of cattle grazing around this slough. Future research will investigate this decline in captures and explore possible reasons for higher recapture rates for males than females.

37

Holding our Tongues: Immigration, Language Death and Linguistic Human Rights

Megan Gette • POL • Andrew Conteh • LO 93 • 1:30PM

This presentation will address the issue of language death. UNESCO reports that by the end of this century, over half of the world's existing languages will become extinct—while we may speculate that this is caused by trends toward globalization, we should question whether preserving endangered or moribund languages is a veritable cause, or if the extinction of languages is simply due to the evolution of culture. Is the death of a language the death of a culture? What does globalization mean for the exchange of culture through social media, and how does the imposition of a single language in areas of business and science affect linguistic minorities? Does this linguistic imperialism compromise diversity in otherwise multilingual nations, or is it necessary to enforce sovereignty and preserve cultural identity? I will explore the importance of maintaining the use of minor languages, the preservation of endangered languages and revitalization of dead or moribund languages, and the rights regarding linguistic minorities integrated into a monolingual country. Issues such as the US English-Only debate, the decline of foreign language education and the segregation within a nation due to language differences call for the reform of linguistic human rights and a redefinition of sovereignty; using resources that examine language endangerment and the mobility of people, I will argue for the adoption of inclusive linguistic policies and prospectively raise awareness related to linguistic human rights.

38

How Perpetual Punishment Invalidates Proportionality

George Peterson • CJ • Geraldine Hendrix-Sloan • LO 91 • 9:50AM

Historically, the varying goals of criminal justice and crime control in the United States have been founded in philosophical principles. Retribution, or the idea of reciprocating harm onto an offender, has ostensibly been the primary purpose of punishment during the last four decades. This discussion critically examines the principles of the retributive framework, particularly as they operate within felony-level incarceration sentences. Knowledge of some of the political, social, and economic harms caused by imprisonment make clear that for many offenders, penalization continues long after a term of incarceration. Given the perpetual harms of imprisonment, the current retributive framework is invalid and unjustified in its operations because it violates the principle of proportionality. Lastly, in seeking to rectify this problem, possible policy changes are explored.

40

Evaluation of market entry strategies for introducing Natural Family Planning as a substitute for traditional contraceptives in Italy
Maria Evglevskikh, Sarah Herland • MKTG • Ruth Lumb • CMU 203 • 3:25PM

There are a variety of contraceptives which are offered in Italy but most of them are considered artificial, unnatural and unhealthy. Natural Family Planning (NFP) is a perfect substitute for contraceptives. NFP is natural, safe, and healthy. It is a knowledge based method where a woman's signs of fertility are used to determine the infertile times of her cycle. This study focuses on developing an entry plan and product assessment strategy based on the historical, geographical, cultural, religious, political and economical condition in the Italian market for NFP. It also provides a general insight about limitations, problems and uncertainties companies face when introducing a product to new markets.

41

Are Fetal Alcohol Spectrum Disorder Prevention Programs Successful?

Danielle Persson, Sara Thanel, Shannon Wood • COMH • Gina Kelly • CMU 200B • 3:30PM

Are Fetal Alcohol Spectrum Disorder Prevention Programs Successful?

Fetal Alcohol Spectrum Disorders (FASD) are completely preventable, more research needs to be done to find out if state and county health department programs that are already in place are working to eliminate this epidemic. The purpose of the proposed research is to find the gaps between the preventive care towards FASD, and the women who still drink alcohol during their pregnancy, thus causing harm to the fetus. With this research other researchers will be able to see where the current gaps exist, and work on diminishing them. The resulting data will show how successful the current state and county programs are.

42

Don't Ask, Don't Tell.

Nicolas Rapacz • POL • Barbara Headrick • LO 102 • 9:30AM

The presentation deals with the Island of Mauritius, located in the Indian Ocean. It will relate the history of the island up to current day. Furthermore it will illustrate the cultural climate of Mauritius and of what the population is composed. Finally the presentation will go over the economy and politics of Mauritius and look at its possible challenges.

43

Capital Punishment Policy

Kaitlin Kelly • POL • Barbara Headrick • LO 102 • 9:50AM

Capital punishment is a policy that still continues to generate debate. It is important to understand why the policy is being debated, and the broader implications it has. To do this, first the history of the policy must be looked at including who has been involved in its creation, and what immediate issues it addresses. Then the prospects of the policy can be examined, and whether or not a new policy will come into the picture and replace it.

44

Facebook: The Good, The Bad, & The Addicting

Brittany Beers, Courtney Johnson, Brittany Lazur, Amy Moorhouse, Jessica Sharp • CMST • Denise Gorsline • CMU 205 • 2:50PM

Facebook is a popular social aspect of college life in our modern technological world. It is used to communicate amongst peers, family members, colleagues, and friends. This can be seen as the "good" side of Facebook. However, upon research, it was found that many less wholesome sides to the popular social networking site exist. The fact that future employers and school officials use Facebook to "keep tabs" on individuals does create a grey area to the discussion. Is it acceptable for these practices to continue? Should employers be able to judge you based on your Facebook profile? This method of job screening can definitely be seen as the "bad" side of Facebook. But even worse, Facebook can be very ugly. It is far too easy to stalk or to be stalked on the website, and lives have been endangered by people they have met on Facebook. Topics that will be covered in this presentation include examples of the good, the bad, and the ugly as well as privacy tips and how to make a profile employer-friendly.

45

Evaluation of Art

Dylan O'Brien, Robert Olson, Derek Page • PSY • Ernest Hallford • CMU ML • 9:30AM

The formal analysis and evaluation of art has been almost exclusively the domain of art experts, who have identified a number of technical and psychological qualities that presumably influence the "greatness" of an art work. Artistic quality of art works were rated in terms of complexity and interestingness, as well as several other factors. We varied aspects such as content (nudes versus still-life) and style (abstract versus realism).

46

Relations among Ratings of Artistic Quality, Beauty, and Liking

Dylan O'Brien, Robert Olson, Derek Page • PSY • Ernest Hallford • CMU ML • 9:30AM

Although the nature of art has been widely discussed by art experts, it is not as commonly studied in experimental research. The current project attempted to discover major factors that influence ratings of artistic quality. Participants rated the quality of art works in terms of beauty and liking, as well as several other factors. We also varied pictorial components such as nudes versus still-life and abstract versus realism.

47

Relations among Ratings of Artistic Quality, Emotional Intensity, and Eroticism.

Dylan O'Brien • PSY • Ernest Hallford • CMU ML • 9:30AM

The current project investigated major factors that influence ratings of artistic quality. Art experts have discussed artistic quality extensively; however it has not been commonly examined in experimental research.

Participants were asked to rate the quality of art works in terms of emotional intensity and eroticism, as well as several other factors. We also systematically varied nudes versus still-life and abstract versus realism.

48

Feminism From the Perspective of the Male College Student

Suzanne Al-Kayali, Matthew Hansana • SOC • Lee Vigilant • LO 90 • 1:40PM

The views of feminism are strong within the smaller, liberal, university setting, and usually overrepresented by a female population, but how strong are these views from the male populous at MSUM? We will be addressing this key issue through our investigation on feminism as well as the circumstances that influence their views. We will be focusing on how male students came to understand feminism and why these students hold the perspectives they express on the issue. Through interviewing this selected population and making several inquiries on their views of feminism, we hope to contribute to the on-going investigation of modern feminism by offering the male perspective.

49

A glimpse into running your own business: Marketing Simulation Research Project

Evan Ellis, Maria Evglevskikh, Nicole Saunders • MKTG • Ruth Lumb • CMU 208 • 2:10PM

This presentation demonstrates the immense benefits of the Market Place Simulation Project on students at the college level. With the web-based Market Place Simulation students are challenged to make realistic marketing and business decisions in a competitive, fast-paced market. Students learn that there is more to creating a product than just having a good idea. Students are given the opportunity to create a business of their own and execute a complete marketing strategy that includes brand design, pricing, ad copy design, media placement, distribution and sales force management. Students are confronted with business decisions and situations that are commonly encountered in real life such as competition and customer satisfaction. Students are challenged to think outside the box, collaborate with fellow classmates and consistently stay on their toes.

50

Graphic Design: What is it and What you can do with it?

Addie Borgh, Heather Donarski, Katie Harness, Whitney Lunn, Daniel Marsh, Bryan Murphy, Alyssa Nelson, Amber Nelson, Danielle Olson, Kayla Reinholz, Heidi Schmitz, Cheryl Wald • ART • Thomas Anstadt • CMU 205 • 9:50AM

ClubDesign will be presenting information about graphic design. Specifically, we will be talking about the process of graphic design, from the sketchbook to computer; what is graphic design, from the purpose to the different elements; what you can do with graphic design, from earning a degree to landing a job; and what is AIGA, from the hiring process to getting your foot in the door. This presentation will help people to better understand what graphic design actually is and what is all involved within it. Graphic design isn't just making things look pretty, it's a creative, fun, and rewarding career.

51

Alcohol Consumption and the Effects on the Body

Leslie Rohrich • NURS • Donna Clark • CMU ML • 9:30AM

Consumption of alcohol is accepted and quite common in our society. It is estimated by the U.S. Department of Health and Human services that nearly 10 percent of current drinkers (about 8 million persons) meet criteria necessary for the diagnosis of alcohol dependence (Healthy People 2010, 2000). Drinking alcohol has immediate effects on the body some which may lead to serious health conditions. Alcohol use over time or heavy alcohol use increases the chance of severe consequences such as liver failure, hypertension, stroke, heart disease, internal bleeding, brain damage, cancer, and death. The body's response to alcohol consumption will be discussed as well as the impact of excessive alcohol use on various body systems.

52

Jehovah's Witnesses and Quality Alternatives to Blood Transfusions

Justine Messelt • NURS • Donna Clark • CMU ML • 9:30AM

There are over half a million Jehovah's Witnesses in the United States. Jehovah's Witnesses have a deep religious conviction against accepting homologous or autologous whole blood, packed red blood cells, white blood cells, or platelets. Jehovah's Witnesses can be challenging surgery candidates for physicians if the patient has lost a large amount of blood. It might seem logical to replace the blood loss with

predeposited blood but would be against religious beliefs. It is important for the healthcare team to understand and accept other cultures beliefs in order to provide holistic nursing care. There are alternative methods and normal body processes that can replenish blood and volume replacement. This project will discuss medical practices of Jehovah's Witnesses and explore quality alternative techniques to blood transfusions.

53
"Would That He Were a True Brother": Thomas Becket and the Projection of Authority

Mason Lewis • HIST • Annette Morrow • CMU 204 • 1:00PM
Thomas Becket was the Archbishop of Canterbury for just eight years, 3 June 1162 until 29 December 1170. During this time he managed to make many enemies for himself, both within the Church and the English government. Some people, specifically Bishop Gilbert of London and Bishop Jocelin of Salisbury, believed he should have never been appointed the Archbishop, others simply that he took his appointment far too seriously and over managed the other bishops of England. Becket took his position as Archbishop very seriously, and to that end firmly believed in the absolute autonomy of the Church within any political system. The Church, according to Becket, was to answer only to Rome, any quarrel the governments had with the Church should be addressed there and settled by the pope. Because of this conviction, when Becket became Archbishop he absolutely refused to bow to royal power, and in so doing he alienated himself, and the Church, from the English government. His continual assumptions of papal authority vested in him caused a distinct rift in the English clergy. This rift, combined with Becket's belief in the power of the Church over the state, eventually made it possible for Henry II to force Becket into exile while pushing through the political reforms that had so angered Becket in the first place.

54
Forms of Insulin Therapy

Megan Emerson • NURS • Donna Clark • CMU ML • 9:30AM
Diabetes mellitus is the seventh leading cause of death in the United States. It currently affects 17 million people, and the incidence continues to rise. The different types of diabetes include: type 1, type 2, and gestational. A majority of those with diabetes have type 2. For all types of diabetes mellitus, chronic hyperglycemia (a high blood glucose level) is the main feature. This can be due to problems with insulin secretion, insulin action, or both. Insulin allows glucose in the blood to move into cells to make energy. It also promotes triglyceride storage in fat cells. Insulin is responsible for keeping blood glucose levels from becoming too high and keeping blood lipid levels in normal range. Management of diabetes mellitus involves dietary intervention, blood glucose monitoring, a planned exercise program, and in some cases, medications to lower blood glucose levels. Oral agents are used when diet control is not successful. Insulin therapy may also be initiated. Insulin therapy is necessary for those with type 1 diabetes and is also used frequently for type 2 diabetes. Insulin comes in rapid-, short-, and long-acting forms. Insulin patterns try to mimic the normal release pattern from the pancreas. Diabetic individuals can receive anywhere from one to four insulin injections each day. The amount of injections is determined by the form(s) of insulin that are given. EndoTool® is a new device being used in acute care settings to manage hyperglycemia. The first step is entering the patient's demographics into the computer. Next the patient's blood glucose level is tested and entered. The computer then calculates an insulin dose and the time for the next blood glucose test. The nurse then makes the adjustment to the IV insulin rate if necessary. This process is repeated after the next blood glucose test. This tool helps to reduce human error, provides a uniform dosing procedure, and improves patient outcomes.

55
Minority and Lower-Class Inequalities in Today's Society

Marques Walker • SOC • Deborah White • LO 90 • 2:45PM
With this literature review I will try and examine the different types of inequalities that African-Americans are facing here in the 21st century. I will try and find how they are being treated unfairly and I will examine each inequality that they are facing, from jobs, pay scale, education, criminal justice system, lack of resources and so on. My goal is to find out why these inequalities still exist and how can we address the problem in America. As of right now I feel like our biggest problem in the U.S. today is accepting the fact that these inequalities exist in the first place. I think as Americans we look at the U.S. as the land of equal opportunity and the place where anything is possible, and American society is not willing to give up that title. Although there are many lower class and minority citizens in the U.S. who would beg to differ of the

validity of the title "land of equal opportunity." When you look at the big picture the chances of a child that is born into an impoverished family is less likely to become middle class citizens versus the chances of a child who was born into a wealthy family to stay as wealthy as their parents. Social class has a lot to do with this statistic. Lower class children lack the education standard that middle and upper-class children receive. This is because their parents cannot obtain the means that it takes to try and get their children a better education so the parents and the children have to rely on public education. This is just one of many issues that I will examine in this literature review.

56
Republic of Mauritius – People, Culture and history
Dominique Rolando • ANTH • Bruce Roberts • CMU 216 • 9:30AM
The presentation deals with the Island of Mauritius, located in the Indian Ocean. It will relate the history of the island up to current day. Furthermore it will illustrate the cultural climate of Mauritius and of what the population is composed. Finally the presentation will go over the economy and politics of Mauritius and look at its possible challenges.

57
Determining specific site of Rho associated kinase Rock phosphorylation on carboxyl terminus of NHE-1
Daniel Hammes, Andrea Slusser • BIOL • Mark Wallert • CMU ML • 9:30AM
Determining specific site of Rho associated kinase Rock phosphorylation on carboxyl terminus of NHE-1

58
Electrochemical Analysis of Nickel Melt in Different Compositions and Temperature
Molly Hagstrom, Kelsie Meyer, Linsey Ness • GEOS • Russell Colson • CMU ML • 9:30AM
Using an electrochemical system, a rare geologic research technique used in only a few labs in the world, gases were measured to understand the moon's history. NASA's Apollo 15 Volcanic Lunar Glass B samples were replicated and used in the experiments. Tests were conducted to find out how gas presence affects the melt. The experiments measured diffusion rates and chemical potential in a four-component system comprised of silicon, aluminum, calcium, and magnesium. Iron could not be used in the four-component system because nickel is present. The chemical properties of nickel "in situ" were examined to know what happens to the melt at each tested temperature. Higher temperature did not affect gas bubbles in the melt at different chemical compositions.

59
MSUM Division 1 Hockey Arena
Mitchell Hogue, Nathan Pavak, Jesse Turner • CM • Norma Andersen • CMU ML • 9:30AM
The World's Greatest Construction Company would like to present a state of the art hockey facility used to house the future MSUM Dragon's Division 1 Men's and Women's Hockey teams. The new arena will be LEED Silver Certified to incorporate the most sustainable building elements and energy efficient goals.

60
Pantheon Construction, Paws Place
Joshua Asplin, Richard Larsgaard, Brandon Schaefer • CM • Norma Andersen • CMU ML • 9:30AM
Paws Place Project Introduction The Paws Place construction project is designed to meet the needs of a viable animal boarding and care business. All of the building design aspects target the goal of raising the bar in the pet care industry.

61
Cultural Identity and Mass Media Among Immigrants in the U.S.
Josh Fergen • SOC • Deborah White • LO 90 • 3:30PM
This review will focus on the role of mass media and the acculturation process of immigrants and how these two variables interact with each other in shaping a cultural identity. Living in a dual world where one culture is held at home and another is learned through socialization in society, this review plans to illustrate the problems many immigrants have, especially the transition for second generation immigrants, when it comes to adapting a new culture. Living in a dual world of cultures, identity and role confusion can cause immigrants to remain stuck in the social class they arrived in and may enforce cultural stereotypes depicted in the media outlets which tend to be a major force in acculturation. By exposing these problems facing the acculturation process, the United States can work from an acculturation approach to one that is more tolerant and allows for social mobility for newly arriving immigrants.

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62

Economics and Eli Whitney: Lessons in Intellectual Property Rights

James Teigland • ECON • Tonya Hansen • LO 89 • 2:50PM
The Copyright Act, the Patent Act, the Semiconductor Chip Production Act of 1984 and the Trademark Act of 1946 constitute United States intellectual property law. Intellectual property rights create incentives for people to innovate. Since those incentives inhibit competition, there is necessarily some welfare loss. That welfare loss is frequently experienced directly when consuming intellectual property and indirectly when producing intellectual property. The goal of intellectual property laws is to balance these counteracting forces to maximize the value between the use of intellectual property and the cost of its consumption and production. Eli Whitney's invention of the cotton gin and the subsequent legal battles involving its patent offer a valuable lesson in intellectual property rights. This paper examines the shortcomings of intellectual property rights at that time, and what we can learn from the case of Eli Whitney today.

63

Sensory Enhancement: Cochlear Implants for Adults

Kayla Braun, Kathleen Priebe • SLHS • Mary Drake • CMU ML • 9:30AM

The application, implications, benefits, and realistic expectations for cochlear implants may vary depending on a patient's age, medical condition, and culture. Adults who are postlingually deafened may yield high satisfaction from a cochlear implant. Learning what a cochlear implant is, how one works, and who is a candidate are all important topics for an adults with hearing loss. Basic information, such as how the human cochlea works and the reasons for sensorineural hearing loss will enlighten all audiences. Adults with or without hearing loss can also learn about the realistic advantages of cochlear implants, the individual with cochlear implants' rights in all settings (including public and vocational), and the Deaf culture controversy. Learning how cochlear implants work and their effectiveness will benefit both cochlear implant candidates and hearing adults.

64

On the Border Mexican Grill & Cantina

Erik Bilstad, Travis Olson, Brent Pescion • CM • Norma Andersen • CMU ML • 9:30AM

We will be presenting an On the Border Mexican Grill & Cantina. This is a conceptual project that we have designed with the anticipation that it will someday be built in the Fargo-Moorhead area. With the company that we have created and the designing of the building, we wanted to give a virtual tour of the building along with the description of the materials, schedule, and estimate that we came up with.

65

Senior Recital Program Note

Lyric Rembrandt • MUS • Laurie Blunson • CMU 214 • 10:10AM

My research is based upon the program notes for my fall 2010 senior recital. In this presentation I will be address my method of repertoire selection. I will use scores, lead sheets, and my own transcriptions of the material to identify which musical aspects draw me to each piece. Upon completion I will have guided you through a manner of how musicians build a set list and given examples of music that represent the jazz idiom properly.

66

Amped Arrows

Brandon Freudenrich, Eric Swendsen, Isaac Warzecha • CM • Norma Andersen • CMU ML • 9:30AM

Our group will be presenting a conceptual project that we have been working on all spring semester. The project is an archery store with an inside range and outside 3D shooting course. With the company that we have created and the design of the building, we want to present our company profile, building design, estimate, schedule, and the types of materials we integrated into our building.

67

The Impact of Casinos on Dropout Rates in Minnesota

Brieanna Hoban • ECON • Tonya Hansen • LO 89 • 2:30PM

This paper examines the impact casinos have on high school districts' dropout rates in Minnesota. Reservations are some of the lowest income areas the United States. In 1988, federally recognized tribes were granted the right to open casinos in order to stimulate long-term economic growth. However, since casinos increase the wage rate, more students may be dropping out of high school because the marginal cost of educational attainment increases. If casinos are correlated with an increase in dropouts, they are stimulating short-term economic benefits,

instead of what the policy intended. Data for this research was gathered from the 2002-2003 Minnesota Department of Education database and the Bureau of Labor Statistics County level database. The results of this regression indicate that a school district's proximity to a casino does not significantly impact its dropout rate.

68

A First Look at Transcriptional Regulation of the Regulatory Protein in C4 Plants

Lumu Manandhar, Margaret Zimmerman • BIOL • Chris Chastain • CMU ML • 9:30AM

In plants with C3 and C4 photosynthesis, the chloroplast enzyme pyruvate, orthophosphate dikinase (PPDK) catalyzes the conversion of pyruvate to phosphoenolpyruvate (PEP). Its activity in chloroplasts is up/down regulated in response to light via reversible phosphorylation of a threonine residue in the PPDK active-site. The PPDK regulatory protein (RP) catalyzes this light-regulated reversible phosphorylation. In several respects, RP is a most unusual, bifunctional protein kinase/protein phosphatase for which the gene has only recently been cloned. For example, when the primary amino acid sequence of RP was bioinformatically analyzed, structure common to protein kinases or protein phosphatases was absent. Instead, RP was shown to belong to a group of enzymes termed DUF 299 (domain of unknown function). And since the gene for RP was only recently identified, nothing is known concerning the mechanism of how the enzyme's expression level is regulated. In this presentation, we describe our research project that is aimed at understanding the transcriptional regulation of RP with relation to PPDK in maize a C4 plant. Our project is to isolate mRNA for PPDK and PPDK-RP in maize leaves under varying light levels (High, Low or Dark). qPCR using custom designed Taq-man probes will be used to quantitate the amount of mRNAs for the different light treatments. The data gathered in this study will reveal if the gene is co-regulated along with its target enzyme at the gene transcriptional level.

69

The Subculture of Violence among Male Prisoners in the US

Meghan Nelson • SOC • Deborah White • LO 91 • 10:10AM

Violence is a common occurrence in male prisons across the nation. Prison institutions, particularly male prisons, provide unique environmental and social conditions where violence and victimization often become sub-cultural norms among prisoners. Violence has become a major form of communication between prisoners; it is a language that everyone in prison speaks. This presentation involves a literature review on the influence of prison gangs and other social factors on the rates of violence and victimization within male prisons. An in-depth look into the status management practices among prisoners as well as the influence of maintaining masculinity in the overall prisoner hierarchy will be presented.

70

The 500 Building.

Derek Bohnenkamp, Aaron Olson • CM • Norma Andersen • CMU ML • 9:30AM

CAD Construction is a full service construction company. We provide estimates to our customers in bid format that's easy and clear for them to understand. The buildings that we have constructed over the years stand for themselves. It doesn't matter the size or scope of the project. CAD'S impeccable reputation for finishing on time and budget stands above any other construction company around. Our customers express joy in seeing the refurbishing of the old building and making it look new again. They see it as bringing the city back to life. People that have used our service are pleased with our service and honesty.

71

Peroxiredoxin, a mitochondrial-specific peroxidase, as a possible key regulator of the β -adrenergic receptor anti-apoptotic pathway

Andrea Slusser • CHEM • Joseph Provost • CMU 200C • 2:30PM

We previously reported a β -adrenergic receptor (β AR)-dependent modulation of apoptosis requiring formation of a β -arrestin/heat shock protein (HSP) 27 signaling complex for protection against program cell death. Our hypothesis is that a protective mechanism for this signalosome occurs by trafficking specific proteins to localized areas of the cell. A non-biased gene microarray profiling technique followed up with biostatistical analysis was used in epithelial (UROtsa) cells to identify multiple gene products altered after co-incubation with the β AR agonist, isoproterenol (ISO) and an inducer of apoptosis, staurosporine (STS). Gene products found significantly changed when compared to STS treatment alone included PRX, a mitochondrial peroxidase, FBXO28, a nuclear ubiquitin ligase regulating cyclin-kinases and ZNF638, a pro-apoptotic transcription factor. Quantitative real-time

PCR techniques using 5' nuclease chemistry was used to validate changes of these three specific gene products. There was an increased gene transcription (lower CT) for PRX and FBXO in cells treated with ISO plus STS that was significantly different from STS only. Similar results were found for PRX using a neuronal (1321N1) cell model. Conversely, there was a significant decrease in ZNF638 gene transcription for UROtsa cells treated with ISO plus STS when compared to just STS. All of our current results corroborate observations documented from the gene microarray profile analysis. Increased PRX gene expression seen with concurrent ISO incubation is hypothesized as a compensatory mechanism for the increased free radical production initiated by STS. A working model depicting a dependency for the ISO-initiated γ -arrestin/HSP27 signalosome to traffic PRX into the mitochondria is presented. This work was supported by a Summer Undergraduate Research Fellowship (SURF) from the American Society for Pharmacology and Experimental Therapeutics and NIH grant P20RR016741 from the NCRR.

72
Scorch Commons
Christopher Thomas, Todd Vetter • CM • Norma Andersen • CMU ML • 9:30AM

Our proposed project is for a 3-story multi-use building. The top two floors will consist of apartments and the first floor will be for commercial use. Our plan is to have a coffee shop, convenience store, and pizza/subs restaurant located on the first floor. For now we are leaving the first floor unfinished as suit to build, but have a public restroom in plan for future use. Our goal for the apartments will be to entice the students, however, they will not be restricted to only students. Each floor will have two one bedroom and two bedroom units allowing for a variety of households to move in. As for the building materials, we are choosing to go mainly with a brick façade to match the look of the campus buildings. This style will add to the neighborhood allowing our building to fit in nicely. We will be using metal framing and precast concrete for the main structure of the building. Currently we are undecided as what to do with the roofing, but it will either be a green roof or an EPDM roof white in color. Either of these will incorporate LEED which we will be discussing later. The site location is on the corner of 6th Avenue and 12th Street South in Moorhead just North of Lommen Hall. We chose this location for many reasons but mostly because of the proximity to the campus of MSUM. Our select age range for our project is aimed at college students who will have easy access and is only a short walk from campus. Not only is there a lot of foot traffic, but also is just off a major street where many cars pass by everyday. When deciding on the location, we also had to account for existing buildings. The two lots we selected are very reasonably priced and only contain two house and a small garage. They are no longer in the best of condition and their demolition will only factor into the cost of the project slightly.

73
Canadian Border Policy
Kelsey Nelson • POL • Barbara Headrick • LO 102 • 10:10AM
 I will be review Canadian border policy. I'm going to be answering the questions: should the regulation be as strict as it is or should there be more regulation.

74
The No Child Left Behind Act
Justin Bohrer • POL • Barbara Headrick • LO 102 • 2:30PM
 My presentation will cover the No Child Left Behind Act for Dr. Headrick's POL 341 Public Policy course. I will cover the implementation of the act through the current question of whether or not to reauthorize this act.

75
Moonlight Resort
Brooks Duesterhoeft, Jason McGregor, Alex Sweep • CM • Norma Andersen • CMU ML • 9:30AM
 We will be presenting our final project for our Capstone Experience class. Our project is the Moonlight Resort on Leech Lake, and our company name is ABJ Construction Services.

76
The Evolution of a Ever Changing Solid Waste/Recycling Market: A Look at Consumer Welfare
Jonathan Swart • ECON • Tonya Hansen • LO 89 • 3:10PM
 This article will examine the differences in sanitation markets throughout the United States. Sanitation markets have evolved over the last 50 years to three main types: contract, franchise, and license agreements. These markets have a wide range of economic problems, but this study focuses on what these markets mean for the individual consumer.

Consumers, as individuals, have little say in what type of refuse collection service is arranged in their particular city, but as a voting population can come together to improve the service they receive. Refuse collection services constitute a large municipal expenditure and to date today there is little hard evidence to guide these municipalities. This article plans to use the greater Fargo-Moorhead area as an example of different types of refuse and recycling programs. Sanitation companies serving the City of Fargo, Moorhead, West Fargo, and the surrounding region will be explored.

77
DGR construction - Construction of Buffalo Wild Wings Building
Willie De-Souza, Enol Gilles, Gary Richards • CM • Norma Andersen • CMU ML • 9:30AM

We will be remodeling the old VFW building in Moorhead, and transferring it to a Buffalo Wild Wings. We feel that this is a great proposition because the only Buffalo Wild Wings in the area are in Fargo. The students in the moorhead area will now have a Buffalo Wild Wings in the area, we build this building according to LEED concepts.

78
A Literature Review on High suicide rate among Native Americans
Willard Yellow Bird • SOC • Deborah White • LO 90 • 1:20PM
 This research is about high suicide rate among Native Americans, and how this rate is the highest of all ethnic groups. It will also cover the social problems that are the possible explanations to why Native Americans are likely to commit suicide than any other ethnic groups. This Literature review will also discuss some modern theories on suicide. It will also touch on why Native Americans also suffer from a high rate of mental health and addictions. It will also discuss a few programs prevent Native Americans of suicide and some other programs for the survivors of suicide. I'm Conducting this literature review and research because it is a very overlooked and neglected subject among society.

79
Farm By-Products as a Source of Renewable Energy
Jena Thompson • ECON • Tonya Hansen • LO 89 • 10:10AM
 This paper analyzes the costs and benefits experienced by an individual poultry farmer as he joins the FibroMinn program. Based out of Benson, MN, the FibroMinn plant collects manure from livestock farms, converts it into electrical energy, and utilizes the resulting residues as crop fertilizer. The research and use of alternative, renewable energy sources is of interest to the U.S. and other nations focused on lessening dependence on foreign oil, finding a solution to the diminishing supply of fossil fuels, and reducing the emission of pollutants. Advances in com-based ethanol production, the most popularized renewable energy source, are ending due to growing concerns about using food for fuel and the exhaustion of research topics. Therefore, an understanding of alternatives to com-based ethanol in the renewable energy market is of growing importance. By analyzing the costs and benefits experienced by a farm as it becomes an input supplier for FibroMinn, the study will be useful to poultry farmers who are interested in joining FibroMinn or similar programs. This research can also be utilized by decision-makers charged with aligning the incentives to expand alternative energy programs.

80
Effect of intrasexual competition and interference on nest quality and reproductive success in the labyrinth fish, Betta burdigala
Randy Sutrisno • BIOL • Brian Wisenden • CMU ML • 9:30AM
 Betta burdigala is a fish that lives in stagnant waters with very low levels of dissolved oxygen. One way they adapt is by breathing air using a labyrinth of canals inside their head; hence these fish are known as "labyrinth" fish. When Betta burdigala spawn they build a nest of bubbles that keep their eggs at the water surface where they can access atmospheric oxygen. The size of the nest depends on several factors such as male experience, presence of other competitors, water chemistry and sometimes also female size. This study was conducted on wild-caught B. burdigala from Bangka Island, Indonesia. I compared the size of the bubble nest and number of hatched young for males breeding in the presence of absence of sexual rival. The result of this experiment will provide insight into unusual reproductive ecology of this group of fishes.

81
Minnesota State University Moorhead New Residence Hall
Sarah Braton, Maria Camargo, Casey Johnk • CM • Norma Andersen • CMU ML • 9:30AM
 We are presenting our Capstone Project that consists of designing, drawing, estimating and scheduling a 4 story apartment style dormitory that was based off MSUM's Master Plan for future building plans. The

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project has mechanical and storage basement. 1st floor has the proposed housing administrative offices, a one stop shop, lounge area, and 4 units. Each unit consists of 4 single bedrooms, bathroom, kitchen, and living room. 2nd, 3rd, and 4th consist of 10 units, lounge areas, and laundry rooms. These dorm rooms have the comfort of living on campus in an apartment style living arrangements, with new accommodations such as central air and heating.

82

Justice? A Critical Look at the Leonard Peltier Trial.

Adam Hasbargen • PHIL • Theodore Gracyk • CMU 204 • 3:10PM

In this presentation a critical look is taken at the Leonard Peltier trial and at the trial of his peers that occurred just before his involving the same incident.

Using history as a guide and philosophy as a tool I show glaring differences in the approach to each trial. Subsequently the question of what is "Justice" and what is "Fairness" becomes an issue.

Using established facts it becomes clear that the evidence that exonerated his peers in the previous trial was suppressed in Leonard Peltier's trial.

I argue: Given that an interpretation of a single event lead to an actual established reasonable doubt, this single event cannot then have a second interpretation by merely allowing the suppression of established, vital, and true information about the said event.

I show that sufficient evidence exists to question the motives and activities of the FBI. Exacerbating this is the fact that no oversight existed over the FBI during this era and no accountability has ever been placed on them regarding their overall policy. Thus all documents involving this case and all Native American/FBI interactions must be subject to immediate review with no censoring. In addition this must be done as an open public hearing on Native American and United States Government relations.

I ultimately call for a Truth and Reconciliation Commission to be created to oversee this entire operation.

83

The Relationship Between Spiritual Belief and Health Statuses

Matthew Hansana • SOC • Susan Humphers-Ginther • CMU ML • 9:30AM

Some say that prayer and devotion greatly aid in the recovery time and overall health statuses of individuals. There are also those who believe that one's individual health status is the direct result of genetic predisposition and lifestyle. The purpose of this study is to examine the differences and similarities between both claims. Through my research I hope to find just reasons for both claims and present the main arguments of both sides to the best of my ability. The results of my research may inadvertently persuade or dissuade individuals from their current beliefs on the correlation between health status and spirituality.

84

Cultural Nursing Care for Special Needs Children in Jalapa, Nicaragua

Anno Johnson, Lisa Thielke, Tracy Zimmerman • NURS • Jane Bergland • CMU ML • 9:30AM

Our poster project contains cultural nursing care from our trip to Jalapa, Nicaragua. Our nursing project focused on the special needs children in Jalapa as known as "pepitos". We chose this as our project as the special needs children do not have resources in Jalapa to receive their care and medications they need. The nursing groups addressed preventative care with the "pepitos" as well as how to relate culturally. With the achievement of these things the special needs children have a better chance to function on a day-to-day basis. We noted that the ultimate nursing care for these children is directly related to holistic nursing care "looking at the bigger picture."

85

The Performance of Appalachian Folk Music as a Means of Preserving an American Folk Music Tradition

Ross Cameron • MUS • Laurie Blunsom • CMU 214 • 10:30AM

The Performance of Appalachian folk music has been significant because it acts as a natural means of preserving the folk music tradition. Since the 1920's, authentic performance of traditional music has been seen as the most important way to preserve American folk and traditional country music. Today, however, some musicians choose to incorporate modern pop music techniques into traditional music. In my research, I will be investigating the authenticity of performance as preservation in Appalachian folk music and examining modern interpretations that transform folk music into pop music. I will be presenting a comparison of traditional Appalachian folk music performance from the early 20th century to modern folk music performance.

86

Obesity: America's Growing Concern

Brittiany Bowlus, Lucinda Craft, Jessica Hollis • COMH • Gina Kelly • CMU ML • 9:30AM

OBESITY: AMERICA'S GROWING CONCERN The medical profession has provided us with the facts and risks about obesity, yet the United States adolescence keeps getting bigger and bigger. The study will look at the question; why are the adolescents in the United States becoming obese? Considering one hypothesis; the study will provide facts on the nutritional content of popular foods that America's adolescents are consuming and look at data concerning Minnesota and North Dakota's adolescent obesity rates. The study will also look at the alarming obesity trends throughout America. Americans must figure out a way for our adolescents incorporate a healthy lifestyle, and to understand the consequences of becoming obese. Their future, quality of life and health concerns are determined by their health at the present time. The saying, "We are what we eat," is proving to be, we aren't eating well. Why? What is in the food that we are consuming? Is it contributing to the obesity problem in America? The study will provide the facts to help you determine if you are consuming healthy nutritious foods or are you consuming foods that have unhealthy properties. Using information provided by the Center for Disease Control and Prevention and using data from the General Social Survey. Brittiany Bowlus Lucinda Craft Jessica Hollis

88

Adult Neuro-Typical Attitudes toward Individuals with Autism

Trisha Page • PSY • Christine Malone • CMU ML • 9:30AM

In order to try and better comprehend the power of knowledge on adult attitudes toward individuals with autism, 40 adult college students were given a packet about the disorder including current information from the Autism Society of America. Participants also viewed a short video of an autistic individual experiencing success in a common setting (a high school senior playing in a basketball game) following receiving the information packet. Each participant was asked to complete an autism attitude questionnaire (adapted from the Mental Retardation Attitude Inventory-Revised [MRAI-R] by adjusting the questions so that they were applicable to college-aged students and fit to measure attitudes toward autism spectrum individuals.) The questionnaires about their attitudes toward individuals with autism were administered both before and after being provided with the information about autism and viewing the video. It was recorded as to whether or not any previous interactions with individuals on the autism spectrum had been experienced, as that may skew the preliminary attitude questionnaire. The inventory measures attitudes on the following four subscales: desired social distance, views regarding mainstreaming, beliefs about private rights, and other possible subtle stereotypical beliefs. I predicted that by providing the general population with basic information about the realities for individuals with autism, that it would reduce biases and increase affinity between these two factions, resulting in more positive attitudes. The results found were significant as predicted; that by providing individuals with information about autism, it positively influenced their attitudes toward individuals on the autism spectrum.

89

Pain Assessment in the Pediatric Population

Sarah Mathiowetz • NURS • Donna Clark • CMU ML • 9:30AM

Abstract: Vital signs commonly refer to a person's blood pressure, temperature, pulse rate, and respiration rate. A person's pain level is now referred to as the fifth vital sign, and is now also included in a typical set of routine vital signs. Pain is subjective and thus is difficult to measure. The measurement of pain becomes more complex when assessing it in children. There are a variety of age appropriate pain assessment tools which can help in measuring pain in the pediatric population. This poster will present a theoretical review of the empirical findings of the assessment tools.

90

North Star Construction, Proposed Innovis Medical Office Building Addition

Paul Braton, Dereck Houge, Ryan Klick • CM • Norma Andersen • CMU ML • 9:30AM

We are going to present our company North Star Construction and the proposed Medical Office Building Addition to the existing Innovis Hospital. The addition is 57,600 total square feet, it is three stories with a full basement. The building is core and shell with room for six tenant spaces, we will finish the hallways, bathrooms and lobby areas. We also propose an alternate option for the third floor space to be turned into a drug and alcohol treatment facility.

91

Risk Factors & Prevention of Nosocomial Pneumonia
Kara Krump • NURS • Donna Clark • CMU ML • 9:30AM

Five percent of all patients that are hospitalized acquire a nosocomial infection, better known as a hospital-acquired infection. The second most common nosocomial infection is pneumonia. The additional time in the hospital and treatment received to fight off these nosocomial infections cost millions of dollars each year. It is imperative that health care professionals know who is at risk for nosocomial pneumonia and know what they can do to prevent it. Through experiences in different hospital settings and research, I have learned who are at greatest risk and the many easy steps that health care professionals can take to help prevent nosocomial pneumonia in their patients.

92

Prevention of deep vein thrombosis in patients following surgery.
Rebecca Woods • NURS • Donna Clark • CMU ML • 9:30AM

The purpose of this poster presentation will be to illustrate measures to prevent deep vein thrombosis in patients after surgery. The poster presentation will include incidence, etiology, complications, treatment, and interventions. This poster presentation will also illustrate theoretical review of empirically based interventions to help prevent deep vein thrombosis in patients after surgery.

93

Postpartum Hemorrhage
Kayla Villagomez • NURS • Mary Roussiang • CMU ML • 9:30AM

Worldwide, postpartum hemorrhage is a leading cause of death and morbidity related to pregnancy. Furthermore, recent studies indicate that its frequency and severity is increasing. Nursing care of the postpartum patient focuses greatly on the goal of decreasing the frequency, severity and adverse outcomes of postpartum hemorrhage. During her obstetrical nursing preceptorship, the student nurse learned about the epidemiology of postpartum hemorrhage, including the incidence, trends, causes and risk factors. Through research and consultation with obstetric physicians and nurses as well as hands on nursing care of postpartum patients, the student nurse also learned how to assess for risk factors and warning signs of postpartum hemorrhage. This information is presented.

94

Elasticity of Rationality
Nileendra Abeywardene • ECON • Tonya Hansen • LO 89 • 9:50AM

A commonly used economic concept, rationality, and assumptions based on its derivatives have shaped economic theory since Adam Smith. Advancements in social sciences and developing fields such as behavioral economics have increased debate regarding classical assumptions, including rationality, in economics. Many economists understand that rationality is not a flawless concept, but at the same time economists stand by models based on rationality. The real question is not "Are individuals rational?", but "How rational are they?" This study focuses on the latter question by summarizing conceptual and theoretical challenges against the concept of rationality and efforts made to resolve these disagreements within the discipline. The link between rationality and economics of social welfare is also considered. The audience is left to decide whether or not economics has stretched the assumption of rationality in economic theory too far.

95

Views on Government Spending on Welfare
Cory Bellefeuille • CJ • Deborah White • CMU ML • 9:30AM

The purpose of this study was to determine factors contributing to an individual's view on government spending on welfare. Some of the factors used in this study are replications of other studies done previously to either confirm or oppose previous findings. Government spending is a tight issue these days especially because of the recent decline in the economy, and welfare spending is always the least favorable expenditure out of all social provision programs investigated stated by Christian (2008). The 2004 General Social Survey (GSS) was completed by 2,812 individuals. Individual requirements to participate in the GSS consisted of being at least 18 years of age, not incarcerated and a legal resident of the United States. Some of the key findings found in this study are that total family income, marital status, and the respondents were major predictors at predicting an individual's view on government spending on welfare. The GSS is issued once every two years (<http://www.norc.org/GSS>). This survey consists of 133 questions, ranging from asking an individual about a person's demographics to personal views on certain issues. This survey will be used to help form the outcomes for this study. What it is that this study will attempt to show is the public's opinion on welfare is affected by certain personal characteristics? This study will look at the respondent's age, marital

status, family income, socioeconomic status and household type. It will determine if any of these variables affect a person's view on public welfare. What the outcome of this study is hoping to show is that possibly one of these variables do show to have an effect on the public's view of welfare. This research is going to be examining a social problem, because society members who receive government assistance are labeled social problems by the elite, or the politicians. They are labeled this because they are a minority and many people believe that these individuals who receive welfare are not hard-working and individuals having such problems managing their own life that in order to survive, they need help from the government. This is why people who receive welfare are considered a social problem in this society.

96

Using Communication Theory To Analyze Corporate Reporting Strategies: A Study Of The Health Care Industry
Zachary Lukes • FINC • Marsha Weber • LO 101 • 1:20PM

The purpose of this study is to examine the health care industry and its management responses to material weaknesses. Management is required to evaluate the effectiveness of its company's internal controls pursuant to Sarbanes-Oxley Section 404. Analysis of corporate financial disclosures using communication theory can provide useful insight to company stakeholders. Using Benoit's (1995) image restoration typology, I have classified different strategies companies in the health care industry use to respond to material weaknesses in internal control. The typology sorts the responds into five major types with 14 individual strategies. I have included in the report examples from corporate SEC filings and annual reports of companies in the health care industry to assist in illustrating the defined strategies set forth by Benoit's typology.

97

Lung Cancer Disparities in Minnesota
Sarah Schrapp, Brandon May, Aarati Niraula • COMH • Gina Kelly • CMU 200B • 3:10PM

Cancer is currently the leading cause of death in Minnesota. Lung cancer has the highest mortality rate of all cancers, and people diagnosed with lung cancer have a lower chance of survival than many of the other most common cancers, even when diagnosed at the same stage. In 2008, 2,426 Minnesotans died from lung cancer. In 2007, 2,415 lung cancer-related deaths were reported in the state. The burden of lung cancer within Minnesota is notable and warrants further investigation and study. This epidemiological study particularly seeks to evaluate the factors contributing to the increasing level of lung cancer among women in Minnesota and other lung cancer disparities that exist within the state. The primary causes of lung cancer, including cigarette smoking, radon exposure, and exposure to second-hand smoke, are investigated among the population groups experiencing lung cancer disparities. Other health determinants such as genetics and access to healthcare are also considered. The role of such causes in lung cancer disparities is evaluated and provides a basis for recommendations for policy alterations and prevention improvements. Recent policies relating to public smoking and radon prevention measures in homes are additionally considered in relationship to potential future impacts on lung cancer incidence and disparities. The study seeks to contribute to impacts that focus prevention measures, appropriate resources, minimize disparities, and ultimately, notably reduce lung cancer mortalities.

98

Sexually Transmitted Infections in Two College Towns
Shikha Sherchan • COMH • Gina Kelly • CMU 214 • 2:30PM

This study is based on sexually transmitted diseases in two college towns concentrating mainly on Gonorrhea, Human Papillomavirus (HPV) and Chlamydia. The research will be focusing on Clay County-Moorhead and Stearns County- St. Cloud. The research is aimed at investigating whether there are higher incident rates of Gonorrhea, HPV, and Chlamydia affected by programs aimed at the education, prevention, treatment, and control of these sexually transmitted infections within college populations. This topic has been chosen as being epidemiologically relevant due to the widespread prevalence in demographics due to having high rates of multiple partners, unprotected sex and use of oral birth control contraceptives as the only form of protection. The viruses responsible for the transmission of these infections are usually spread through mucus membranes in the mouth, vagina and urethra. Sexually transmitted infections carries great deal of stigma, individuals are embarrassed or ashamed to even admit they may have contracted an infection which tends to less testing and more spreading of infection. Without testing and because of the stigma, people who may have the infections are also less likely to contact their partners to relay on information about possible infection. This is particular in

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college campuses because of casual sex, hook-ups and high rates of multiple partners. Individuals do not want to be ridiculed for spreading the disease nor miss out on the "college life style."

99

Iron-deficiency anemia in women and children worldwide
Beverly Apiagyei, Binamrata Bhandari, Tana Lohse • COMH • Gina Kelly • CMU ML • 9:30AM

Iron-deficiency anemia is a global public health problem affecting more than 200 million people worldwide. Iron-deficiency anemia affects both developing and developed countries with major consequences for human health as well as social and economic development. Iron-deficiency anemia negatively affects cognitive and physical development of children, physical performance and work productivity in adults. Vulnerability to iron deficiency varies greatly with each stage of the life cycle but women and children are most at risk for developing this condition. This study examined the prevalence of Iron-deficiency anemia in women and children around the world. The purpose of this study was to determine why the prevalence of Iron-deficiency anemia in developed and developing countries vary according to factors such as gender, age, weight, physiological, pathological, environmental and socioeconomic conditions. To assess the worldwide prevalence of Iron-deficiency anemia in women and children, quantitative data from secondary sources such as the Centers for Disease Prevention and Control were analyzed. Data on country-specific prevalence estimates, regional age and sex-specific prevalence rates, incidence rates of cognitive impairment in children less than five and age patterns of anemia from different nutritional surveys were examined and analyzed.

100

Addressing the Needs of English Language Learners in schools through Indirect Service Delivery Models in Speech-Language Pathology

Sarah Hoepfner • SLHS • Bruce Hanson • CMU ML • 9:30AM

Federal Laws like the Individuals with Disabilities Education Act (IDEA) mandate that assessment and intervention for students with communicative disorders be performed in the individual's native language. IDEA also prohibits that a student be placed in special education services due to learning problems that result from environmental, cultural, or economic differences. My poster addresses how School-Based Speech Language Pathologists can use indirect service delivery models to address the needs of English Language Learners who do not qualify for speech and language services offered through the schools.

101

Leadership Project: LOGAN (Labs Overseeing and Guiding Autism Needs) Group

Jennifer Austing, Carrie Bertsch, Matthew Johnson, Joran Le Stradic, Trisha Page • LEAD • Denise Gorsline • CMU 207 • 3:30PM

As part of the Leadership 301 course, the given assignment was to form a group, identify a need within the community, and help fill that need. We worked together to help a local family purchase an autism support dog for their son. In order to achieve this goal, we completed several fundraising efforts including: autism ribbon sales, crepe feed, dog house project, and wrapping presents at Best Buy. As a result, we were able to raise the funds needed to eliminate the financial need necessary to purchase the dog. Upon completion of the project, we exceed the funds needed. Remaining funds were made available as a scholarship, at MSUM, for an individual on the Autism Spectrum. This project provided all participants with valuable experiences in communication, leadership, philanthropy, and self-growth.

102

America's "Black Regiment": Clerics as Soldiers in the War for Independence

Courtney Koch • HIST • Sean Taylor • CMU 204 • 1:40PM

Many cite the men known as the "Founding Fathers" and the influence of the Enlightenment as the forefront in the War for American Independence. However, most colonists were far more influenced by their churches and religious leaders than by their politicians. It was through this profound impact on public opinion that religion played such a significant role in the movement towards the American Revolution. This paper discusses the most palpable religious force behind the war for independence—the American clergy. I examine the many roles the clergymen played in the revolutionary movement: their political protest leading into the war, their rhetoric and preaching as justification and motivation during the war, including the demonization of the British and use of Biblical analogies, as well as their contributions as soldiers, chaplains, and recruiters throughout the struggle. My research was

primarily in the first hand accounts of clergymen at the time of the revolution, primarily surviving sermons, in addition to narratives of those who served with the Colonial Army. With the knowledge gained from this material, I found that the American clergymen were instrumental to the mobilization of the colonies for the cause of independence, the perseverance and morale of soldiers and civilians throughout the struggle, and the eventual victory over the British forces.

103

The influence of similarity of comparison target on the optimistic bias
Tiffany Bouwman, Trisha Page • PSY • Gary Nickell • CMU ML • 9:30AM

Gourevia and Clark (2001) have defined the optimistic bias as the tendency for people to think that they are less likely to experience negative future events while they are more likely to experience positive future events. The purpose of the present study was to investigate how similarity of the comparison target impacted the optimistic bias. Ninety-three participants completed a survey of 12 possible future positive and 12 negative outcomes. The comparison target was varied for these outcomes (college friends, college classmates, or the average college student in the U.S.). As hypothesized, participants rated themselves more optimistic for future positive outcomes than for future negative outcomes. Further, it was expected that participants would show the least optimistic bias when the comparison target was their college friends and the most when the comparison target is the average college student in the U.S. However, the opposite effect was found for negative outcomes. Overall, there was no main effect for type of comparison target, but an interaction between the comparison target and the type of outcome was found.

104

Why Income Affects Health Status

Andrea Kerestes • SOC • Susan Humphers-Ginther • CMU ML • 9:30AM

It is no surprise that income greatly affects the health status of people. The lower the income level of a person, the less likely those individuals will rate their condition of health as excellent. Overall health status is greatly dependent on income levels not only in the United States but in the world. It is easy to see that less developed countries are usually very poor and therefore lack the necessities and money to seek medical care to improve their health when needed. This proposed research will extend the knowledge of individuals by shedding some light on this problem that affects so many individuals worldwide. The findings will allow lower income individuals to better understand why they tend to view their health status lower and hopefully be able to make conscious decisions to better their health.

105

William Shakespeare's influence in the Contemporary World
William Weightman • THTR • David Wheeler • CMU 205 • 9:30AM

Many Americans feel that the work of William Shakespeare is dull, boring, and unrelated to their modern lives. Others feel it is no longer appropriate for performance, but should be studied merely on a literary level. Quite the opposite is true, and this exciting presentation will encourage listeners not only to view Shakespeare's work differently, but instill a passion to learn more and find ways to reflect on their own lives by comparing them with the work of the world's most famous playwright.

106

Recessionary Religion: The effects of recessionary pressures on religious structure

Mark Frenzel • ECON • Tonya Hansen • LO 89 • 1:40PM

After 200 years of relative dormancy, inquiry into the economics of religion has recently experienced an explosion of interest, reigniting in the 1970s. An area of recent research has been in the structure and characteristics of the market for religion and beliefs. However, very little attention has been paid to the institution as part of a greater macroeconomic framework. My research will focus on the interplay between widespread recessionary pressure and the resulting role of religious institutions in the United States. Namely, I will use historical data in conjunction with econometric analysis to measure the effects of unemployment levels on religious engagement and market structure.

107

Hessian Soldiers: Their Influence on the American Revolution

Christine Haus • HIST • Annette Morrow • CMU 204 • 2:00PM

My oral presentation will look at the German forces which the English hired for the American Revolution. It will specifically look at their influence on the war itself and on individual experiences of the Hessian soldiers.

The Correlation among Religion and Mental Health**Amber Wenaas • SOC • Susan Humphers-Ginther • CMU ML • 9:30AM**

Over the years, the number of studies involving religion and health have grown; however, the research shows both positive and negative relationships among the two variables. Using information obtained from both published literature and the General Social Survey the relationship between one's involvement in religion and one's mental health will be explored. Studies have shown that there is a positive correlation between religious attendance and one's mental health. One's involvement in religious ideals, such as belief in an afterlife, have increased one's feelings of tranquility and in turn improved their overall mental health. There are, however, areas in the aspect of religion that have been unable to show whether or not they have a serious impact on one's mental health, such as frequency of prayer. The findings from this research may be used in a number of different areas. Religious affiliations may use the findings as a draw to get more involvement from the community; people may also seek religion in time of mental instability; or, the research may be used simply for personal education on health matters.

109

The Effects of Brassica rapa on White Cabbage Butterfly Larvae**Brittany Beers, Amy Moorhouse • BIOL • Alison Wallace • CMU ML • 9:30AM**

Many plant species have natural defense mechanisms to defend themselves against herbivorous insects. Brassica rapa (rapid-cycling), also known as Wisconsin fast plants, have variable numbers of trichomes on their stems and leaves. These trichomes are little hairs that are thought to function as a deterrent to herbivorous insects. This trait appears to be genetically based because we have successfully selected for "hairy" and "non-hairy" populations. One particular herbivore, the White Cabbage Butterfly, *Pieris rapae*, use fast plants as a food source and for oviposition sites (laying eggs). I investigated how trichomes may affect larval development by measuring changes in their wet biomass over a period of four days in larvae raised on "hairy" versus "non-hairy" fast plants. This was done to see if higher numbers of trichomes resulted in slower larval growth rates. My pilot study produced non-significant results, meaning the amount of trichomes on a plant had no effect on larval development. The experiment will be repeated, but this time with a larger sample size and more specific measures of trichome number and larval growth rates. These results and their significance will be shared at the Student Academic Conference.

110

Adoption**Rebecca Trippler • SOC • Deborah White • LO 91 • 1:00PM**

Adoption has been around since the late 1800s. International adoptions have grown consistently since the 1950s. This research covers several aspects of adoption including open and closed adoptions, international adoptions, common concerns associated with adopting internationally, and problems that adoptive families come across. Twenty five scholarly journal articles were reviewed and then summarized along with a few adoption agency websites that were concerned with international adoption. Throughout this research it has been shown that there are more problems associated with adoption than one would have thought and the idea of international adoption is far more complex than a domestic adoption within the United States. Complications within the process of international adoptions are also common when one does not take the time to do research before choosing their adoption agency. By looking at this research and educating people through more resources to adoption, it is possible to prevent further complications.

111

Community Video Project Screening and Presentation**Andrew Neill, Patrick Wynne • FILM • Raymond Rea • CMU 208 • 1:40PM**

The purpose of film 472 is to give students a taste of nonfiction and to allow them to work with a group of community clients. Each student is put into a small group and assigned a duty such as producer, editor, cinematographer etc. The students meet with the community client to get input. The students then take the information provided and begin formulating ideas that will become the proposal. Once the proposal is created it is then presented to the client for approval. Over the weeks after the proposal the students work on the project and workshop in class with other students doing different projects. Once the project is complete the community clients are asked to join the class in a viewing. After the viewing the clients give comments and feedback on the created videos. There is one final screening at the end of the semester for the

film department, the university, and the community. The videos are given to the clients to do with as they wish. For our presentation in this conference we will screen the four videos that were developed in this class and talk about our research.

112

Why is Breast Cancer an Epidemic in the United States?**Bryan Ackerman, Kristin Kirchoff • COMH • Gina Kelly • CMU 214 • 3:40PM**

Why is Breast Cancer an Epidemic in the United States? This study examined women in the United States that are affected by breast cancer each year. Breast cancer is the most common cancer among women in the United States, other than skin cancer. Breast cancer is the second leading cause of death in women, after lung cancer. In the United States it is estimated that 192,370 women will be diagnosed with breast cancer and 40,170 women will die of cancer of the breast in 2009. Mentioned within this study are different methods of diagnosis and an analysis of why breast cancer research is important to the United States as a society. This study will also identify risk factors of breast cancer and why breast cancer has become an epidemic in the United States. Some main risk factors for breast cancer are age, genetic predisposition, ethnicity, and having certain types of abnormal cells. With all of the risk factors associated with breast cancer it increases the chances for more women in the United States to be susceptible to this disease. Breast cancer should be examined to follow the trends of incidence and prevalence rates so that future studies can use the data to possibly find a cure.

113

Trumpet Repertoire in the 20th Century**Drew Larson • MUS • Laurie Blunsom • CMU 214 • 2:00PM**

The trumpet has become a viable solo instrument in the 20th Century with a steadily increasing repertoire. There are essentially two categories of works in the 20th-century trumpet repertoire: historical works revived from the past and contemporary pieces that use modern compositional techniques. My research focuses on two trumpet works from my senior recital that represent these categories and an examination of how they characterize these trends in the trumpet repertoire. In this presentation, I will focus on the contemporary category and discuss various techniques used in contemporary pieces. Specifically, I will discuss the Sonata for Trumpet and Piano by Halsey Stevens, providing examples of techniques such as thematic composition, mixed meter techniques, and timbral variations.

114

Triage Nursing as a Practice: How to Determine the Acuity of a Patient**Michelle Jetvig • NURS • Donna Clark • CMU ML • 1:00PM**

When coming into an emergency room/urgent care setting the patient often registers then is referred to the triage nurse to determine the acuity of the patient. The triage nurse assesses the patient and rates their status on a scale of 1 to 5. This research presentation will go through the evidence based practice behind the assessment steps a triage nurse would take to assess the incoming patient with examples of different patients who present with different types of symptoms and complaints.

115

Does Money Talk? How The Composition Of Individual Presidential Campaign Donations Impacts**Jared Dion • ECON • Tonya Hansen • LO 89 • 3:30PM**

This body of research examines the composition of individual Presidential campaign donations and their impact on the ability of a President to provide equal representation to the population they serve. Using a random sample of individual campaign donations for each President, a measure of donor socioeconomic class is constructed as the ratio of large (donations greater than or equal to \$2000) donations to total individual donations. This paper considers the relationship between donor socioeconomic class and presidential approval ratings as a means of determining whether campaign donations influence presidential actions.

116

Gender Discrepancies in Confidence in Medicine**Thomas Seim • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM**

Despite technological advances in the medical field, the use of the sound scientific method, rigorous clinical trials, and scholarly peer-reviewed medical journals, people's trust in the Western, modern medicine is continually tested as more and more people explore alternative options of medicine (homeopathic medicine, new age medicine, folk remedies and so on). Moreover, women, who have traditionally and especially act as caregivers to the elderly and to children, have less confidence in

medicine than men do, according to the General Social Survey. The obvious question is 'why'? Moreover, if healthcare in the United States has a chance to become improved (universal healthcare, single payer options, a public option, and so forth), then the confidence level the American people, especially women, needs to be addressed, because if healthcare is to be entrusted with the government, not only do citizens need to trust the government, but Western medicine itself also needs the same level of trust and confidence.

117
Racial and Cultural Identity in Transracial Adoptees
Thomas Seim • SOC • Deborah White • LO 93 • 9:30AM

South Korea has been the pinnacle example of a country placing their own children up for adoption, as there are an estimated of more than 200,000 Korean adoptees worldwide. It has been 57 years since the armistice of the Korean War, when adoption of Korean children was seen as a compassionate act in a war-torn country. Researchers have been slow but steady in uncovering the ramifications of child displacement and research is starting to gather to find out how these adoptees have been able to cope with white parents, white brothers, white sisters, and white communities when the adoptees look so out of place. Analysis and meta-analysis have been gathered to synthesize literature on the psychological, emotional, and social integration of interracial adoptees living in the United States. The emphasis of this literature review deals with how these adoptees construct racial and cultural identity in America.

118
Mollusk Distribution Within The Saline Lakes On San Salvador Island Bahamas-Establishing A Baseline For Determining Biological Response To Climate And Anthropogenic Change

Adam Rigge • GEOS • Karl Leonard • CMU ML • 1:00PM
San Salvador Island, Bahamas has many diverse lakes of various sizes, salinities and other environmental parameters. These lakes have faunas that are dominated by shelly invertebrates such as mollusks and ostracodes. While more is known about the ostracode community and its distribution, fairly little is understood about the mollusk community—particularly whether or not their distribution is controlled by the same variables (i.e. salinity) as ostracodes. This study examined the occurrence and abundance of the mollusks on San Salvador as well as the environmental factors that might be controlling their distribution. During June 2009, sediment and water samples from 27 lakes on San Salvador Island, and analyzed for species content, abundance, and environmental variables, such as lake area, water depth, dissolved oxygen, conductivity, total dissolved solids and temperature. Statistical analyses completed on the samples indicate that variables such as lake area, latitude, longitude, and salinity control most species' distributions. However, given the small sample size, it is unclear as to whether or not these factors are the main variables controlling the distribution of the mollusk fauna throughout the entire island. This study has implications for interpreting climate change as reflected in mollusk community changes in sediment cores through time because mollusks have been shown to be reliable proxy indicators.

119
Cancer Prevention
Nichole Dodd • NURS • Donna Clark • CMU ML • 1:00PM

Cancer Prevention Cancer can be an acute and chronic health problem that affects all ages and all walks of life. It was estimated that about 1.5 million new cases of cancer were diagnosed in the United States in 2009. Cancer accounts for nearly one-quarter of deaths in the United States, exceeded only by heart diseases. In 2006, there were 559,888 cancer deaths in the United States (American Cancer Society 2009). Cancer is one of the most preventable life-threatening diseases facing Americans today. This poster presentation will illustrate how college-aged students may significantly reduce their risks for cancer.

120
How Sleep May Affect Your Ability to Achieve a Higher Academic Degree and Decrease Performance in School

Tana Lohse • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM
There are many things that contribute to success in school. This study looks at how sleep may affect one's ability to achieve a higher academic degree and decrease one's performance in school. Sleep is an emerging health concern, especially for students, and many people may not be aware of how big of a role sleep may play. The hypothesis for this study is that if one does not get enough sleep, their chances decrease in their ability to achieve a higher degree and a decline in their academic performance. The Centers for Disease Control and Prevention (CDC) is one source that is used to look at the importance of sleep. The General Social Survey (GSS) is used to compare variables such as stress,

education, and health status. The goal of this research is to raise awareness of this health problem, so that people may improve or maintain their health to reach success.

121
Biodiversity: How much is enough? How much is a species worth?
John Christianson, Kathleen Germann, Brooke Martz, Cory Stessen • BIOL • Donna Stockrahm • CMU 216 • 3:10PM

We will be debating issues associated with biodiversity. One side of the debate will be arguing that biodiversity in the tropics is extremely important, and we need all the species to keep the environment healthy. The opposing side will be arguing that biodiversity in the tropics is not as important as human welfare. The loss of one species within a narrow habitat range will not have a great effect on the overall ecosystem.

122
Global Bio-conservation and it's Implications
Andrea Pitz, Michael Walls, Sarah Warner, Michael Winans • BIOL • Donna Stockrahm • CMU 216 • 1:40PM

Human populations are using Earth's natural resources at an alarming rate that will require two planets' worth of resources in the next 40 years. Global warming has caused the Earth's temperature to rise due to greenhouse gas emissions caused by industrialization. The eradication of natural resources has also caused pollution in our water sources and is depleting natural habitats and species. The most contingent international agreement governments have developed so far, the Kyoto Protocol, includes an international agreement for the reduction of net greenhouse gas emissions. To fulfill this agreement, measures designed to reduce or limit current emissions have to be brought into force. Veto states, such as the United State and China, have the potential to block strong global environmental action because their cooperation is so essential that by not participating, global environmental policy will never be implemented. One reason why the United States and China did not sign the Kyoto Protocol is because they believe that economic viability could be jeopardized. Moreover, findings show that in developing countries, government investments tend to privilege development issues such as trade, energy, and infrastructure, while investments in the environment and natural resources are seen as a barrier to development. We will debate the implication of bio-conservation on a global scale.

123
What is the rose and right of developed nations in conserving the tropics?

Megan Gette, Ashley Horton, Amanda Koskela, Sarah Martinson, DeAnna Rastedt • BIOL • Donna Stockrahm • CMU 216 • 3:30PM
This debate will focus on the role and rights of developed nations in conserving the tropics. The arguments surrounding conservation include the ecological health of the planet, the exposure to erosion, and deforestation. Do developed nations have a responsibility in conserving the areas, despite the nation's sovereignty and rights to their own land development? Or, in opposition to this argument, does the region and the nation that owns it have complete control over the resource inherent to the area? Because many of these nations are impoverished and need the economical security procured by the exportation of natural resources, conservation would greatly impede their political and social growth. We will explore these issues in order to bring awareness to the arguments surrounding developed nation's involvement in the conservation of natural resources.

124
Ecotourism: Are We Loving The Tropics To Death?
Carly Helfrich, Seth Houkom, Chelsey Penuel, Alex Stalboerger, Randy Sutrisno • BIOL • Donna Stockrahm • CMU 216 • 2:00PM

This debate about ecotourism in tropical regions will discuss whether it is a tool for or a threat against conservation. One positive side of ecotourism includes providing the general public with an understanding of the importance of conservation. Furthermore, ecotourism creates economic value for a region that is intact as opposed to being deforested for economic gain. Ecotourism boosts the local economy for years to come, rather than providing short-term gain. The negative side of ecotourism includes several effects of increased human activity. One effect is that building hotels or resorts is detrimental to the land. Increased human activity will also lead to the building of roads and the disposal of sewage and garbage. With an increase in these areas, the land will be destroyed, to make room for human settlement.

125

Surgical Intervention for Spinal Stenosis

Jennifer Spencer • NURS • Donna Clark • CMU ML • 1:00PM

Spinal Stenosis is a debilitating narrowing of the vertebral space surrounding the spinal canal often resulting in unilateral numbness, tingling, pain and eventual loss of function in the affected extremity. There are numerous theories on the best treatment of this condition. This project compares the advantages and disadvantages of lumbosacral spinal fusion surgery as a treatment option.

126

Sounds of Ecstasy: Music in the Films of Werner Herzog

Luke Holmaas • FILM • Anthony Adah • CMU 208 • 9:30AM

While the image is of primary importance in the work of the highly idiosyncratic German filmmaker Werner Herzog, music too plays its own major role in both the creation of his films and their creations of meaning. By highlighting the ways in which Herzog uses music, both classical and newly created pieces, in a few key films selected from across his vast filmography of fiction and documentary works, I hope to show not only how at times, as Herzog says, "the true quality of an image can't be appreciated except through music", but also the varying ways his choice of music influence his films, adding further layers to both the unique sensual experience as well as the deeper meanings found within Herzog's works.

127

Intel X-86(IA-32) family's processor

Aashana Dhankher • CSIS • Andrew Chen • CMU ML • 1:00PM

I am going to present the Intel X-86(IA-32) family's processors to help understand people about the processor's a little bit more. I will specifically concentrate on the 80386 up to Pentium family of intel processor. Its going to be useful to others because then people could be able to make an easier and faster decision about the processors when choosing one to buy. As we know that computer is a necessity of every one nowadays hence buying a better performance processor will be useful for everyone.

128

Gender Roles by Race: Childrens' Views and Hardships

Kierstin Aanenson • SOC • Susan Humphers-Ginther • LO 90 • 10:10AM

Gender roles have been around since the beginning of man. They are reinforced everyday, at school, at work, at home. Studies show that there are physical differences in the brain that add to the pertinence of these roles but children still dip into the strike zone all the time. What if a boy genuinely likes the color pink? What happens to the girl that would rather climb trees instead of play with barbies? Teasing and punishment can quickly follow. Many do not stop to think how this effects a child mentally and physically.

129

The Significant Role of Birth Order

Angela Heng • SOC • Deborah White • LO 91 • 1:20PM

Some may believe that studying birth order is like studying whether or not the sky is blue, that it is something that should just be common sense. However, through research it could be concluded that birth order plays a significant role on character type which may explain why some people aspire for attention or why others hide in the corner. This study will review past literature to help explain how birth order plays a significant role in things such as relationships, personality type and academics. When looking at birth order one will be classified into one of four categories which are; oldest child, middle child, youngest child and only child. It will be shown that these categories are important because each group has certain characteristics due to birth order.

130

The Sociology of Food

Amber Wenaas • SOC • Deborah White • LO 90 • 2:30PM

"Food is our common ground, a universal experience." (James Beard 1903-1985) The main objective of this literature review is to understand in better detail the social inequality through the lens of food. As one of our most basic human activities, sociologist, biologist and anthropologist have all observed a great variability in patterns and consumption from one culture to another. Across many places, human societies have experienced many different styles of reaching their basic nutrition, some with greater success than others. Examining what people eat, how they eat, how much they eat, where it comes from, and the meaning they contribute to it can shed a light on the vast role food plays in every society throughout the world.

131

NHE Regulation of Intracellular pH

Kayla Kapsner • CHEM • Joseph Provost • CMU ML • 1:00PM

The function of the sodium hydrogen exchanger (NHE) is to regulate intracellular pH. NHE transports an intracellular proton for an extracellular sodium ion and is thus involved in regulation of intracellular acid levels. The purpose of this study is to determine intracellular pH by NHE. The experiment will consist of a series of pH assays to see how different agents affect the ability of NHE to function properly. The primary role of NHE is to maintain intracellular pH at a constant level, which ranges between 6.8 and 7.3 for most cells. NHE maintains proper pH levels by requiring energy to extrude an H+ ion from the cell. The energy required to do this is obtained by the intrusion of a Na+ ion into the cell. By exchanging H+ ions for Na+ ions in order to obtain the proper concentration of H+ ions inside the cell, intracellular pH is regulated. The study is currently a work in progress. It will be conducted by using fluorescence microscopy to measure intracellular pH levels by using a fluorescent dye called 2',7'-bis (2-carboxyethyl)-5(6) carboxyfluorescein (BCECF). Intracellular pH response to BCECF dye can be measured by observing any changes in the excitation state or emission at a specific wavelength when the cell is exposed to a single wavelength of light. The cells are stained with BCECF dye and are treated with different hormone agonists. The cells are placed in a flow cell and light is shined upon the cells, which excites the fluorescent dye. The excited state of the dye causes the cells to emit two wavelengths of light, one of which is dependent on pH. The emitted light is observed through fluorescence microscopy and the pH of cells is determined by using the ratio of the fluorescence emission spectra at two different wavelengths. Intracellular pH levels are important because pH plays an important role in many cellular processes including cell growth, calcium regulation, enzymatic activity, receptor mediated signal transduction, and many others. The ability to measure pH levels of cells is important because it allows us to test how various agents affect intracellular pH and how the cells react when pH levels are altered.

132

Screen for expression of calcineurin B homologous protein 2 in non-small cell lung cancer

Kristina Anderson • CHEM • Joseph Provost • CMU ML • 1:00PM

Cancer affects the lives of millions of people everyday and in 2009 the American Cancer Society reported that lung and bronchus cancers were the leading with highest deaths per year. The invasion and migration of cancer cells through the body follows a series of steps that includes initiation, tumor development and tumor invasion and metastasis. Understanding the invasive growth of cancer cells and tumors can be used to propose methods for the inhibition of the invasion and metastasis. Tumor cells movement through the body is complex but it must essentially disrupt the rigid network of other cells to progress forward. The sodium hydrogen exchanger isoform 1 (NHE1) is a transmembrane protein that localizes on the leading edge of cancer cells. NHE1 exchanges extracellular sodium for intracellular proton decreasing the extracellular pH that disrupts the cell network providing space for the cell to move. Calcineurin homologous protein isoform 2 (CHP2) is likely to have a significant role in regulating activation of NHE1 and this project will be targeting CHP2. The first step is to extract CHP2 RNA from cultured cell lines and human tissues. The RNA will be analyzed for CHP2 expression with real time PCR. Step two is detection of CHP2 protein expression in cancer and normal lung cell lines through Western blot with anti-CHP2. Step three is detecting interactions between NHE1 and CHP2. This will be accomplished through knockdown of CHP2 protein in cell lines. If CHP2 is involved in activating NHE1 creating a knockdown technique will help understand CHP2's role.

133

Female Drug Sellers and Their Experience Within the Drug Economy

Robert Vistad • SOC • Deborah White • LO 91 • 1:40PM

This paper examines the participation of female drug dealers in the drug economy. By examining the unique roles in which female drug dealers play as compared to men through extensive literature review, and cross examination through multiple sociological theories it will give insight into the social environment and structure that female drug dealers are a part of. The roles examined in this paper of female drug sellers are roles of masculinity, criminality, violence, and overall experiences which are encountered by female drug sellers. It is also noted the level of difficulty that some females encounter with entering the drug market and competing when in it with the status quo of "hegemonic masculinity". Literature on women in the drug economy is minimal, and the view of drug sales throughout the world is seen primarily as a male issue. This article is designed to give scientific insight into the world of female drug sellers.

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134

Poverty, Health Insurance, and Health Status

Cole Brunner • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Most people can come to the conclusion that the lower income you have, the less likely you are to have health insurance. If you are less likely to have health insurance, then the less healthy you are. In 2008, according to the U.S. Census Bureau, there were 39.8 million people living in poverty, and 46.3 million people living without any health insurance. Also, according to the General Social Survey conducted by University of California, Berkeley, the higher your income, the better your health status.

135

Defibrillator: A life saving device

Andrea Wallace • NURS • Donna Clark • CMU ML • 1:00PM

When a patient's heart goes into an irregular rhythm, a variety of medical interventions can be used; one medical intervention is a defibrillator. A defibrillator is a machine that analyzes the heart rhythm and sends a shock able rhythm. There are two main types of defibrillators, one is a manual defibrillator and the other is an automatic defibrillator. A manual defibrillator can be found in hospitals and on ambulances. They are used by trained medical staff, like doctors, paramedics or EMTs. These machines require training and knowledge of how the cardiac system operates. The manual machine can treat a wide variety of heart rhythm conditions. An automated external defibrillator (AED) on the other hand can be used to treat a few abnormal heart rhythm conditions. An AED is a life saving device that a bystander can use with little or no medical attention. These defibrillators can be found in a wide variety of public places like churches, malls, schools, fitness centers and hospitals. An AED will send a patient a shock if they are in a shock able rhythm; the intent of sending the shock is to restart the heart in a normal rhythm. This shock can determine life or death for the patient. By providing information to the community about the use of defibrillators and how to use could one day mean helping save some one's life.

136

Human Trafficking: A Sociological Analysis

Katie MacRae • SOC • Deborah White • LO 90 • 10:30AM

People all over the world are trafficked for the purpose of sexual slavery. Most of the slaves are women and children. They are taken from their villages or are sold by their families to human traffickers who take them to places where the sex industry is thriving. They are forced to stay under poor living conditions and many times have no way of escaping. They are deprived of proper living conditions, health care and emotional support. While the sexual slaves are severely hindered the traffickers make vast amounts of money and the economy of the countries they live in flourish because of their slavery. There is a need for collective action because these women and children are unable to help themselves and often are ignored by the law enforcement and the government. More specifically, this research will look at the economic aspect of human trafficking. This literature will review the complex social problem of human trafficking, by using scholarly reviewed articles.

137

Prostitution in the United States: The Relationship between Prostitution and Public Health Concerns

Katie MacRae • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Prostitution is an illegal activity in the United States. Individuals found to be engaging in sexual activities for money will likely be arrested and charged. Because of this illegality of prostitution, sex workers are often unable or unwilling to seek medical help for sex related health issues. Individuals who have been paid for sex or have paid for sex are less healthy than those individuals who have not been paid for sex or paid for sex. This is likely because of the legal structure and the lack of benefits for sex workers. The legal structure makes it difficult for persons working in the sex industry to seek help when needed. Sexually Transmitted Infections, HIV and other health issues related to abuse and poor living conditions are all public health issues which need to be addressed by policymakers. By looking at the public health concerns related to prostitution and sex work, policymakers should see the need to adjust prostitution polices to help alleviate health concerns.

138

Electromagnetism: Eddy Currents and Levitation

Fenner Colson • PHYS • Linda Winkler • CMU 218 • 1:00PM

A metal object placed in the alternating magnetic field of a current loop experiences a lifting force (electromagnetic levitation) and heating. These effects are caused by eddy currents induced in the metal. The magnetic moment induced in a sphere and the levitation force on a sphere are calculated.

139

Sexuality Education

Anna Merriitt, Justin Nistler • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

This is a study of the effectiveness of sexuality education and it's relation to early sexual activity and pre-marital sex. Most of the sexual education in the past has been abstinence based, but studies are now being conducted as to the effectiveness of sexuality based education as opposed to abstinence based education. We will be studying the number of sexual partners of those who are in favor of sexuality education in contrast to those who oppose it. Our hypothesis is that if sexuality education is taught in schools, then the rates of unsafe sexual practices will decrease; and furthermore, people who are sexually active see a need for sexual education for young people. We hypothesize that teaching young people about the potential mental, physical, and social consequences of pre-marital sex will lead the youth to make better decisions regarding their sexuality.

140

Impact on Minnesota lake systems by the evasive aquatic zebra mussel

Renek Jorgenson, Julie McGeary • BIOL • Patricia Wisenden • CMU 216 • 1:00PM

Zebra mussels are an invasive aquatic species that recently invaded Minnesota Lakes. Zebra mussels can negatively affect some benthic (bottom-dwelling) invertebrates but benefit others. Zebra mussels out-compete some benthic invertebrates for food by consuming large amounts of planktonic plants and animals, leaving little food for native invertebrates. Native clams decrease in abundance in the presence of zebra mussels because zebra mussels attach to them and impeded their ability to feed. Although not often recognized, zebra mussels can have positive effects on benthic invertebrates. When zebra mussels aggregate they create a jagged, 3-dimensional substrate, creating interstitial spaces for other benthic invertebrates. Our predictions are samples with high density of zebra mussels will have high numbers of invertebrates that prefer interstitial spaces. Invertebrates that prefer flat surfaces such as snails will decrease in number. In this study we used SCUBA to collect benthic samples in two Minnesota lakes, Lac Homme de Dieu (with zebra mussels) and Lake Carlos (without zebra mussels) to compare benthic invertebrate number and diversity. Because benthic invertebrates are an essential part of the aquatic food chain, studying positive and negative effects of zebra mussels is of great ecological and economic importance.

141

Investigation of Quercetin as a possible sensitizer for Dye-sensitized solar cells

Eric Berget, Zachary Morseth • CHEM • P. Asoka Marasinghe • CMU ML • 1:00PM

Quercetin was investigated as a possible sensitizer for use in dye-sensitized solar cells (DSSC's). Quercetin/LiI, I2 photocells was found to generate cell voltages around 400mV and various current densities as a function of the incident light intensity. The quercetin sensitizer was analyzed by cyclic voltammetry and was found to undergo reduction. The reduced quercetin was also investigated as a possible sensitizer, and it was found that the reduced quercetin gave similar potentials as quercetin sensitizer. A comparison between the reduced and non-reduced quercetin sensitizers was performed and as for current density produced quercetin was found to generate higher values.

142

Achondraplasia Puncata X-linked Dominant

Katelyn Gleason • SLHS • Mary Drake • CMU ML • 1:00PM

Genetic disorders are common and widespread, and as research around the world continues more and more knowledge about the specific causes of these disorders are being discovered. Achondraplasia Puncata X-Linked Dominant is one of these disorders. This disease is an extremely rare genetic disorder that affects people across the nation. I have been lucky enough to have firsthand experience working with someone with this disorder, yet wanted to know more about the disorder and what the causes and symptoms were. By looking into case studies and research on this disorder and combining these with personal experience, much has been learned about the disorder. Achondraplasia Puncata X-Linked Dominant is a disorder that few know about, but has very interesting symptoms and variations. Learning about this disorder will help to educate people who may not be familiar with the disorder and increase general awareness of genetic disorders.

143 Behavioral Adaptations of International Students in the Fargo/Moorhead Community
Nathaniel Arneson, Kimberly Iwen • ANTH • Bruce Roberts • CMU
216 • 9:50AM

The purpose of this study is to learn about the adaptations that International students experience after arriving in the Fargo-Moorhead community. Our particular location of study will take place at the "Pink House". The Pink House is a privately owned home that welcomes International and American students to socialize in. In this study, we will videotape interviews with 8 international students from various countries that go to the Pink House as well as 1 to 2 American students that go there. The owner of the Pink House will be interviewed and possibly videotaped. We will also videotape interviews with 1 to 2 international students on the MSUM campus. The interviews will consist of around 20 questions that pertain to an international student's experience in Fargo-Moorhead and in the Pink House. The interviews will be around 30 minutes long. Before subjects can partake in this study, they must read and sign an informed consent form stating that they agree to be interviewed and videotaped. We will also take pictures of the Pink House's rooms where International and American students socialize in. Subjects will not be photographed, only the rooms will be. The videotapes created for these interviews and the photographs taken of the rooms will only be shown at the Student Academic Conference and destroyed afterwards.

144 The Relationship between Health Status and Sleep
Katie Beyer • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Human beings require sleep to function, be healthy, and to be productive. Some people need more sleep than others, and quality of sleep is just as important as quantity. Getting more sleep is an easy way to quickly improve your health. I will be researching scholarly articles and other accredited research to find the correlation between sleep and health status, the side-effects of lack of sleep and the positive effects it can have on overall health. Information will also be discussed concerning sleep disorders and improving sleep habits. This research will also fill in the gaps in research having to do with medicalization of sleep disorders.

145 Adolescent Drug Use and Associated Stigmas
Anna Merritt • SOC • Deborah White • LO 90 • 2:50PM

Adolescent drug use is often listed as one of the top concerns for parents. They are concerned about the potential health side effects, the idea of "gateway drugs", and in general having their children's lives turn out different than they envisioned when they first held their baby boy or girl. Through a comprehensive literature review, unique insight will be gained on the side-effects, ideas, and conceptualizations of drug use, to see the other side of adolescent drug use. This totality approach to the use of illicit drugs, from the stigmatization attached, to the potential socio-personal reasons for stepping into the drug arenas at a young age. This approach will hopefully generate answers for not only the parents, guardians, teachers, and other adults, but also for the users themselves.

146 Medical Tourism: Alternatives to the US Healthcare System
Clayton Kramer • ECON • Tonya Hansen • LO 89 • 2:00PM

As a result of globalization, consumers are no longer restricted to buying goods and services from nearby producers. The consumption of goods in the global marketplace involves the consumer traveling to the market or the product being transported to the consumer. Despite the prevalence of this type of exchange in goods markets, the delivery of services, such as medical care, has remained more localized. This research explores the relationship between rising medical care and insurance costs in the U.S. and Americans' consumption of medical care in foreign countries. Economic theory suggests that increases in medical care prices in the U.S. would decrease the quantity of medical goods and services demanded within the country. Alternatively, state-of-the-art global medical facilities that charge considerably lower prices for medical goods and services compared to U.S. facilities are expected to emerge as substitutes in this market. In recognition of additional factors which uniquely impact the demand for medical care, this research focuses on estimating the frequency of substitution of global medical care for U.S. medical care and understanding whether this practice will become more or less common in the future.

147 Education and Domestic violence
Heather Smith • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Education and Domestic Abuse Rates Additional research is needed to help prevent the epidemic of domestic violence. Many women and even men are victims of physical and mental abuse throughout their life time. I believe that as education increases, the prevalence of domestic violence will decrease. I'm interested in finding out if education plays a role in the prevalence of domestic violence. I'm also curious as to how age affects the rates of domestic violence. I will provide information that will help women to see the warning signs of an abusive relationship. I would also like to present resources that can provide help for those who need them. My research will benefit others by making people aware of the available resources to those who are already being victimized. With information and resources available, more women and girls will be able to access it. Knowing more about what causes domestic violence will allow us to be able to take more steps in preventing it.

148 The territorial dispute over Dokdo Takeshima between Japan and South Korea

Min Joo Chae, Haina Kang • POL • Andrew Conteh • LO 101 • 2:30PM

Nowadays, the territorial disputes in East Asia increases, especially between South Korea and Japan, because the seas in East Asia are relatively small comparison to many boundaries of East Asian countries. Both Japan and South Korea are disputing the ownership of Dokdo Takeshima. South Korea claims that Dokdo Takeshima is a territory of Korea in historically and based on the international customary law. Also Korea contains several historical proven evidences. On the other side, Japan also claim that Dokdo Takeshima is a territory of Japan mainly based on historical documents and international treaty law between South Korea and Japan during the colonial period. This case is not only shows conflict between customary law and treaty law but also obscurity of International Law of the Sea. This is a problem because some statements of International Law are indistinct. Based on International sources of law, the project is looking for the clear answer whether Japan or South Korea has a stronger claim for Dokdo Takeshima. Before I began this argument, I will look into history of Dokdo Takeshima's conflicts, conflict viewed by customary law and treaties and lastly arguments of each countries based on a source of law.

149 Causes of Obesity in the Younger U.S. Populations
Katie Beyer, Stefani Milde, Heather Smith • COMH • Gina Kelly • CMU ML • 1:00PM

The rates of adolescent and childhood obesity are increasing at alarming rates throughout the United States. Childhood obesity is a fast-growing public health threat because it can lead to many other health risks later in life such as diabetes, heart conditions and obesity throughout their adult lives. The main focus of the research is on the rapid increase of childhood obesity in the U.S. This research will look at the regions in the U.S. where children and adolescents that are at the most risk for becoming obese or already are considered overweight. Evaluations of school lunch programs and other implemented healthy eating programs in grade schools will be discussed in this research. The resulting data will provide data on preventative measures, community involvement, and impact on society. This research will outline community resource and involvement along with prevention methods. The data presented will depict why childhood obesity is a growing epidemic throughout the U.S.

150 Correlations between increased alcohol consumption and marital status and its effects on men's health

Daniel Souers • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Excess alcohol consumption is generally higher amongst single men, and can have adverse affects on their health. It's somewhat unknown why this occurs. It may be companionship issues, increased loneliness/depression, amongst other things. My research will address this problem and try to find a way to explain the correlation between marital status and drinking. I will also try to offer some insight on solutions to this problem and to look at what can be done to help these individuals. Analysis of the data from the general social survey will close the gap in understanding between the relationships between drinking and marital status relating to overall health.

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China And Africa
Ahbra Hashim, Buba Kanagi • INTL • Andrew Conteh • CMU ML • 1:00PM

China and the countries of the African continent have a long history of relationship that started in the sixth after countries in Africa gained independence. China and Africa were in hold in the eights, but in the last ten years both China and the African countries have renewed their relationship and cooperated well in many areas like economics, politics, military, business, and trade. Both China and Africa have entered a new phase of strategic partnership. This paper will discuss the cooperation between China specific regions in the continent.

52
Who benefited and Who is Benefiting. An Assessment of the Sino-Africa Relationship
Ahbra Hashim, Buba Kanagi • INTL • Andrew Conteh • CMU ML • 1:00PM

In this conference I will like to focus on the present relationship between China and the African continent. I will research this relationship between the Asian giant and an impoverished continent that for years has been a playing ground for outside influence and power thereby causing impediment in its development efforts. China's presence in Africa is not viewed differently in many circles but at the same time, it is seen by many as the remedy for Africa. Despite surmounting economic aid close to surpassing the status quo, skeptics still see China's move as another form of hegemonic ambition and resource exploitation. This affiliation tracing its source back to the Bandung conference in 1955, had been through many trajectories to become what it is today. For about a decade now this relationship has been viewed with close proximity both as a hope and despair in the eyes of critics and pundits. The aim of this research is to look at both arguments from a balance angle through the use of historical and contemporary evidence to come to a consensus conclusion.

153
Who benefited and who is benefiting now? An analysis of Sino-Africa relationship
Buba Kanagi • HIST • Henry Chan • CMU ML • 1:00PM

In this conference I will like to focus on the present relationship between China and the African continent. I will research this relationship between the Asian giant and an impoverished continent that for years has been a playing ground for outside influence and power. China's presence in Africa is not viewed differently in many circles. Despite surmounting economic aid close to surpassing the status quo, skeptics still see China's move as another form of hegemonic ambition and resource exploitation. This affiliation tracing its source back to the Bandung conference had been through many trajectories to become what it is today. For about a decade now this relationship has been viewed with close proximity both as a hope and despair in the eyes of critics and pundits. The aim of this research is to look at both arguments from a balance angle through the use of historical and contemporary evidence to come to a consensus conclusion.

154
International Students, Their Challenges, and What MSUM Can Do
Tony Dahlen, Joran Le Stradic, Nana Manga Matuba, Dominique Rolando • CMST • Denise Gorsline • CMU 207 • 9:30AM

Discussion will focus on the issue of challenges faced by international students during their stay at Minnesota State University Moorhead. The discussion will involve international students talking about varied topics including: culture shock, transportation, social life, college classes, and the view of American culture as opposed to that of their own country. In addition, we will talk about some basic principles of intercultural communication as a way of understanding some of these challenges. In conclusion we will talk about what the University, students, faculty, and other members of MSUM can do to help make the stay for international students a great experience.

155
Christianity and the Dakota Indians: The Success of Missionaries in Unforeseen Circumstances
Renee Pieschke • HIST • Paul Harris • CMU 204 • 2:50PM

The Dakota Indians occupied central Minnesota when they first came into contact with Samuel and Gideon Pond. The Ponds, along with Reverends Thomas S. Williamson and Stephen Return Riggs, sought to improve living conditions for the Dakota Indians by assisting them with farming and translating the Bible into their own language. The missionaries had limited results in their initial attempts to proselytize the Dakota Indians. With the few converts they managed to acquire, the

missionaries and their families safely made it through the Dakota Conflict of 1862. Following the defeat of the Dakota Indians, the missionaries worked with the captive warriors who were then more susceptible to conversion.

156
Exercise Affecting Health between Social Classes
Kristin Grenz • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Physical activity has played a central role in the preventative measures of health and wellness. At the present time our nation is at a tipping point of what to do with the evidence that supports the health impact of physical activity. We can continue to spend our budget reacting to health problems, or we can work upstream at what is creating our health problems to begin with. What proactive steps can we follow to reduce the health problems in the future? The purpose of the research is to fill the gap by using preventative measures of exercise to benefit our health care by educating the lower social classes. Specifically, research will be conducted on the how many people chose to exercise on a daily basis in groups or alone. The controlled variables are sex and social classes. Knowledge exists on the relationship between lower socioeconomic status and healthcare problems. Our society has accepted the fact that lower class citizens experience more health care problems, instead of us as a nation taking preventative action. We have chosen to react to health issues, thus creating the health care reform. President Barack Obama has addressed the nation with a plan to "provide more security and stability to those who have health insurance. It will provide insurance to those who don't. And it will lower the cost of health care for our families, our businesses, and our government." But how did our nation get in this trouble to begin with? Preventative measures must be taken in order to change the lifestyles of how lower social classes live, in return, decreasing health problems directly relating to the lack of exercise such as stroke, heart disease, diabetes, and hypertension. The relationships are not only of importance to epidemiologic research, but also to health promotion programs.

157
People Who Can Manage Stress Not Only Feel Healthier, They Are Healthier
Courtney Conyers • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Since the "fight or flight" response has been studied, it has been applied to an acute stress situation. Now that the population has numerous amounts of stressful situations in everyday life, the "fight or flight" response becomes prolonged, and it has adverse effects on overall health. The statistics that triggered this topic is the correlation between reported excellent health and the ability to manage stress. This paper will provide the rationality as to why people "feel" they are in excellent health when they can manage stress. Stress has been correlated with a variety of body systems, and the results of chronic stress can cause certain dysfunctions, which can contribute to increased healthcare needs. The previous statement is why stress can be considered a "social problem". There has been much research on the stress response among medical professionals, but this analysis will put the information into perspective and highlight the fact that stress is more than just a mental health issue.

158
Broadway Musicals in Jazz
Travis Knecht • MUS • Laurie Blunsom • CMU 214 • 9:30AM

There are many popular songs, which are widely recognized, that were originally written for Broadway musicals. Because of this popularity, jazz musicians have always been inclined to use songs from Broadway musicals in their repertoire. Many of these songs have become standards among all jazz musicians.

159
Examination of Modern Economic Society
Motoki Akagi • ECON • Tonya Hansen • LO 89 • 9:30AM

Modern economic societies, mainly characterized by specialization of labor, inconvertible currency, and productivity growth, facilitate efficient exchanges of goods and resources between two types of agents: (1) goods and service consumers who generate income as suppliers of resources and (2) goods and services producers who demand resources. Efficiency, logic, rationality, interdependency, multiplication, and uniformity are often displayed in visible actions of individuals within modern economic societies. In contrast, the influences of tradition and religion have declined due to their inefficiency, illogicality, and irrationality. This paper proposes a theoretical framework for evaluating the tradeoffs that impact individuals in modern economic societies.

160

King Lear: Inspiring More Sympathy than Macbeth
Allegra Reisinger • ENGL • Sandra Pearce • CMU 203 • 9:42AM

King Lear incites more sympathy in Shakespeare's readers as a tragic hero than Macbeth through three examples: the curve of character development, familial relationships, and final scenes. The audience is predisposed to dislike Lear because of his actions, but as the play progresses, the character undergoes changes for the positive rather than Macbeth, who is honorable in the beginning of the play but deteriorates as it continues. Two of Lear's daughters reject him despite his kindness towards them, but the third remains loyal even though he banished her from his kingdom. Macbeth's relationship with his wife crumbles as his hate grows, eliminating any compassion he might receive from her. During the closing scenes of King Lear, the title character admits his faults and tragically moves toward his death in peace, while in Macbeth's final scenes, the protagonist compares himself to the devil and any hope for redemption is coldly denied. After exploring these three examples, the reader can conclude that King Lear is more of a sympathetic character than Macbeth.

161

A Difference of Character: Contrasting Shakespeare's Disguised Leading Ladies of The Merchant of Venice and Twelfth Night
Elsie Peterson • ENGL • Sandra Pearce • CMU 203 • 9:54AM

This paper examines the text of two of William Shakespeare's comedies. The goal is to compare the leading females in Twelfth Night and The Merchant of Venice. This research draws upon mostly direct quotes from the texts with Philip C. Kolin and Russ McDonald as secondary sources. After identifying key character traits of each, it becomes clear that the two women differ greatly. This research shows how two women, seemingly alike in their responsibility for their own actions, can vary in their actions and concept of survival.

162

Mathematical Modeling of Evolution in Fruit Fly (*Drosophila melanogaster*) Populations

Morgan Elfelt, Brian Eyler, Diane Ware • MATH • Ellen Hill • CMU 227 • 3:10PM

For our group project we will be modeling the evolution of a fruit fly (*Drosophila melanogaster*) population. We will study hypothetical mutations in the population that may take place over the course of several filial generations. A beneficial mutation would be included in this population, and a frequency distribution of genotype proportions will be determined over time with differing environmental pressures.

163

A Model of Productivity Versus Number of Employees
Janelle Ross, Josiah Srock • MATH • Ellen Hill • CMU 227 • 1:00PM

Our topic is based on the starting of a new sunglasses company. We will be modeling productivity versus the number of employees. Factors will include number of machines available, efficiency rates of employees and machines, and downtime. As a start we will use different models of productivity. The next step will be to combine these models into a single model representing the optimum number of employees for the desired number of sunglasses produced.

164

DVT Protocol
Katie Pruitt • NURS • Donna Clark • CMU ML • 1:00PM

My presentation will provide evidence-based prophylactic measures against Deep Vein Thromboses (DVT) that are common in a medical-surgical unit of which include one or more of the following: physician ordered ambulation, lovenox injections, warfarin or heparin therapy, anti-embolism stockings, and sequential compression devices. This presentation will provide evidence-based conclusions of which measure is most preventable against DVT's through a discussion of the DVT protocol used by nurses in this setting to prevent this costly and fatal complication seen in approximately 2.5 million individuals in the United States alone each year (Ignatavicius, 2006). Deep Vein Thromboses are a common post-operative complication that is 100 percent preventable if accurate nursing assessment and care is provided (Lamon, 2008). Without prophylaxis, 40 to 60 percent of orthopedic surgeries will result in the development of a DVT (Ignatavicius, 2006). DVT's form from blood clots that remain in one location, typically in the lower extremities. In the post-operative population, DVT's result from immobility and decreased circulation of blood back to the heart. DVT's are a serious complication that can be fatal if left unrecognized and untreated (Collins, 2009). Three classic factors, known as Virchow's Triad, contribute to the development of a DVT including: hypercoagulability of the blood, stasis of blood in blood vessels, and an abnormal blood surface (Lamont, 2008).

165

An assessment of suicide terror.
Darren Johnson • POL • Andrew Conteh • LO 101 • 9:30AM

What motivates a suicide terrorist?
This presentation will seek to assess the phenomenon of suicide terror by exploring the motivations and methods of the actors as well as the social factors that perpetuate and grant legitimacy to the act.

166

Seizures in Children
Allison Buckley • NURS • Barbara Matthees • CMU ML • 1:00PM

Seizures are the most common neurologic dysfunction among children and can occur with a variety of medical conditions involving the central nervous system. Seizures occur when numerous cells in the brain send out an electrical charge at the same time. This abnormal and immense amount of electricity overwhelms the brain, causing a seizure. In the United States, approximately 3 to 5 percent of all children will experience a seizure (Children's Hospital Boston, 2010). Epilepsy develops in 45,000 children under the age of 15 each year. It is estimated that by the age of 20, one percent of the population can expect to have developed epilepsy (Epilepsy Foundation, n.d.). There are many different types of seizures, all of which have different and unique characteristics. When caring for children with seizures, nurses play a critical role in providing care and education. The nurse is responsible for the immediate care of the child's condition while hospitalized, protecting the child from injury, administration of medications and other treatments, educating others about caring for a child with a seizure disorder, and providing emotional support to the patient and family. This poster will discuss the epidemiology, treatment, and nursing care of children who experience febrile, absence, and tonic-clonic seizures.

167

Benefits of Breastfeeding
Alecia Fortmann • NURS • Mary Roussiang • CMU ML • 1:00PM

Breastfeeding has been proven to have a number of health benefits such as improved nutrition, developmental, immunological, and social outcomes. The World Health Organization and the American Academy of Pediatrics recommends mothers breastfeed for the first 6 months, preferably one year, and continue for up to two years. According to Persad and Mensinger (2008), only 54% of women breastfeed in the early postpartum period and rates can be as low as 16% among minority, low-income, and urban women. There are many factors that affect women's decisions to breastfeed. Education is an important part of helping women make a decision to breastfeed. Professionals need to help mothers initiate and maintain milk supply and overcome breastfeeding problems and lack of confidence after infant discharge. Mothers need adequate information given to them during the initial process of breastfeeding and even after discharge.

168

Does Premarital Sex Affect Your Health?
Rebecca Scott • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Past generations, have viewed premarital sex as immoral. However, is there more to it then just religion? Before I started my research on how premarital sex affects health. I hypothesized that, as age increases so does the opposition towards premarital sex. Younger generations don't view premarital sex as a bad or immoral thing, where as older people do. I also hypothesized that men are more accepting in premarital sex then females. I begun my research looking at statistics from the General Social Survey out of Chicago, to see if different variables like age and gender come in to affect the acceptance of premarital sex. My findings not only supported my hypothesis, it also showed me the other negative health affects on engaging in premarital sex. These negative affects range anywhere from unwanted pregnancies to STD's and regret. Almost half of people from Kinsey Institute that participated in a survey, said they regretted engaging in premarital activities. Premarital sex also affects people physically, 50% of the people that are HIV positive are between the ages of 18-24. Lastly, unwanted pregnancies are more frequent in adolescences. These previously listed statements among others listed within my paper, show that premarital sex has health components.

169

The meteoric rise of the motorcycle industry in Chongqing China
Isaac Thomas • ECON • Tonya Hansen • LO 89 • 1:20PM

In general, the coastal region of China has left the inland region behind in economic development. By exceeding China's average rate of growth, Chongqing has been an exception to this generalization. Chongqing has become China's largest motorcycle producer by following several

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development models, including both the Susan model and the Wenzhou model. These models have accelerated the rise of private enterprises due to increased efficiencies through specialization of labor, industrial clusters and agglomeration effects. With the completion of the Three-Gorge Dam project, Chongqing is a prominent port city and now known as "The Gateway to the West." This paper uses a historical method to explore Chinese policy changes and the technological advances, from the Chinese Cultural Revolution to the modern day, that have allowed Chongqing to become China's leader in motorcycle production.

170

The Eeriness of Eye Size in Consumer Robots Varying in Humanness of Appearance

Casey Lloyd • PSY • Rochelle Bergstrom • CMU ML • 1:00PM

Previous studies have found that an uncanny valley effect exists for consumer robots. It has also been found that increasing eye size in computer generated faces increases the uncanny valley effect. This study will seek to generalize the eye size findings to consumer robots. It is expected that uncanny valley effects, measured by eeriness, of robots varying in humanness of appearance will be increased by increasing eye size 50 percent. Participants will view images of robots then complete eeriness questionnaires. There will be a normal size eye group and an enlarged size eye group. If the hypothesis is supported, this will identify eye size as a significant variable in the eerie appearance of robots.

171

Increased Gun Control Needed as Result of Increasing Gun Violence in the United States

Matthew Olson • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Increased Gun Control Needed as Result of Increasing Gun Violence in the United States In every major United States city, legally and illegally, guns are for sale. The reasons vary on why a person purchases a gun, but the reasons why the gun was built for purchase never does....guns are manufactured and distributed to wound and/or kill. Over the last decade there have been school shootings at Virginia Tech (Virginia Polytechnic Institute and State University), Columbine High School, and nearly yesterday Deer Creek Middle School. Virginia Tech and Columbine have been labeled as sadistic massacres. The daily pain inflicted by guns on American families is as indescribable as it is inhuman, yet the gun business has never been more successful. What is disturbing is that one of the main reasons guns are bought are for protection from others who bought guns. A law which would require a person to obtain a police permit before he or she could buy a gun would help cut down the purchasing of guns by citizens in the fear of getting shot and killed by a gun, stop massacres like Columbine from ever happening, and most importantly stop criminals and mentally unstable kids from having a chance to get their hands on a gun period. Crime itself seems to shift to regions which are most impoverished, "Detroit has trouble showing improvement in its crime rate because dedicated, desperately needed and appropriate resources are not invested in public safety. Painfully, it is not a priority," says Wayne County Prosecuting Attorney Kym L. Worthy. With a lack of investment in public safety and a rise in the crime rate it's only logical citizens in Detroit and regions around the US with rising crime rates are frightened and in their desperation feel they need to protect themselves and buy guns. With the new law implemented however gun ownership would decline across the board creating less gunfire in urban US neighborhoods. This sparks the question if gun control is related to viewpoints of different regions, will regions with higher crime rates be in favor of stricter gun control?

172

Sex Trafficking of Women in Europe

Rose Lodu • INTL • Andrew Conteh • CMU 200D • 2:30PM

Sex trafficking is one of the most dubious forms of migration. It is nothing new but it has exploded into a \$30+ billion international business. In Europe, the collapse of the USSR and enlargement of the EU escalated the problem. Chiefly because many of the Eastern source countries now enjoy certain rights as members of the EU, one of which is free movement reflected in the 1985 Schengen Agreement. The elimination of those internal borders further exacerbated the situation. Likewise, individuals in neighboring countries strive to enter into an EU country because once in, one is able to move freely within the EU. However, EU and non-EU laws in regards to sex workers are not uniform. The European Police Office and other articles provided ample sources on the matter, stating that EU and non-EU countries lack cooperation in order to deal with this problem. The Palermo Protocol of 2000 and the Council of Europe Convention on Action against Trafficking in Human Beings which entered into force in 2008, has only 21 signatories and only 17 countries have ratified it out of 47 European states. Laws exist but without

adequate implementation it is practically worthless. As a result of the slow implementation, trafficking continues to grow and so does the further criminalization of trafficked sex workers instead of the perpetrators. The geography of trafficking is that women and girls are trafficked from all parts of the world via several routes by air, land and sea. The trafficked individuals are transported to Western Europe via the Balkans and former Eastern bloc countries. The commoditization of human beings for sex exists because there is a high demand for it, going after the Johns will help decrease supply and optimistically lessen sex trafficking. On the whole, EU and non-EU laws must be made more inform through cooperation and implementation in order to counter sex trafficking and the criminalization of trafficked sex workers.

173

Japanese Caring for Elderly

Paige Hofte • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

As the aging population is rapidly increasing there has been growing concern as to who will care for the elderly. There are options of in home care, retirement communities, and children caring for their aged parents or a few other options. The problem that will be looked at is children caring for their aged parents. Research will be done to compare cultural importance of filial piety between Japanese and American families. The research will confirm that Japanese culture supports filial piety more so than American culture. By looking at different research or studies the results will help to support each other's findings and support the given hypothesis. The results from these findings will show the importance of children caring for their aged parents.

174

Rhetorical Critique of Franklin Delano Roosevelt's Pearl Harbor Address to the Nation

Jennifer Austing • CMST • Denise Gorsline • CMU 205 • 1:40PM

As part of the Rhetoric Theory and Criticism class, an assignment was given to write a rhetorical critique on a topic of interest, using the knowledge gained in class. For this particular assignment, I chose to critique Franklin Delano Roosevelt's Pearl Harbor Address to the Nation on December 8, 1941. The analysis used to critique this speech was Aristotle's Neo-Aristotelian method. Specially, Aristotle's study of ethos (speaker's credibility), pathos (emotional appeal), and logos (logic behind the information presented) we used to analyze this speech. Examples of ethos, pathos, and logos were supported directly by FDR's words. I chose to analyze Franklin Delano Roosevelt's speech because Pearl Harbor has been a continuous topic of conversation within my family. My grandfather always talked about it when I was growing up and so it sparked my interest very early in life. It also is ranked the number four speech out of one hundred on American Rhetoric: Top 100 Speeches.

175

Discrimination of parental chemical cues by larval convict cichlids

Michelle Killebrew, Taehyun Kim • BIOL • Brian Wisenden • CMU ML • 1:00PM

Convict cichlids are small fresh water fish native to Central American lakes and streams. The unique thing about cichlids is that they form monogamous pair bonds and jointly defend their nest. When the eggs hatch, both female and male protect their young for up to 6 weeks, and until the young are able to live independently. The survival of the young depends upon their staying with their parents for protection. Previous work showed that baby cichlids are attracted to the chemical cues from their parents. Typically, males protect the surrounding area, and females protect the immediate vicinity of their babies. In our experiment, we will test if the babies are more attracted to the smell of their father or the smell of their mother.

176

Incarceration and the American Prison System

Ryan Backer • SOC • Deborah White • LO 90 • 3:10PM

The American prison system is currently overwhelmed with inmates. Many of these individuals find themselves being labeled as criminals, even though they are simply addicted drug users. Inmates who meet the criterion for drug offender are currently numbered at around 400,000 in the system. This number is roughly one-fourth of the current corrections system. The costs of such imprisonment are widespread, affecting both the incarcerated and the general public. The criminalized drug offender will see himself plucked from society and will likely lose his or her employment and important ties to society. This is important in relation to recidivism rates for this select group because upon release, the individual may be unable to find employment and may be forced back into a life of drugs and crime which will eventually land them back in the corrections system. The cost to the general public is great. They must

foot the bill that is required to house, feed, and clothe the prison population. Essentially a percentage of their taxes go directly to the needs of 400,000 drug offenders who are being punished for their addiction to illicit drugs. It must be stressed that not all of these individuals are innocent of only being users, as some are indeed traffickers or large-scale dealers. This review examines the alternatives to imprisonment that have shown good indications of effectiveness. Recommendations for future policy include increased funding for mental health and drug treatment, educational programs, and effective primary prevention.

177

Penury and Health

Ebonee Ronningen • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Background Homelessness is defined as: lacking a fixed, regular, and adequate nighttime residence; and having a primary nighttime residence that is supervised by a publicly or privately operated shelter designed to provide temporary living accommodations, and transitional housing for the mentally ill; an institution that provides a temporary residence for individuals intended to be institutionalized; or a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings. Persons who become homeless may have preexisting health conditions that had contributed to their homeless condition (e.g., mental illness) but, health related conditions present themselves and are exasperated during the experience without permanent sustainable housing. Homeless individuals lack the resources needed to access medical interventions and/or preventative care (e.g., financial, transportation, and knowledge about where to access care). Results The research suggests that homelessness is a dynamic social problem affecting a large number of marginalized groups (e.g., African Americans, women, non-Whites, and the mentally ill). Individuals and families experience homelessness in varying durations depending on their resiliency and levels of motivation. Homeless people experience higher levels of physiological and psychological stress which brings on or exacerbates illness and substance use/abuse which subsequently makes it more difficult to overcome homelessness. Conclusions Therefore, if income is related to condition of health, then homeless persons, who are the poorest of the poor, will experience a higher incidence of health related problems. Homelessness induces physical and psychological stress which in turn renders the homeless population vulnerable to health conditions (physical and psychological). Homeless persons may avoid medical professionals and support staff due to historically negative experiences in which they have felt devalued and dehumanized in response to stereotyping, prejudice, and discrimination. Feeling unwelcomed further detours the homeless population from using medical establishments when they are needed. Therefore, they may be less likely to seek medical care which consequently may worsen or contribute to the incidence illness among the homeless population. Homeless persons lack the resources needed to allow for the adequate use of medical facilities and professionals.

179

Movie Industry Analysis

Allison Bauers, Ross Miller • MKTG • Ruth Lumb • CMU 203 • 3:05PM

Our project will analyze and critique the movie industry and bring to light many factors that have led to the record breaking success the industry has had, particularly in the past year. The history, number of people employed, and in-depth analysis through interviewing industry managers sheds light on this diverse and ever-evolving industry.

180

Apartheid Africa: The Rise and Fall of Racial Segregation in South Africa

Andrew Boman • HIST • Nathan Clarke • CMU 204 • 2:30PM

Racial Segregation is an issue many are aware of, but few like to discuss. Whether it is something we wish to discuss or simply try to avoid, it has influenced the world greatly. Many may not be aware how its influence in South Africa helped develop the region and the country into what is it today. This time of racial segregation in South Africa is known as the Apartheid. The Apartheid in Africa greatly influenced the region, holding its racial grip for over fifty years of South Africa's history. This presentation will discuss the Apartheid's rise and fall, following the history of South Africa and this issue from 1948 into the 1990's. The events and relevant background leading up to this development will be discussed. The rise of the apartheid regime and their institution of racial policies through the rise of the opposition in the 1970's and 1980's and the influence of Nelson Mandela on the dismantling of the Apartheid are all important events in this tragic part of African History. The Apartheid in

Africa contributed to the disassembling of racial segregation and Africa's role in the global market.

181

The Process of Research in Evidence-Based Nursing Practice

Pamela Clemens • NURS • Barbara Matthees • CMU ML • 1:00PM

Purpose: This poster will portray the research steps required in achieving evidence-based clinical and nursing practice. Background: Improving health and nursing care in this time of rapid growth of information and knowledge requires practitioners to have access to current information quickly in order to integrate this into clinical practice. The public, also, expects health care and nursing care to be directed by research and evidence rather than tradition. In this new healthcare environment the provision of nursing care requires a foundation based on research and evidence. Knowledge that is gained from nursing research assists nurses explain what, why, and how nursing actions benefit the health and outcomes of their patients. Research provides the basis and guide for decisions made in clinical nursing practice. Details: The interaction of evidence-based practice with the research process steps and the nursing process will be highlighted by the poster. Assessment from the nursing process will involve developing a research problem/question/PICO, review of literature, and distinguishing variables from the research process. Planning from the nursing process will include developing a hypothesis, determining a research design, affecting the variables, and choosing a sampling from the research process. Lastly, intervention from the nursing process will comprise the collection of data, analysis of data, explanation of the data, and the communicating results from the research process. Examples of the levels of research leading to evidence-based practice will be provided. Conclusion: Evidence-based practices require and involve a thorough step by step research process before acceptance into general practice.

182

The use of the recorder during the baroque period in England

Christopher Tollefson • MUS • Laurie Blunsom • CMU 214 • 9:50AM

The use of the recorder in England during the baroque period was broad in both setting and style. My research explores the use of the recorder in England from 1600 to 1750 and its eventual decline due to the introduction of the transverse flute. I will investigate both composers and performers of recorder music to show how both the music and the manner in which it was played evolved during this time.

183

Pulse Jet Harmonics

Robin Smith • PHYS • Matthew Craig • CMU 218 • 2:50PM

A pulse jet is the most basic design of rocket motors and most do not contain any moving parts. This class of motor runs a cycle with a frequency dependant on the geometry of the combustion chamber. The initial explosion creates a vacuum inside the chamber then fresh air rushes in mixes with more fuel and that cycle repeats. This experiment is designed to measure the characteristic frequency of the jet as a function of the exhaust pipe length. The frequency data is modeled by a function and compared to a theoretical model for sound waves inside a pipe.

184

Eye Tracking: Cutting-edge research and its application at MSUM

Carlie Brekke, Jennifer Livingood, Rhonda Shinnaberry, Rebecca Stine • PSY • Elizabeth Nawrot • CMU ML • 1:00PM

How well does an infant see? Can computers be designed to aid communication in people with disabilities? What is the most effective way to design an advertisement? Questions like these are being answered using the latest technology in infrared eye tracking. Eye tracking uses infrared light reflected from the eye to determine precisely where an individual is looking. Moreover, in some cases the eyes can be used to control machines or computers. Eye tracking techniques are used in a wide variety of fields, from psychological and medical research to market research and advertising, computer interfacing, automotive safety, and law enforcement to name a few.

For example, in advertising, recall of brand name information is more sensitive to placement than the speed of a commercial (Brasel & Gips, 2008). In clinical psychology, eye avoidance is characteristic of social phobia (Moukheiber et al. 2009) and focus on negative images is characteristic of depression (Kellough, Beavers, Ellis, & Wells, 2008). In education, eye tracking has been used to develop textbook design (Salmron et al. 2009) and understand reading strategy (Duggan, & Payne, 2009). Eye tracking is a particularly effective method for studying infants and children. Different patterns of eye tracking and attention have been found in children with autism as well as infants with Fetal Alcohol Spectrum Disorders (Green et al. 2009).

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Copper Electro Position

Michelle 1:00PM

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At the MSUM Child Development Lab, we are currently using eye tracking to study how infants perceive motion and depth. We present two- to five-month-old infants with two tasks: a two-dimensional stimulus to elicit smooth pursuit eye tracking; and a random dot pattern designed to appear three-dimensional to test their depth perception. Eye tracking makes it possible for us to measure infants' eye movements and attention to these stimuli. Understanding the normal course of development of these processes may allow us to detect vision problems early in life.

185
Copper(II) Complexes of Pyridine-2,6-bisamide Ligands: The Electronic and Structural Effects of Methyl Groups at Various Positions

Michelle Branch, Kaitlyn Funk • CHEM • Jeffrey Bodwin • CMU ML • 1:00PM

The various physical properties of copper(II) complexes are dependent upon their electronic and structural features. This research involves creating six different ligand formations that will each have their own effect on the electronic and structural features of the copper(II) complexes. The six different ligands being used consist of three mono-methyl derivatives and 2,4-, 2,6-, 3,5-di-methyl derivatives. Previous studies have found that the copper(II) complexes have drastically different physical properties at different pH levels. To better understand these physical differences in the copper(II) complexes, the ligand complexes are being tested before being bound to the metal for similar physical changes at different pH levels. These differences can be seen through color changes of the solution containing the ligand complexes.

187
Studying digene trematode life cycles in the lab

Sara Aleem, Kristina Anderson, Matthew Cole, Jacob Vossler • BIOL • Brian Wisenden • CMU ML • 1:00PM

Ornithodiplostomum ptychocheilus (OP) is a trematode parasitic flatworm that requires three hosts to complete its life cycle. The adult worm lives in the intestine of a fish-eating bird such as a heron. Eggs leave the heron in the bird's feces and land in the water. There, the eggs hatch into ciliated miracidia that seek out and penetrate the flesh of a snail. Within the body of the snail the parasite multiplies asexually and emerges as cercariae that are released by the thousands every. Cercariae float in the water and wait to be contacted by a swimming minnow. Upon contact, the cercaria penetrates the skin of the minnow and travels along peripheral and central nerves until reaching the minnow brain. There, the cercariae metamorphose in metacercariae where they remain dormant awaiting ingestion by a heron. Minnows typically carry 170 worms per fish. To study how this parasite affects fish behavior we set out to recreate the parasite life cycle in the lab. Several minnows carrying the worm were dissected and their brains were removed. Several brains were then fed to chicks to stimulate hatching and development into adulthood. The chick's fecal deposits were then collected, filtered and examined for the presence of parasite eggs of the parasite, which in turn will be used to infect lab-reared snails. The objective of this study is to understand and replicate the complex life cycle of OP. The methodology will be repeated for another trematode parasite of interest, black spot disease.

188
Forgotten Slaves: Child Labors around the World.

Sunil Paudel • INTL • Andrew Conteh • CMU ML • 1:00PM

Even after 84 years, when the first slavery convention was signed at Geneva in 1926, the world is indifferent about the eradication of different forms of slavery from the face of the earth. With the economic growth and globalization around the world, the number of slaves, also called forced laborers, has increased more than ever in recent years. According to the International Labor Organization (ILO), there could be at least 12.3 million forced laborers around the world. This data contradicts with other research, which shows the number close to 27 million. The situation looks even grimmer looking at the child laborers around the globe. As stated by the United Nations Children's Fund (UNICEF), in 2004 there were 218 million children aged 5 to 17 engaged in child labor, excluding domestic child laborers. Out of this number, around 126 million children are engaged in hazardous work. About 5.7 million of them are forced and bonded laborers (40-50 percent of the total forced laborers). This poster presentation at the Student Academic Conference will examine different forms of child labor around the world. It will particularly focus on the topic Prohibition and Immediate Action for the Elimination of Child Labor mentioned in 1999 ILO convention (No. 182), for the definition. The poster presentation will discuss the causes and effects of child labor in the life of children and in society as a whole. Reliable data from the organizations such as UNICEF and ILO is imperative to elaborate the

topic of my presentation more clearly. The visual part of the presentation will mainly include pictures, diagrams and graphs from online journal sources. This poster presentation, I hope, will help to clarify the crucial nature of child labor around the world to the visitors of the conference.

189
Consistency of Shy-Bold Personality Continuum in Zebrafish
Sonny Radenic, Cory Sailer • BIOL • Brian Wisenden • CMU ML • 1:00PM

Personality is a term that describes individual differences among individuals. One perceived personality trait in humans and a range of animals is the shy-bold continuum. The purpose of this experiment was to refine previously developed methods to determine shyness and boldness traits of zebrafish, *Danio rerio*, and then be able to use these methods for shy/bold inheritance in offspring. This was determined by correlating data from four experimental trials: exploring unknown territory by swimming through PVC piping, a comparison of pre- and post-predator insertion activity levels and relative location of the specimen to the predator. These experiments enable us to reliably differentiate between shy and bold zebrafish. The significance of this work is that we will then be able to study the effect of personality on response to indicators of risk, such as chemical alarm cues. Because zebrafish are easy to breed in the lab, we will then be able to further our investigation to explore if shyness/boldness is genetically transmitted from parents to offspring.

190
Development of genetic markers for the trematode parasite
Ornithodiplostomum ptychocheilus

Matthew Cole, Kathleen Germann • BIOL • Brian Wisenden • CMU ML • 1:00PM

Ornithodiplostomum ptychocheilus is a digene of the family Streididae. *O. ptychocheilus* has a complex life cycle in which it first clones itself in snails, leaves the snail and encysts in the optic motor region of the brain of minnows where it waits to be eaten by a bird (final host). The intestinal worm reproduces sexually in the bird's intestinal track and eggs are deposited in the water along with the bird's fecal matter, where they hatch and infect snails. In minnow its presence alters the morphology and behavior of the minnow increasing the risk of predation. This evolutionary arms race between host and parasite has begun to be studied, but no molecular techniques have been employed to explore the population dynamics of *O. ptychocheilus*. This study describes the development of molecular techniques that can be employed in this species. Five potential primers that may amplify microsatellite regions within the *O. ptychocheilus*'s genome are currently being screened. The primers are from the related human parasite, *Schistosoma mansoni*, of the family Schistosomatidae.

191
How Vital is Education and Income When Considering One's Health
Veronica Leaf • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Education and income play a crucial role in the health of the American family. Recent studies have shown that the less education a person has, the less healthy they are. These studies have also shown the more education a person has, the healthier they are. I will be using the variables income and education and the control variable health, to conduct my research for this project. More research needs to be done on how education and income play a role in our health so community health workers, medical workers and the government can focus their attention on the high needs areas of the United States.

192
Proteomic Profiling of Arsenic and Antimony Stress on *Sulfolobus solfataricus*

Danielle Rastedt • CHEM • Joseph Provost • CMU 218 • 9:30AM

Members of Archaea, the third domain of life, have adapted to some of the most severe environments known to support life. One in particular, *Sulfolobus solfataricus*, is thermoacidophilic, therefore, it can be found in extreme environments such as the hot springs in Yellowstone National Park. This archaeon can endure extreme temperatures, high acidity, and highly enriched metal environments. Understanding how these organisms survive and what particular mechanisms are used in these harsh environments have become of intrinsic interest. The aim of this study was to quantitatively define the regulation of proteins upon treatment with arsenic and antimony species in different time periods and concentrations. Proteomic analyses using two-dimensional differential gel electrophoresis (2D-DIGE) was used to determine proteins of interest after exposure to 50µM antimony. Furthermore, SDS-PAGE analysis was used to determine insoluble proteins after being stressed with 240µM and 1mM arsenic. Regulated proteins lists were

created, which can be further used to identify the mechanisms of proteomic response. Together these experiments begin to identify important proteins, which play a role in the environmental stresses of arsenic and antimony.

193

Simple BEAM Robotics

Murshid Saqlain, Wesley Teo, Nicholas Weir • PHYS • Stephen Lindaas • CMU ML • 1:00PM

Biology Electronics Aesthetics and Mechanics (BEAM) robotics is a type of robotics that is non-computerized. BEAM robots are cheap, reliable and can be built in a matter of days. Parts of BEAM robots can be salvaged from almost any broken electrical components like a CD player, microwave oven, or power supply. By using simple electrical components such as resistors, capacitors, transistors, motors and solar cells, we are making BEAM robots that will replicate insect behavior. Our aim is to make a photovore that will walk on four legs, detect the warmest source and move towards it, and turn around when it faces an obstacle by means of motion sensors.

194

Preterm Births in the United States

Brittany Frisco, Brittany Lothspeich, Kayla Vadnie • COMH • Gina Kelly • CMU ML • 1:00PM

Preterm birth is a problem that is increasing in the United States. If there isn't a solution for preterm birth the number of deaths among babies will continue to grow. Babies who are born preterm require longer hospital stays, more frequent visits and more possible health issues as they grow up. This is an epidemiological problem because one in eight babies born in the United States is born preterm (March of Dimes Foundation, 2009). If this issue isn't tackled, our children of the future could become less healthy and have more medical problems. The methods chosen to use to research valid information when looking at this study are mainly the credible internet sources and the area hospitals. Looking at the health problems and potential health risks of babies who are born to preterm compared to the babies who are born full term will have a big impact on the potential ways to prevent and educate women on what they can do to keep themselves and their babies healthy. This study will explain better ways for prenatal care to be delivered and ways to lower the death rates of babies. The main goal for this study is to find more productive ways to improve the health and well-being for women and children. Some of these preterm births can be prevented by good prenatal care and regular doctor visits. By lowering the numbers of preterm births this will also lower the cost of hospital bills for the family and save on expenses for the hospitals. By identifying who is the population most at risk and why their risks are so high could be a key factor in preventing preterm births. This study will aim research, educate, support and advocate for the issue of preterm births.

195

Design of an energy-efficient home from construction phase through livable stage

Shouvik Bhattacharya • PHYS • Linda Winkler • CMU ML • 1:00PM

It is a common myth to us that energy efficient houses are more expensive than ordinary houses. If we think deeply it will be clear to us that we're not making any deal by switching our home from an ordinary one to an energy efficient one, since it will be worth of living if and only if we be succeeded to make our environment livable. Choosing an energy efficient house is therefore not a smart choice anymore, and it will be the only option to sustain our life in our planet in near future. Fargo - Moorhead is in cool climate region. We also experience floods each spring. The Fargo-Moorhead valley was formed by a glacial lake. The clay is extremely weak for high rises. In this poster I will show a design of an energy-efficient house from construction phase through livable stage. It will be a 'Passive solar home', which will produce electricity in summer, and also will be hot enough to live in winter. When people will start to live in that house they will be using clean electricity. I strongly recommend them to buy their appliances which are all energy-star marked. I will suggest them to have an appointment with any representative of energy star to finish their energy audit. This will help residents to estimate how much energy they will be consuming during their stay. I also encourage them to use heater equipped with timers. I will also design the lighting set up on the basis of day light.

196

National Identity Crisis in the Third World, specifically in Nepal and how it's effects on National

Paruj Acharya • SOC • Deborah White • LO 90 • 9:30AM

Third world countries in general lack inclusive and representative governments. Usually having displaced an older establishment of

monarchy, colonialism or some other form of exploiting regime, these countries remain wary of governments that follow. Multi-party politics target and recruit from specific groups of an already divided population. This divide deepens as parties emphasize on only their own interests while neglecting National Interests. In the absence of a collective National identity, people seek their identities based on socio-economic class, ethnicity, demography, being the historical oppressor or the historically oppressed, etc. Democracy is fruitful only after certain criteria are met: A united population that has transcended petty differences, has acquired national identity specifying common interests and is properly represented in a government that is considered legitimate and reliable where people are willing to accept and implement policies once they are passed even if they disagree with its contents, for the sake of National Interests. These precursors prevent infestation of the political sphere by interest driven parties. Similarly, the danger of cyclical stalemates that could potentially emerge among rival parties is thwarted through legitimizing government decisions as final. Lastly, when people feel well represented by their governments, political participation separate from narrow party affiliations increases. In other words, the government can truly be "for the people, by the people", and not just status, power aspirations and certainly not inherited rights for those who hold on to the demented idea of entitlement because it runs in their blood. However, Democracy without intrinsic requirements that make it 'work' is just another word for Anarchy. It serves as a catalyst for reinforced division, which ultimately begets conflict, bloody conflict. Thus the need for political stability precedes democracy. The objective is not to devalue "democracy" but to discover conditions within which it flourishes. This will be a literature review on scholarly articles related to Urbanization, Political Bureaucracies, Conflict, the process of Democratization and the role of Political Parties. Each concept discussed will then be infused with factual information from Nepal, that pertains to the concept. This is a very important issue because even many years after democratization, many third world countries often find themselves in worse conditions than they started with.

197

South America United

Amanda Heller • SPAN • Benjamin Smith • CMU 200D • 3:10PM

Simón Bolívar had the dream of uniting all the free nations of South America under one central government. He died without ever having seen his dream realized but today there exist groups such as la Union de Naciones Suramericanas (UNASUR) working with Mercosur and la Comunidad Andina that are once again striving to unite South America politically, socially, culturally, financially and environmentally. This presentation will discuss the goals of these organizations and the obstacles they have come across in meeting their goals, as well as the benefits unification will have for the people of South America.

198

Music Recording Industry Change To Digital Music: Where The Tune Will Come From

David Geeslin • ECON • Tonya Hansen • LO 89 • 10:30AM

Industry markets have been going through drastic changes in the last decade. No industry is a better example of this, than the music recording industry. The switch from a hard goods industry, to a mainly digital goods industry, has dramatically changed the market structure. The success or failure of competitors in the market will be based on who can change their system to accompany this switch to digital goods. From different marketing techniques, to sales strategies, changes will need to be made, or you will be left behind. This shift will also allow new players to enter the market that normally didn't have a place to compete. Individual artists now have the opportunity to produce, market, and sell their own music, giving them independence from record labels. I will be using the presentation to study the new aspects of the music recording industry market. Mainly where profit will be coming from, and what changes record companies will have to go through to realize this profit.

199

El realismo mágico en La casa de los espíritus por Isabel Allende y La casa de sano placer por Alicia Yáñez Cossío

Samantha Daugherty, Jennifer Minion • SPAN • Cecilia Maffa-Bustamante • CMU 200E • 2:55PM

Español: El objetivo de nuestro trabajo es analizar el realismo mágico en La casa de los espíritus por Isabel Allende y La casa de sano placer por Alicia Yáñez Cossío. Hemos leído estos libros en la clase, Español 444 "Periods and Authors of Latin American Literature". Vamos a presentar resúmenes de las dos novelas, explicar qué es el realismo mágico y dar ejemplos de esto en las obras. English: The object of our presentation is to analyze magical realism in La casa de los espíritus (The House of Spirits) by Isabel Allende y La casa de sano placer (The House of

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althy Pleasure) by Alicia Yáñez Cossio. We have read these novels in class, Spanish 444 "Periods and Authors of Latin American literature". We are going to present summaries of the two novels, explain what magical realism is and give examples of this from the texts. *We will be presenting entirely in Spanish.

13 Study of the mass to charge ratio of an electron Justin Eberhardt, Josiah Srock • PHYS • Linda Winkler • CMU ML • 1:00PM

We propose of this experiment was to establish the ratio of mass to charge for an electron. This was calculated two different ways. The first experiment was done classically with a vacuum tube which resulted in a m/e ratio of 1.59×10^{11} with a standard deviation of $.105 \times 10^{11}$. The second experiment was done relativistically with a radioactive beta source resulting in a m/e $.82 \times 10^{11}$.

14 Study of the Kinematics of a spherical ball between two parallel surfaces. Nish Dhakal • PHYS • Matthew Craig • CMU 218 • 2:30PM

When a ball is thrown in between parallel surfaces it's usually not possible to get the ball back to hand. But if a super ball is thrown in between the parallel surfaces such as a table and a floor it is possible for the ball to bounce back in hand. The moment of inertia $I = m r^2$ makes the ball move up and down in between the surfaces with an oscillation frequency (f) which is periodic after number of collisions. This study analyzes the motion of super ball with a periodic oscillator. It also explores how the motion of the super ball depends on its properties like angular momentum, kinetic energy, velocity and positions.

2 Gravitational Lensing Nepsha Shrestha • PHYS • Matthew Craig • CMU 218 • 3:10PM

A bright object or QSO (Quasi Stellar Object) such as a galaxy or a star that is very far away from Earth, if there is nothing between it and then we see one image of the object. If a cluster of galaxies is blocking the direct view to the object then the light will be bent by the gravitational field around the galaxy. This is called gravitational lensing. Because the gravity of the galaxy between the QSO and us acts as a lens and bend the light rays and rather than creating a single image the gravitational lens creates multiple images of same distant object. If the lens is in perfectly straight line between earth and the distant object then the object is imaged as a ring, which is known as Einstein ring. If the gravitational lens is off-center with respect to the line between the source and the Earth then we would see the two images at different distances away from the actual object. Gravitational lensing is an important astrophysical tool because it directly explore mass distributions and because it brightens and enlarges the images of distant sources. With the help of software called gravlens we could easily find the lens equation for general mass distribution and the observational data like positions, redshifts and time delays of point like images as well as extended images. Gravlens includes a wide range of basic lensing calculations.

13 The Academic and Personal Rewards of Fundraising and Leadership Ashley Harrington, Mikayla Martens, Nicolette Pilon, Jonathan Wehl • CMST • Denise Gorsline • CMU 205 • 3:30PM

Our team partnered with the NothingbutNets organization to help buy and donate nets to prevent Malaria for people in Africa. This is the story of our journey into a rewarding experience both academically and personally helping others in their time of need. We gained experience through our use of networking, problem solving, organization and time management.

14 Mental Health and Socioeconomic Status: What's the Connection? Mel Kline • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

The prevalence of depression and other mental health disorders is increasing causing overwhelming distress to people. In the U.S., more than 15 million people suffer from depression alone. Often depression comes with other mental illnesses such as anxiety or panic disorders. Depression and other mental health disorders cause impairment of an individual's normal cognitive, emotional, or behavioral functioning, and is caused by social, psychological, biochemical, genetic, and other factors. Head trauma or other health issues. In research on General Social Survey (GSS), it was found that socioeconomic status has little effect on mental health. I will look further into the correlation between income and mental health. The purpose of this paper is to take away the stigma of mental disorders, especially depression.

205 Use Of Different Electrical Properties To Estimate Soil Chemistry, Water Content, And Engineering Qualities Thomas Berg • ANTH • Rinita Dalan • CMU ML • 1:00PM

Many different physical and chemical properties influence soils' behavior. Geophysical tools exist to measure these properties, but they are often extremely expensive and only measure one physical/chemical property at a time. This project, a continuation of a previous project focused on measuring electrical capacitance only, will measure many different electrical properties of a soil profile to obtain information about aspects of the soil, such as compaction and water content. The final products are also intended to be affordable alternatives to current technologies. Measuring many of these different soil properties all in one instrument should increase its use outside the intended field of archaeology, creating uses in agriculture, civil engineering, and possibly pollution studies.

206 Colorectal Cancer: Prevention and Incidence Rates Alayna Briard, Katherine Howland, Hayley Wenzel • COMH • Gina Kelly • CMU 214 • 2:50PM

The following study investigates the ways in which Colorectal Cancer is affecting males and females throughout Minnesota and the United States. Through focusing on the age range of Colorectal Cancer incidence rates and by using comparative tactics, the data will be broken down to find the group to be most heavily encouraged to begin screening. In addition, the preventative measures for Colorectal Cancer will be scrutinized for effectiveness. In alliance with insurance companies, this new information will demonstrate a more appropriate screening age and will stress the importance of having Colorectal screenings be covered in their insurance policies.

207 Tea Masters to Salt Shakers: A Historical look at Ceramic Art in Life Claudia Chenard • ART • Kelli Sinner • CMU ML • 1:00PM

Ceramics holds a historical partnership with people of all cultures in everyday life. In experiencing this poster presentation, the viewer will be opened up to a world explaining what main cultures would use ceramic art in association with their everyday life. From the past to the present and into the future the presentation explains how ceramics helped mankind survive as well as pass on oral and visual traditions that are still appreciated today. There will be ceramic sculptures and pottery to display local modern ceramic artists. I would like the audience to walk away with a better understanding of ceramic arts and the essential role this medium has played in the stability of mankind since modern materials, plastic for example, have taken over the present need for more natural alternatives like ceramic and glass.

208 Updated Survey of Wild Turkey (*Meleagris gallopavo*) distribution in Cass (ND) and Clay (MN) Counties (2003-2009) Tara Eichhorn, Morgan Elfelt, Kiaja Undersander • BIOL • Donna Stockrahm • CMU ML • 1:00PM

This study has been conducted since 2003 with the objective of using mail surveys to estimate the minimum wild turkey (*Meleagris gallopavo*) population in the Red River Valley (RRV) in the Fargo, North Dakota/Moorhead, Minnesota, area. The RRV offers suitable turkey habitat in a relatively narrow corridor surrounded by a dense human population. In 2004, urban human-turkey interactions were monitored as well, adding in 2005, a survey to assess public opinion on wild turkey management options in the event abatement measures were necessary due to problematic urban turkeys. Turkey observations reported from 2003 through 2009 show a strong population thriving in the RRV, fluctuating, with a steady increase in numbers and sightings. In 2004, 12.5% of survey respondents (respondents = 40, out of 150 mailed surveys) reported negative human-turkey interactions. In 2005, negative reports rose to 24% (respondents = 75, out of 500 mailed surveys). In 2006, negative human-turkey interactions dropped to 7% (respondents = 190, out of 537 mailed surveys). In 2007, negative human-turkey interactions increased to 10% (respondents = 115, out of 220 mailed surveys). In 2008, negative interactions again decreased to 7% (respondents = 123, out of 244 mailed surveys). In 2009, 3% of survey respondents (respondents = 104, out of 207) reported a negative human-turkey interactions showing a decrease from past years. Negative interactions included such things as turkeys blocking traffic routes, entering yards, eating from bird feeders/gardens, and aggressive behaviors. The 2009 public opinion survey also showed that 60% of respondents that reported sightings believed that they were witnessing the same group of turkeys over a period of time. Also, 26% of respondents reported wild turkeys becoming more tame, and only 7% reported turkeys becoming more wild.

209

Building a colling unit for a NMR spectrometer

Nicholas Weir • PHYS • Ananda Shastri • CMU ML • 1:00PM

Hydrogen fuel cells, once developed, will be far more practical and efficient than fossil fuels. Fuel cells combine hydrogen and oxygen to produce electricity. In order to do that they require a proton conducting material, which allows protons to move through it. Analyzing the proton diffusion is very important. To do this we need to use nuclear magnetic resonance (NMR) spectroscopy which is a very useful tool for investigating matter. It does this by aligning the nuclei in an intense magnetic field. After they are aligned, they are disturbed by a pulse of radio waves which make the nuclei rotate away from the field. The time it takes the nuclear magnets to realign with the magnetic field is called the nuclear relaxation time T1. This quantity is sensitive to diffusion. To study diffusion, T1 must be measured over a range of temperatures. In this project, a cooling unit was constructed. The construction of the unit will be described, the performance evaluated, and results from a typical NMR experiment presented.

210

The Himalayas in Nepal

Ayush Khadka, Binamra Khadka • ENGL • Hazel Retzlaff • CMU 207 • 2:30PM

Nestled in one of the smallest country in the world (Nepal) lays majestic mountain ranges called the Himalayas. The Himalayas is not only subjected to Nepal but India, Tibet and Bhutan too. However more significance goes to Nepal because in its boundaries lies 8 of the highest 14 mountains of the world. All of these 8 mountains range above the 8 thousand meter mark. Nepal has all together 41 mountain ranges that falls under the Himalayas. These enormous mountains lie together in a length of no more than 1200 kms. The highest of these mountains: the great Mt. Everest is 8848mt. Eight of these highest mountains in Nepal are Mt. Everest, Mt. kanchegjunga, Mt. Lhoste, Mt. Makalu, Mt. Cho Oyo, Mt. Dhaulagiri, Mt. Manaslu and Mt. Annapurna. The Himalayas plays a huge factor in attracting thousands of tourists each year in Nepal. Because of its beauty and enormous size, people from all over the world come to Nepal and spend a lot of money to get a glimpse of these mountains. The beauty of the mountains isn't limited to itself. There are huge varieties of flora and fauna living in the mountainous area of Nepal. Beside these factors hundreds of Himalaya's community has sprung adding unique tradition and custom following the path of the Himalayas. This research topic will be elaborating about most of the Himalayas of Nepal and its living diversity that attracts a huge tourist population to Nepal.

211

Servicescape of the Chiropractic Industry

Thomas George, Austin Maddock, Todd Saylor • MKTG • Ruth Lumb • CMU ML • 1:00PM

This will be an examination of the servicescape of a chiropractic facility and how it influences customer perceptions of the service it provides. The servicescape is the environment or landscape where the service is produced and where the service provider and consumer interact, which includes the tools used to perform the service and communicate about it.

There will also be an examination of the challenges this industry has for marketing its services to consumers and some potential strategies for overcoming them. These challenges and solutions will also be compared to what is observed in the chiropractic facility featured in the servicescape.

212

Smoking and its advere effects on Health

Aarati Niraula, Muna Shrestha • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

Health is a state of well being of three aspects -Social, Mental and Physical in human life. One is said to be healthy if he/she is free of disease and in harmony of all the aspects. WHO (World Health Organization) defines health as "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" People are always very aware of their health status. They are concerned about maintaining healthy life, and spend a tremendous amount of money on health care every year. But still health is being depleted one or the other by some social deviance act such as smoking. Smoking is one of the major problems or the cause for several health issues. Smoking is the number one cause of lung cancer around the world. Every year, hundreds of thousands of people die from diseases caused by smoking. One in two life-time smokers die from their habit, half of which are the middle-aged population.

The several social surveys will guide us in looking at smoking patterns among several age groups with gender differences. Our results will be

focused mainly on several health issues caused by smoking including age and gender. As this study is broken down to examine various age groups and gender differences, we can be more specific and suggest better treatment with public awareness.

213

The Importance of Bridging the Gap Between Abstinence Only and Preventative Sex Education.

Heather Sorensen, Sara Thanel • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

The majority of states in the U.S. do not require sex education to be taught in schools even though we continue to have one of the highest rates of teen pregnancies in the developed world. More research needs to be conducted on sex education programs to eliminate abstinence only education and gear more towards preventative sex education. Researchers will analyze data from the General Social Survey in order to examine relationships between sex education and teen pregnancy by region. In order to further such research and enhance programs, both adult and adolescent focus groups should be used in order to understand how to bridge the gap between abstinence only and preventative sex education. The information gathered will allow program directors and community members to better understand and implement safe and effective preventative sex education programs in our schools.

214

The Hangover: How alcohol abuse today affects you tomorrow.

Michael Herbst • SOC • Susan Humphers-Ginther • CMU ML • 1:00PM

It is no secret that many Americans drink alcohol. In fact, according to the U.S. Center for Disease Control (CDC) in a 2008 survey, 50% of all citizens over the age of 18 are considered current regular drinkers. The goal of this project is not to judge individuals who partake in alcohol consumption, but rather to educate people about what is happening within their bodies when they use alcohol to the point of abuse, resulting in what is commonly referred to as "The Hangover". This project emphasizes topics such as how alcohol use affects an individual's perceived overall health status, health concerns associated with chronic alcohol abuse, and the physiological factors causing a hangover. If an individual is going to binge drink, it is important for them to understand how those abusive behaviors are affecting their bodies.

215

Is adding a Technical Communications Minor or Emphasis to Minnesota State University Moorhead's English Major Feasible?

Amber Olds • ENGL • Hazel Retzlaff • CMU ML • 1:00PM

Technical communications skills are important for anyone to learn, but especially for students who are not going to on to graduate school or pursuing a career in academia. In Tebeaux's article, she found students without technical communications skills had a hard time getting a job with their B.A. English degrees. MSUM English students have not been introduced to a lot of technical/business writing in their English education. Thus, they may think they are prepared in technical/business writing, but they don't really know what they need.

216

Testing the Claims of the Power Balance holographic wristband.

Taylor Knight, Cory Weidman • PHYS • Stephen Lindaas • CMU ML • 1:00PM

The Power Balance band is the newest rage amongst athletes looking for natural performance enhancers. Power Balance is performance technology that uses holograms embedded with frequencies that react positively with your body's natural energy field to improve balance, strength, and flexibility. To test the claims of Power Balance we will conduct experiments on human subjects in the areas of balance strength and flexibility. Our hypothesis is the Power Balance band will improve our subjects overall performance.

217

Phenological responses of butterflies and native flowering plants to regional climate shifts

Bodini Herath • BIOL • Linda Fuselier • CMU 204 • 9:50AM

Phenology is the study of recurring plant and animal life-cycle events, such as leafing and flowering of plants, maturation of agricultural crops, emergence of insects, and migration of birds. Climate change over the past hundred years is associated with phenological shifts in an increasing number of plant and animal taxa including butterflies. Because native flowering plants are the primary food source of butterflies on Minnesota prairies, changes in plant flowering phenology are likely to induce shifts in butterfly phenology. We studied the relationships between butterfly diversity, flowering phenology, and seasonal climate.

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This study was conducted in MSUM Regional Science Center where study plots were sampled for butterflies and native plant flowering. The arrival of butterflies, butterfly abundance and diversity throughout the summer were correlated with regional climate data and plant flowering phenology. These data were compared to a historical dataset (1910-1961) to examine changes in butterfly and native prairie plant flowering phenology.

218
Engineering and programming with the BOE-Bot: Balancing a reverse pendulum
Phillip Haugrud, Josiah Srock • PHYS • Stephen Lindaas • CMU ML • 1:00PM

The question that we are seeking to answer is how can a robot balance a reverse pendulum. While this question has been answered before, it provides useful practice in understanding computer programs, engineering, and troubleshooting. Reverse pendulums have been used for entertainment, e.g., children balancing an upended meter stick upon their palms, and more practical purposes such as the Segway. The specific methodology that we have used thus far is the PID controller, a control loop with terms for proportional, integral, and derivative values. A set point is programmed into the robot, and then it continually takes measurements of the incline of the reverse pendulum. The difference between the set point and the measured incline, the rate that the difference is changing, and the sum of all differences are used to tell the robot which direction to move and how fast.

219
Exploratory Screening of Capsaicin-based Compounds as Potential Therapeutic Targets for Human Non-small Cell Lung Cancer
Cory Weidman • CHEM • Joseph Provost • CMU 218 • 10:10AM

Lung cancer is the second most common cancer in both men and women. It accounts for approximately 15% of all new cancers. During 2009, there will be an estimated 219,440 new cases of lung cancer. There will be a projected 159,000 deaths from lung cancer in 2009, accounting for 29% of all cancer deaths. Lung cancer can be divided into two distinct types; small cell and non-small cell cancer. Non-small cell lung cancer (NSCLC) is a lung cancer in which the cells are large and look abnormal when viewed under a microscope. Non-small cell lung cancer accounts for approximately 85% of all lung cancers. The five year survival rate for the three main types of non-small cell lung cancer ranges from 11% to 17%. Capsaicin is the active component of chili peppers, plants belonging to the genus Capsaicinoids. It has been shown vanilloids, the family of molecules to which capsaicin belongs, bind to proteins in the cancer cells mitochondria to trigger apoptosis, or cell death, without harming surrounding healthy cells. Our goal was to determine which changes to the capsaicin molecule would do to its efficacy for causing apoptosis in NSCLC. We studied several capsaicin based compounds in three different NSCLC cell lines NCI-H460, NCI-H358, and NCI-H1299. We found that LB-24c12a caused a significant drop in proliferation in all three types of NSCLC cell lines, while SM-1 was found to cause a slight rise in proliferation. These results shed light on possible effects on NSCLC by variations of capsaicin molecule.

220
Characterization of chemical alarm cues in Minnows.
Sara Aleem, Susan Bury, Leah McIntire, Andrea Pitz • BIOL • Andrew Barry • CMU 216 • 2:50PM

The chemical alarm cue that we are interested in is related to the compounds released when a fish is attacked. Other fishes in the population use this information to avoid predation. The contemporary data and research exhibits various evidence that suggests, the alarm cue is either a protein or a nitro-phenolic compound. Our goal of the research is to test the chemical composition of the alarm cue. For this experiment we would be taking fish skin extracts and making the small-molecule-fragment and large-molecule-fragments. We would test the effects of these fragments on fish behavior separately. Our data would then be analyzed using the FTIR technique.

221
What Factors Affect the Prevalence of HIV in the United States?
Frank Darko, Brandon Mabb, Heather Sorensen, Lexi Wermager • COMH • Gina Kelly • CMU ML • 1:00PM

Human immunodeficiency virus (HIV) is most often a sexually transmitted virus. It is passed from one person to another during sexual contact that involves vaginal, oral, or anal sex. HIV can also be passed from one person to another through other means, such as through contact with blood or body fluids. This can occur through such processes as blood transfusions or sharing needles contaminated with HIV. The disease can also be passed from an infected mother to her baby during

pregnancy, childbirth or breastfeeding. Research will be done to analyze the factors that will contribute to the prevalence of HIV in the United States. By describing the social and psychological processes that contribute to the prevalence of HIV, this will offer suggestions for eradicating the disease through public policy and individual education there will be a greater basis of knowledge on HIV for future policies and programs.

222
Minnesota Indian Gaming Regulation
Sarah Butrum • POL • Barbara Headrick • LO 102 • 1:00PM

With the Minnesota state budget deficit, individuals are looking for new ways of generating money. Currently the Minnesota Indian Gaming Regulation allows recognized tribal governments to build and manage casinos. Minnesota legislators have introduced new bills that will allow the other forms of gambling for the state revenue. This has caused an uproar from Minnesota tribes and individuals opposed to gambling.

223
Project Shinryu
Christopher Swanson • CSIS • Andrew Chen • CMU 227 • 2:50PM
Project Shinryu is an experiment in the integration of spaced repetition technology and computer science related language acquisition methods. My belief is that we can greatly improve the speed at which one can learn computer science languages by employing methods I have used for learning languages. I have been developing software which makes use of this new learning model, and will be presenting all of the details in regards to the software, the learning model, and how I will launch this as an online platform.

224
Mercenary Malice: Dangerous Defense Contractors
Carson Starkey • POL • Barbara Headrick • LO 102 • 3:30PM
My presentation will address the long-term, systemic danger posed to the American Department of Defense by private war contractors. The American military occupations of Iraq and Afghanistan have highlighted profound dysfunction, inefficiency, fraud, and criminal behavior within the civilian contractor workforce of the Department of Defense. Companies like Dynacorp, KBR, and Blackwater have garnered obscene profits from no-bid contracts issued by the Department of Defense, despite the fact that those companies have failed to make logistical services for American troops more efficient, as well as failing to provide lower costs for American taxpayers. Widespread war profiteering by private defense contractors has embarrassed the American military and hampered the prosecution of the wars in Iraq and Afghanistan. The Department of Defense must minimize or eliminate the use of private contractors for the sake cost effectiveness and to regain credibility in the world military community.

225
The Effects of Sound on the Cinematic Viewer
Nathaniel Lundin • FILM • Kyja Kristjansson-Nelson • CMU 208 • 1:00PM

Diegetic and non-diegetic are the two main categories of sound in regards to the cinematic experience. The former refers to sound that the characters experience within the world that is created for them, sounds they interact with. The latter refers to sound that the characters cannot hear or interact with such as voice over narration, musical scoring, etc. The purpose of this presentation is to illustrate the effects both types of sound have on the cinematic viewer. Main topics will include: Musical scoring and sound effects as emotional cues, the viewers reaction to well-known sounds out of context, and the absence of sound in film and television.

226
Classical Vocal Technique
Angella Hadrath • MUS • Laurie Blunsom • CMU 208 • 10:25AM

Classical programming for a voice recital presents the singer with many technical challenges. Depending on style, historical period, genre and accompaniment, the singer must approach each song with a variety of technical considerations. Each individual song requires an examination of the technique required to successfully and artfully execute the music.

In my research, I am looking at the repertoire of my senior voice recital and examining the technical demands of the works included. For this presentation, I will first give a brief overview of the issues involved in vocal technique. Then, I will discuss two songs, one from the 20th century and one from the 18th century, and demonstrate the technical requirements of each song. This presentation will give the audience a better understanding of the demands of classical singing and an appreciation of the technical abilities of the classical singer.

227

Experimental methods used to Determine Rho associated kinase Rock phosphorylation on carboxyl terminus of NHE-1

Daniel Hammes • BIOL • Mark Wallert • CMU 216 • 1:20PM

The Rho associated kinase p160 ROCK (Rock) phosphorylates the Na⁺/H⁺ exchanger isoform 1 (NHE1) regulating ion transport, cell migration and ezrin, radixin, moesin (ERM) binding. NHE1 is an integral membrane protein which is involved in the regulation of intracellular pH, extracellular acidification, cellular migration, and cytoskeletal organization. Increases in NHE1 phosphorylation has been implicated in cancer metastasis. Phosphorylation of NHE1 induces an intracellular alkalinization which promotes cellular proliferation and coordinates cellular migration through ERM binding and the accompanying organization of actin filaments. The specific aim is to investigate the specific site(s) of Rock phosphorylation on the carboxy terminus of NHE1. This presentation will be a brief introduction to methods used in identification of the Rock phosphorylation site of NHE-1 through mass spectroscopy, site directed mutagenesis, protein expression, protein purification, and kinase assays.

228

Blood as a Symbol for Conscience in William Shakespeare's Macbeth

Kate Amundson • ENGL • Sandra Pearce • CMU 203 • 10:06AM

While many images within William Shakespeare's Macbeth stand as critical symbols, one of the most constant and vivid details involves blood. Through an in-depth analysis of the blood imagery throughout Macbeth, one may notice that the blood symbolizes a repressed conscience in the two main characters, Macbeth and Lady Macbeth. As the blood imagery increases with the action of the story, feelings of guilt bubble to the surface of the Macbeths until it culminates into a bitter end.

229

Hiroshima Peace Tour Documentary

Douglas Mattis • JAPN • Takanori Mita • CMU 200E • 2:30PM

This is a film of a biennial event where MSUM students travel over the Pacific to Hiroshima, Japan. Once there the students document their short stay in a new culture and as well as their new understanding of the devastating event that happened in August of 1945.

230

Mate attraction: How attractive are single parents?

Marsha Wichmann • PSY • Rochelle Bergstrom • CMU ML • 2:30PM

There are numerous previous studies on attraction and mating theories exploring what males and females look for when it comes to mate selection. However, there has been no research to date examining what prospective mates look for in a single parent. This research seeks to answer the question whether single parents are viewed as conceivable prospective mates. College aged students will be asked to rate an individual's attractiveness based on a brief description of the individual, varying for gender and parental status in the description. Based on contradictory previous research the results of this study are uncertain. The sexual strategies theory states that men look for women who show reproductive value which would make a single mother attractive, but the bird of a feather effect would imply that a single mother would be unattractive to a male without children. Similarly, evolutionary theories show that women look for men who have resources to spend on their potential offspring which would make a single father unattractive because he would have to use his resources on an existing child. But recent research shows that women are more interested in men who are considerate and dependable which could make a single father attractive. The first hypothesis is that single parents may be more or less attractive. The second hypothesis is that people will view single parents more or less suitable for a relationship. This research may be important to understand how theories of attraction effect the growing number of single parents in our society.

231

Differential temperature control of individual growth and mortality of midges

Jessica Rehder • BIOL • Daniel McEwen • CMU ML • 2:30PM

Midges (Family: Chironomidae) are a diverse and cosmopolitan group of insects that live the majority of their lives as larva in aquatic habitats. Adult stages are ephemeral: they emerge and do not feed and expire shortly after mating. Midge larva are the dominant invertebrates in terms of both abundance and biomass of both lake and river habitats. These organisms are important in the transfer of carbon bound in algae (i.e., autochthonous carbon) and carbon deposited into lakes and rivers through runoff events from the surrounding terrestrial habitat (i.e.,

allochthonous carbon) to higher trophic-level organisms (e.g., fish). The amount of energy in autochthonous and allochthonous sources combined converted to midge biomass is referred to as their secondary production. Secondary production is the product of rates of individual biomass growth and population growth; both rates are temperature dependent. Given evidence that the earth is currently undergoing an increase in average temperatures, understanding how such warming impacts energy production in aquatic ecosystems is important. We performed an experiment with locally-collected midges where we exposed them to artificial warming to see if impacts are the same for individual growth rates as they are for mortality. Our findings then allowed us to make predictions about how warming may impact secondary production. This project provided some important insights about how climate change may potentially impact aquatic ecosystems.

232

How does maize wake up? (ie...is dephosphorylation of the catalytic histidine residue non-enzymatic?)

Mitchell Lakner • BIOL • Chris Chastain • CMU ML • 2:30PM

C4 carbon fixation is a far more effective than C3 in terms of both energy production and biomass development. In recent decades, there has been a global shift towards increased food production and sustainable sources of biomass for alternative fuels. C4 species such as maize (*Zea mays*) and switchgrass (*Panicum virgatum*) offer energy effective solutions to both problems. Pyruvate orthophosphate dikinase (PPDK), a fundamental enzyme in C4 phosphorylation, catalyzes the conversion of pyruvate to phosphoenolpyruvate (PEP). Although this is a key step in C4 phosphorylation, the mechanism by which PPDK is reactivated in low light conditions is unknown. We have isolated and purified the PPDK protein and will use a lactate dehydrogenase (LDH) based assay to determine the stability of a phospho-histidine residue of the PPDK enzyme under physiologically plausible pH conditions.

233

Dueling Perspectives of Pornography

Chelsie Leuthardt • SOC • Deborah White • LO 91 • 9:30AM

This paper is based around the feminist views of pornography and the relationship that either agency or structure plays when women choose to either embrace pornography as an enlightening and useful tool for women or choose to look at pornography as inherently harmful and problematic toward the plight of women. Pornography has been debated by many scholars who argue that pornography can either serve a purpose for women or it is just another way that the patriarchal society has use to imprison and control women. It is also a debate as to whether women are becoming more sexually explicit within the pornography industry because they are being liberated or because our patriarchal society has provided them with a false sense of sexual autonomy. Along with the debate of sexual autonomy, pornography has been accused of promoting the act of violence and rape toward women, but this theory has been attempted to be refuted by using a defense that there is no true cause and effect relationship. This paper focuses on differing theories of those who feel women are simply being objectified and fooled, namely by the forces of "structure" and those who argue in support of real female autonomy, agency. This paper is a literature review that will look at the arguments made by several feminists and other scholarly theorists in order to present where the dividing lines have been drawn, where the disagreement occurs, and will provide particular studies that have been used to support both side's view. There will be attention paid to the terms of censorship, patriarchal power and control, feminist theory, sexual liberation, autonomy and false autonomy.

234

Cultures Consumed By Consumption: A Critical Review of Affluence in Western Society and the Role of the Citizen/Consumer in Contemporary Democratic Capitalism

Matthew Gulbranson • SOC • Deborah White • LO 91 • 2:50PM

The internal processes that determine what we associate with objects are shaped externally through systems of meaning creation, communication and interpretation, commonly referred to as semiotics. Unfortunately, within contemporary postmodern society, control of these processes is often dominated by the insatiable appetites of corporate interests and channeled through the agency of commercially inclined mass-media profiteers. This paper seeks to conceptualize the individual actor within consumer culture as they relate to a new global society. In order to accomplish such a task, this literary review will first provide a number of theoretical frameworks related to consumer cultures, allowing for a more thorough discussion of consumer culture in and of itself. I will then examine a number of consequences that have resulted from the western appetite for commodities and consumption, especially now that it is becoming a globalized phenomenon. The next section will provide a

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of overview of the critiques that have been posited by social theorists against the hegemony of American consumer culture. I will then include this literature review with a discussion of excessive/destructive forms of consumption as they relate to the ethical citizen/consumer living in western democratic capitalist societies such as our own.

5

New Media

Ashraf Kamel • SOC • Deborah White • LO 91 • 3:30PM

In spite of the large body of work social theorists have dedicated to media, relatively little has been said about new media. This is unfortunate because new media—the participatory media that the internet has ushered in has become an integral part of day-to-day life in the developed world. New media's interactivity sets it apart from older media and a new body of research is required to make sense of this new social environment. In this literature review I look into the literature on new media primarily organized around three conceptual questions. First, why "new" media, what is meant by new? Second, how does new media change traditional views of media? Finally, I conclude with a review of literature describing the ways that new media has been changing society. These questions provide a starting point for new research into the social implications of new media.

Effects of UV Light on 3 Species of Liverworts

Shua Trautner • BIOL • Linda Fuselier • CMU 204 • 10:30AM

Algae (mosses, liverworts and hornworts) are an important component of the world's flora that occur on every continent on earth. Mounting evidence suggests that liverworts were the very first land plants and as colonizers of land, liverworts must cope with exposure to ultraviolet radiation. In plants, exposure to higher than ambient levels of radiation can cause reductions in photosynthesis and impaired germination rates. We tested the impact of UV radiation on asexual propagules of three species of liverworts, *Marchantia polymorpha*, *M. paleacea*, and *M. inflexa* with different degrees of intercontinental distributions ranging from common across all continents to relatively restricted. Asexual reproductive propagules from these three species will be exposed to ambient levels of UV light and no UV light. There germination rates, rhizoid numbers and chlorophyll content will be analyzed during and after the experiment and results will be used to understand distribution limitations in asexually reproducing plants.

Novel Method to Generate IR Spectra of Solutes in Solution

Shiwot Gebreselassie • CHEM • P. Asoka Marasinghe • CMU ML • PM

A new method to acquire the infrared spectrum of solutes in solution without any interference or minimal interference from the solvent peaks is presented. The peaks of the solvent are removed mathematically from the spectrum of the solution. It is accomplished by minimizing or removing the negative peaks of the solvent absorptions. This method requires only one fixed path length IR cell. This method also permits the use of any available solvent to dissolve the sample in order to generate IR spectra of sample provided the solvent do not excessively absorb at the IR ranges.

Correlation Between Education Level and Health Status in the United States

Robert Anderson • SOC • Susan Humphers-Ginther • LO 90 • 9:50AM

The object of this paper is to display how an individual's education is related to his or her health status. In doing this, I intend to highlight the importance of the social problem of inner-city schools in terms of both economic strain as well as individual health condition. I hypothesize that socioeconomic variables are directly related, meaning that an individual's health status is a consequence of his or her education level, and that the lack of a strong education system, especially in regions of extreme poverty, can be considered a source of poor health conditions experienced in these areas. I intend to do this by combining statistics from the Berkeley GSS Relative Data file (1972-2007), reported findings on the relationship between health and, as well as first hand accounts of health hazards that inner-city children face in schools. With the evidence I provide I hope to draw attention to education reform as a form of health reform, as well as the role of economic stimulus as positive increases in health condition. I hope to drastically reduce the amount of federal funds being used for the current public health aid.

239

VIOLATORS ARE SUBJECT TO ARREST: Unobtrusive Observations of an Interesting Social Situation

Matthew Gulbranson, Ashraf Kamel, Justin Nistler, Thomas Seim • SOC • Lee Vigilant • LO 93 • 9:50AM

The Dike West is a public park located near downtown Fargo, ND and is home to one of the few designated "skate-parks" in the surrounding area. We chose to observe this space because we thought it would be a unique subject for our qualitative research project. Using an unobtrusive observation and grounded research methodologies our goal was to develop a thick description of the skate-park's patrons. Our data was collected during an unseasonably warm weekend in mid-September, from Friday to Monday. Our study utilized investigator triangulation from various vantages around the park, offering a description of "the look" of the park's physical environment, along with the palpable social environment that we refer to as "the feel". Our observations characterized the skate-park as a busy place where teenagers and young adults are allowed to congregate and participate in activities that center around skateboarding, freestyle BMX, and inline skating. As an unsupervised environment, it lends itself as a popular (and rare) place for teens to assemble and interact with one another within a public space that isn't perpetually under the watchful eye of parents or police. However, we still felt that a subtle tension existed between the youth that use the park and the authorities that provide it to them. It seemed to us that the act of designating an institutionalized space for youth to take part in activities that had previously been prohibited could be an attempt to take away from the rebelliousness that is commonly associated with skating. Despite attempts to negate the "edginess" of the park, youth still look to it as a "cool" place where they are allowed to freely define themselves and express their independence to their peers and "rebel" against the authority of the status quo.

240

Body Size Correlates to Asymmetric Competition among Fathead Minnows

Nicole Schlueter • BIOL • Daniel McEwen • CMU ML • 2:30PM

The logistic population model is a classic mathematical description for how animal populations increase in abundance after becoming established in a new habitat and/or react to changes in resource availability. In the classic formulation, population dynamics are controlled by birth rates, death rates, and a carrying capacity (i.e., a value that denotes the maximum number of individuals a given space can hold). The logistic model has historically been criticized because of its simplicity, making it applicable only in rare cases. In the classic formulation, the model does not explicitly account for age or size structure of a population; however, birth rates and death rates are size dependent. Processes that exaggerate size differences between juvenile and reproductive-aged individuals can potentially influence birth rates since fecundity is positively correlated to female size within populations. We performed an experiment that paired fathead minnows in three different combinations of sizes of fish: (1) big-big, (2) big-small, and (3) small-small. We predicted that when a big fish was paired with a small fish, it would have a higher rate of growth than when paired with the big fish. Additionally, we expected to find the growth rate of the small fish in the small-small combination to be higher than for the small fish paired with the big fish. If our hypotheses are supported, it will allow us to modify the logistic population model so that it explicitly takes into account the size-structure of the population and better describes population dynamics.

242

Heritability of plasticity in families of a population of the moss, *Funaria hygrometrica*

Philip Haugrud • BIOL • Linda Fuselier • CMU 204 • 9:30AM

Funaria hygrometrica is a common moss that can successfully grow in many different environments, including recently burnt substrates. Heritability is how much of an organism's phenotype can be accounted for by additive genetic variation, and it changes based on the environment. Given that this moss has generally low levels of genetic variation within a population and that it can survive in both inhospitable and hospitable populations, it is assumed that it is highly phenotypically plastic. My question is: how does the heritability of plasticity change in *F. hygrometrica* families of siblings when grown on ash agar compared to normal agar. Time to germination, proportion of successful germinations, time to first branching of the protonema, amount of sporophytes in each growth stage, and length of sporophytes will be measured. Data will be collected during March, 2010. The expected results are that sporophytes grown on ash agar will generally be smaller and grow slower than ones grown on normal agar and that there will be more variability of growth on the normal agar. The rationale is that fewer phenotypes should be able

to survive on an inhospitable substrate than on a hospitable one, all other factors the same. Plasticity then is hypothesized to be more heritable on the burnt substrate, which would allow different genes to produce the same phenotype that can survive.

243

Franz Schubert: His output and approach to lieder
Sarah Kneeland • MUS • Laurie Blunsom • CMU 214 • 1:40PM

Franz Schubert is the leader of art song literature from the western world in the nineteenth century. Because of his place in art song literature, as a singer, it is important to understand his lieder. In my research I'm looking at Schubert's output and approach for song and why he wrote so many lieder. In this presentation I will discuss a bit about Schubert's life as an accompanist and pianist and how that effected his writing of music for vocalists and his life as he was born into a musical family and how that effected his approach to writing as well. I will be focusing on Schubert's lieder. He has written over six hundred lieder and nine symphonies and I will be discussing his way of writing and creating his works and how he changed and grew in his way of writing style over the span of his lifetime.

244

Whale Wars

Ryu Takagi • JAPN • Chizuko Shastri • CMU 200D • 3:30PM

Within a few years, Whale wars which is a documentary TV program on Animal Planet is getting popular in the United States. Similarly, in Japan people are getting to pay attention to the fight between Japanese research ships and Sea Shepherd which is an international non-profit, marine wildlife conservation organization. In the TV program, the structure of this issue is described limitedly such as the Japanese research ships versus Sea Shepherd. The TV show only takes film from the point of view of the Sea Shepherd's crew. However, behind this issue, there are a lot of complicated things related with each country's lifestyle and history of culture. Also, sometimes information from TV program s is only one-sided although it is catchy and is used for propaganda. In my research, I focus on worldwide viewpoints of this issue such as culture and convey the fact from different viewpoints. Of course, even though I am Japanese, I am suspicious about why Japanese ships have to catch whales for a research while some people claim that the number of whales is decreasing, and they are supposed to be protected in order to keep their numbers.

245

Using Nuclear Magnetic Resonance to Study Hydrogen Diffusion in Fuel Cells

Christopher Moore • PHYS • Ananda Shastri • CMU ML • 2:30PM

This study is being done on the improvement of fuel cell technology. Fuel cells combine hydrogen and oxygen to produce electricity. They require a material that allows protons to move easily through them. These materials are called proton conductors. The study of hydrogen motion through proton conductors is important for the advancement of fuel cells. This study measures this movement, known as diffusion, in proton conducting materials. The process being used to study the hydrogen diffusion is known as nuclear magnetic resonance (NMR).

NMR deals with the magnetic dipole moment of protons in a magnetic field. This means when placed in a magnetic field the nuclei temporarily behave like magnets. During NMR "nuclear magnets" will be knocked out of alignment. The time it takes for these nuclei to return to alignment is referred to as T1. This time will be measured at specific temperatures and frequencies.

A LabView program was written that will automatically log and show the relationship between T1 (the return time) and temperature. The user is asked for specific intervals of time to record the temperature of the experiment. LabView will then send the time and temperature to a spreadsheet which can be used to create a function of temperature to time. The experiment yields a way for a program to be activated and the temperature and time to be automatically logged and entered into a spreadsheet. The results of the experiment will be evaluated.

246

Systemic acquired resistance associated modifications to the structural and carbohydrate profile of Cucumis sativus cell wall
Brendan Haight • BIOL • Andrew Marry • CMU ML • 2:30PM

Like all living organisms plants encounter a variety of biotic and abiotic environmental threats throughout their life-cycle and have developed a broad range of mechanisms to counter pathogenesis. As plants are

sessile, they employ a variety of strategies collectively termed 'defense' or 'stress' responses. The default response, ubiquitous among vascular plants, involves an independent rapid localized generation of reactive oxygen species (ROS) in parallel to mobilization and biosynthetic up-regulation of antimicrobial agents such as phytoalexins and other defense proteins. The latter system initiates an apoptotic system termed hypersensitive response (HR) that yields a necrotic lesion at the infection site designed to restrict pathogenesis by nutritional deprivation. Systemic acquired resistance (SAR) is the most comprehensive defensive response available - associated with structural and biochemical modifications both distal and proximal to the site of infection.

Primarily designed to expand a plant's innate immunity to limit secondary pathogenesis, SAR imparts a basal level of resistance to a broad spectrum of pathogens. SAR activation, either by chemical induction or pathogen elicitation results in structural alterations to the cell wall (predominately lignin deposition), expression of pathogenesis related (PR) proteins, as well as differential expression of metabolic factors pertaining to respiration and carbohydrate and glycoprotein remodeling. However, an accurate profile of SAR associated cell wall remodeling, let alone the signaling pathways and mechanisms has yet to be compiled.

The potential ramifications in biochemical understanding of innate, long-term, broad-spectrum resistance in plants are numerous - particularly in terms of agricultural tenacity and industrial applications dependent on cell wall properties. Our research intent is elucidation of structural modifications and associated biochemical changes to *Cucumis sativus* cell wall in the early stages of SAR activation. Post-inductive cell wall remodeling will be assayed by FTIR, colorimetric assays for uronosyl and methylesterified species and a carbohydrate profile by HPLC.

247

Overview of the MMIX processor.

Samuel Sussman • CSIS • Andrew Chen • CMU ML • 2:30PM

An general overview of the MMIX hypothetical processor. MMIX stands for 2009. The poster will show the basics of the corresponding assembly language.

248

The Power processor by IBM

Zachary Shores • CSIS • Andrew Chen • CMU ML • 2:30PM

A presentation on the POWER processor. This will include history of how the POWER was created, the commands used on the POWER Assembly language, and past and modern equipment which implemented the POWER processor.

249

Experimenting to locate the Mystery RP gene in Maize Leaves

Erin Geissler, Eun Kyung Lee • BIOL • Chris Chastain • CMU ML • 2:30PM

C4 photosynthesis is better than C3 photosynthesis because C4 plants have evolved a means of suppressing photorespiration and therefore are able to utilize all the energy in sunlight for fixing CO2. The PPDK Regulatory Protein (RP) is involved in the C4 photosynthesis process. The main goal of the project is to find the presence of a second "mystery" Regulatory Protein (RP) in maize leaves. Recent indirect evidence from the maize genome project has indicated the presence of a second RP gene. Thus, our question is whether a second RP gene is present in maize leaves. In order to show the presence of this second RP gene, we isolated and extracted total RNA from maize leaves using RNAeasy columns. RNA was converted to cDNA using a reverse transcriptase reaction. We then used maize RP gene primers to amplify this gene using PCR. Finally, detection of the PCR product, and hence existence of a second RP gene, was accomplished by visualization using agarose gel electrophoresis.

250

Windows Presentation Foundation (WPF)

Yury Mikheev • CSIS • Yurii Boreisha • CMU ML • 2:30PM

Next-Generation User Experiences. The Windows Presentation Foundation, WPF, provides a unified framework for building applications and high-fidelity experiences in Windows Vista [and Windows 7] that blend application UI, documents, and media content. WPF offers developers 2D and 3D graphics support, hardware-accelerated effects, scalability to different form factors, interactive data visualization, and superior content readability. (Microsoft@ <http://windowsclient.net/wpf>)

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251

Design of Digital Vax processor

Jeffrey Enniful • CSIS • Andrew Chen • CMU ML • 2:30PM

This presentation will be about the Digital Vax operating system which was designed several years ago.it will include a brief history about this processor, an overview of its key components, examples of its usage and how it performs task.

252

Purification and Biochemical Analysis of the Regulatory Protein of Pyruvate-Phosphate Dikinase

Tony Nguyen • BIOL • Chris Chastain • CMU 216 • 2:30PM

C3 plants and C4 plants have different mechanisms for photosynthesis. C3 plants' photosynthesis occurs in one cell type while C4 plants' photosynthesis is broken down and process in two different cell type, bundle sheath cells and mesophyll cells. Because photosynthesis is split into two cell types, C4 plants do not experience photorespiration. Photorespiration occurs when CO2 is low and O2 levels are high. This leads to the cell fixing O2 instead of CO2 and wasting energy because it leads to the release of water instead of sugar. C4 plants are being study because of its ability to avoid photorespiration. Pyruvate-Phosphate Dikinase (PPDK) is an enzyme that converts pyruvate back into phosphoenolatepyruvate (PEP) and is believed to be the bottleneck at which the rate of CO2 fixation is control. There is also a regulatory protein (RP) that interacts with PPDK. The hypothesis is that RP uses various nucleotide tri-phosphates to phosphorylate and inactivate PPDK. To test this hypothesis, several techniques were used such as column chromatographies and Western blots. The experiments will show various techniques that are efficient for isolating RP and also how RP regulates PPDK.

253

United States Involvement in the Apartheid

Heidi Neibert • HIST • Nathan Clarke • CMU 208 • 2:30PM

I will be talking about The United States of America's involmnet in the Apartheid. I will discuss certain resistances. I will also highlight citizens who were very influential in the process.

254

Lending Growth in North Dakota

Joseph Bottrell • ECON • Tonya Hansen • LO 93 • 10:30AM

This paper examines growth of loans and leases in the state of North Dakota for the time period from 1976:Q1 to 2009:Q3. The goal of this paper is to establish a framework for— and assess the viability of— using neoclassical demand, scale, and monetary policy variables to explain the patterns of growth. I also consider Keynes and his famous animal spirits. The branch of economics concerned with behavioral decision-making models has led me to frame another explanation with less neoclassical basis, and more emphasis on these animal spirits. I estimate the regression by using the ordinary least squares method. I find that the collection of variables is significant, but two of the animal spirit variables, and one classical variable cause severe multicollinearity. Another classical variable may need to be estimated using simultaneous equations or two-stage least squares estimation.

255

The Role of Good Diet And Exercise For Good Health

Elizabeth Rawal • SOC • Susan Humphers-Ginther • CMU ML • 2:30PM

In public health, it is quite often emphasized for one to make good dietary choices and to include exercise to attain good health. A combination of two improves quality of life and helps to fight many diseases. Our nation has been facing a high risk since the number of obesity cases dramatically increasing. Many chronic diseases are result of our sedentary lives and lack of a healthy diet. The purpose of this research is to look into more in-depth specific data on how it changes one's life to bring good quality of life in mental, physical, emotional, social levels. It will cover some of the topics on why our nation's facing top three leading causes of death such as stroke, heart disease and cancer due to lack of these choices. The research will cover many secondary data available through General Social Survey, Healthy People 2010 and Centers for disease control and prevention et cetera.

256

Mapping Planetary Magnetic Fields

Alexander Freed • PHYS • Linda Winkler • CMU ML • 2:30PM

Accurate models of planetary magnetic fields are essential for any extraterrestrial mission. Based on these models, scientists can map out where radiation is most likely going to concentrate, so the engineers can properly shield their multi-million dollar electronics. The goal of this

research was to create independent offset, tilted dipole (OTD) models of Earth's and Jupiter's magnetic fields. By modeling the two most well known planetary magnetic fields in our solar system, comparisons could be made between these models and more accurate multipole models used in the scientific community. These comparisons revealed one region where the multipole models looked dipolar, but on the whole, the models differed significantly, as expected.

257

Going Green: The Efforts of the United States and Japan

Andrea Oberloh • JAPN • Chizuko Shastri • CMU ML • 2:30PM

Global climate change has been an increasing issue in recent years. Going green has become a larger and larger trend. Around the world the countries have been doing different things to reduce waste and greenhouse gasses. Comparing the efforts of Japan and the United States shows Japan has a more efficient recycling system as well as higher recycling rates. Japan has taken the lead of maximizing recycling efforts of Japan and the United States should follow and do the same. There have been many efforts in both countries to be a "greener" country. Japan has worked on developing a biofuel airplane and fuel cell systems for households that can provide electricity and heating, and the United States has also been working with biofuels like ethanol. By comparing the accomplishments of both countries we can see the strengths of each and we can develop a better system for the future.

258

Improving the Future Generation with STEM

Benjamin Forsythe, Alexander Freed, Steven Ruckdashel • PHYS • Stephen Lindaas • CMU ML • 2:30PM

Over the past couple of decades, the number of American scientists, engineers, and mathematicians has been decreasing. To reverse this decline, the national Science, Technology, Engineering, and Mathematics (STEM) Education Coalition was created to get Americans excited about these fields of study once again. STEM is being implemented at all levels of experience, so we helped at an elementary level by focusing our efforts on Moorhead Horizon Middle School. We created a robotics club that used teamwork and problem solving ingenuity to design and program a robot to compete in the annual FIRST LEGO League (FLL) competition. The kids were successful in the competition, and each is now excited about one of the STEM areas.

259

Controlling Home Appliances Remotely

Shashank Sitaula • CSIS • Andrew Chen • CMU 227 • 2:30PM

A home appliance control system (HACS) is a system which provides various services to remotely operate on home appliances, such as microwave oven, TV, and garage door etc through remote devices such as mobile phones, internet enables devices and palm-tops. Rapid use of wireless and the Internet media at home inspires the use of home network to control home appliances. Advances in technology make man's life simpler and simpler day by day. Home Appliances Control System (HACS) is one live example for this. Using HACS, one can control and manage different home appliances using wireless devices like cell phones, PDA's, web browsers etc. Smart homes are becoming one of the hottest selling products in the globe. Moreover it's a device which is making our lives easier in this modern world. This project includes developing a HACS system to control some home appliances like Refrigerator, Television, Water Sprinkler, Air Conditioner etc. One of the examples would be to have your AC ON, when you are in the way to your home so that you have a good comfortable temperature before you get home. HACS is flexible enough to allow addition or removal of devices to control its functioning and also appliances it controls.

260

How does sunlight regulate C4 photosynthetic pathway in maize leaves?

Damilola Ayanlakin, Nivedha Manohar • BIOL • Chris Chastain • CMU ML • 2:30PM

C4 photosynthesis utilizes the protein pyruvate phosphate dikinase (PPDK) in the presence of sunlight, C4 plants have higher performance in sunlight because they have evolved a mechanism to bypass O2 fixation by RUBISCO and have CO2 directly incorporated into the pathway. The ability to bypass O2 fixation saves energy and carbon in the C4 pathway, resulting in better performance of C4 plants.

PPDK is the most important enzyme in C4 photosynthetic pathway in C4 plants like maize. We hypothesize that the level of PPDK is regulated by the amount of sunlight the plant receives. We are testing this by growing maize plants under high and low levels of sunlight. We will then harvest plant leaves at the three week seedling stage for PPDK extraction. The

PPDK in the extract will be assayed using a western blot and SDA PAGE. Using the results from Western blot and SDS PAGE, we will be able to determine if PPDK is regulated by sunlight level.

261

Sex Offenders Breaking the Myths.

Rachael Moe • SOC • Deborah White • LO 91 • 3:10PM

In society we tend to have our own views of what the label of a sexual offender is, this being that they are low on the economic scale, males and typically unattractive men who attack women of whom they are strangers. The truth on sexual offenders in statistics isn't exactly that when it comes to evidence on reported sexual offenses. In this literature review I will examine exactly what a sexual predators is by breaking stereotypical myths, along with looking at the characteristics and typologies of sex offenders with an insight on treatments and recidivism for all sex offenders; be it male, female or child offenders. The end result will be a statistical based educational background on what and who sex offenders are in society while viewing them through the sociological lenses of theory; mainly labeling and reintegrating shaming theory, along with feminist theory in how sexual offenders are viewed through a male lens in a professional stand point.

262

Communication in a Technological Age

Justin Nistler • SOC • Deborah White • LO 91 • 2:30PM

This is a study of the advancements, changes, and downfalls in modern day communication and human interaction. I will be examining how technology such as cellular phones, internet websites like Facebook and Myspace, and web services such as Skype have changed the way that people communicate with one another. I will be using a literature review method and perusing scholarly articles to gain more information on communication. I believe that communication in itself is very dynamic and will always be changing as different technologies come along. As much as the telephone first revolutionized the way we talk, so did text messaging, as well as the changes that came along with the internet. These changes are only stepping stones in the staircase of the change of human interaction.

263

Japanese and American high school systems

Noeuth Orm • JAPN • Chizuko Shastri • CMU ML • 2:30PM

Every country has its own education system. One is not always the same as the other. Two countries in particular has two very different educational systems but in some sense they are the same. These two countries are The United states and Japan. In my presentation i will present how Japans education system is different from the United states education system in the high school level and also i will show how they are the same. Did you know that Japanese students need to take an entrance exam to enter high school not like in the united states? Did you know its mandatory for Japanese students to wear uniforms in high school? and also that, the Japanese can only join one after school activity during high school? if these questions are interesting come and learn more!

264

What Certain Aspects in Life Help Contribute to a Happy Marriage

Angela Heng • SOC • Deborah White • CMU ML • 2:30PM

To this day a large amount of data exists on relationships especially when it comes to marriage and divorce. With the divorce rate at an all time high it has become a trend for researchers to look at the negative side of things and focus on why a particular couple may have made the choice to get a divorce, rather than what makes a married couple stay committed to one another. The purpose of this study was to look at married couples and gain insight on what factors may contribute to a happy marriage. This study used data from the 2004 general social survey (n=2,812) to help determine which aspects in life help contribute to the overall happiness of a marriage. Systematic random sampling was used as the sampling design and researchers ensured that individuals who were chosen to take the survey were equally distributed to how many people are in the United States when it came to things like sex, race and ethnicity. When looking into what certain factor may play a role in a happy marriage things such as family annual income, respondent's income, intimacy and religion where studied. When the study was competed it was found that aspects such as, respondent's income and intimacy played a positive part in the overall happiness of a marriage.

265

The Impact of Digital Technology on Film Aesthetics and Distribution

Conor Holt • HON • Stephen Hamrick • CMU 203 • 10:30AM

Background: In the past decade, the use of digital technology and the internet has become almost commonplace in both Hollywood and the Independent film market. The relative ease, cheapness, and with Hollywood, the possibilities for CGI effects, has convinced filmmakers of it's superiority over standard celluloid film. My study was to gather research and find opinions on how Digital technology is actually changing cinema, how it affects filmmaking styles and approaches, and how Digital technology and the Internet is changing the role of the viewer. Research and Results: I have gathered information from a variety of sources, including Film Journals and essays, on how digital filmmaking and the capabilities of the internet are changing the cinematic language. I have found apposing viewpoints, one side claiming "digital" only affects distribution and has no affect on film style, the other side arguing that digital technology influences the acting, stories, and direction of modern films. My research, however, has consistently provided evidence to the stance that digital technology is affecting all aspects of filmmaking, from pre-production to distribution. Since digital film can be altered and retouched by computer software programs, films are now closer in art form to paintings than to photography. With the inexpensiveness of digital capture, in contrast to costly film negative, directors are free to leave the camera running, which allows greater improvisation and relaxation on the part of the actor. New advancements in CGI are making special effects simpler and more incredible every day. And the internet, by way of film websites and youtube, offers multiple new and innovative options for film promotion and distribution to both Hollywood and Independent productions, as well as input and creative options for internet users. Results: An investigation into the impact of digital technology in the realm of filmmaking has concluded that digital cinema provides significant impacts on multiple areas of film production and distribution.

266

Trauma: Motor Vehicle Accidents

Brianne Hoffman • NURS • Donna Clark • CMU ML • 2:30PM

Trauma Physical trauma is a serious injury to the body that can have life-threatening effects or can even cause death. Three types of trauma are as follows: blunt force trauma occurs when the body is struck with an object or force, causing concussions, lacerations or fractures; penetrating trauma occurs when an object pierces the skin or body, usually creating an open wound; trauma also results from "controlled injury," such as that caused by surgery. According to the Centers for Disease Control and Prevention (CDC), unintentional injury kills more people between the ages of 1 and 44 than any other disease or illness. Trauma (which includes accidental and deliberate injuries) causes 74 percent of all deaths (including suicide and homicide) from ages 10-24. In 2006 there were a reported 11,442 deaths between the ages of 10-24 years old caused by motor vehicle accidents in the United States (Centers for Disease Control and Prevention). Motor vehicle accidents can be prevented in most cases. You can significantly reduce your chances of getting into a motor vehicle accident (MVA) and henceforth reduce your chances of getting any life-threatening traumatic injuries related to the MVAs. By making smart decisions, driving defensively, and being an aware driver you can significantly reduce your chances of getting into a motor vehicle accident. Tips for preventing motor vehicle accidents and injury related to them include: -Do not drive impaired (alcohol, drugs, sleepiness, etc.) -Wear helmet when operating motorcycles -Drive defensively -Wear helmet when operating motorcycles -Do not talk on cell phones while driving -Check intersections twice -Do not text while driving -Turn down the music -Check intersections twice -Stay focused -Do not speed -Wear seat belts

268

Nurse Leadership in Nicaragua

Anna Merkens, Rebecca Roers • NURS • Jane Bergland • CMU ML • 2:30PM

The presentation will compare the similarities and differences of working conditions and practices for nurses in Nicaragua and the United States. We will discuss the similarities and differences (if any) among the necessary qualities of a leader transculturally. Last, we will identify the necessary qualities and skills that the culturally competent nurse leader must possess.

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Adjudication and Diversion: The effects on Juvenile's**Justine Erickson • SOC • Deborah White • LO 90 • 2:00PM**

My literature review focuses on the effects of adjudication and diversion on juveniles. It is important to know how juveniles can be affected with the outcome of being diverted or adjudicated in the court system. A literature review is an amount of information that focuses on reviewing points of current knowledge and or approaches on a particular topic. Literature reviews are secondary sources, and do not report any new or original experimental work. In the Juvenile Justice System, the outcome on how a juvenile will be processed through the courts is different from the adult criminal justice system. When a juvenile comes into the system, depending on the circumstances, they can either be adjudicated or diverted depending on what the judge believes is best. I will be focusing on the research dealing with juvenile's being adjudicate or diverted from the Juvenile Justice System, and how that can affect their future lives. I will apply Labeling Theory which can explain how society views juvenile delinquents and also how juveniles view themselves through the effects of the labeling. I will relate them to the effects of juveniles being adjudicated or diverted and seek explanations to why this happens and what in society can be done to further understand juvenile delinquents.

270

The Harms of Asperger's Disorder Diagnosis**Jared Walters • ENGL • Stephen Hamrick • CMU 207 • 1:20PM**

Over the past couple of decades, then number of children diagnosed with Asperger's syndrome has increased dramatically. While some of these children do have the disorders that they are diagnosed with, many do not. Many others are minimally harmed by their condition and can actually suffer from being diagnosed. This can cause harmful physical and psychological damage to the children who are psychologically healthy. Labeling theory says that someone who does not have a problem will develop one when told that they do. A child who is upset one day in class and strikes a peer turns is told that he is a trouble maker. Likewise, a child with slight developmental problems is diagnosed with Asperger's and is forever behind in development due to an excuse to be behind and also from being treated differently. Wrongful diagnosis can be just as harmful in that the child develops the disorder when they may have had something much less severe. I plan to show how a child with only minor problems or no problems can become a life-long sufferer of Asperger's syndrome, the stigma that is associated with it, and labeling theory.

271

TOMS Shoes: For a Better Tomorrow**Kathryn Adducci, Dana Altendorf, Courtney Jones, Aaron Lund, Whitney Nelson • CMST • Denise Gorsline • CMU 205 • 2:30PM**

For our Leadership 301 class, a challenge was made to fund raise for a cause of our choice. Our group chose TOMS Shoes. TOMS Shoes gives a pair of shoes away, to a child in need in over sixteen different countries, every time a pair of shoes is bought. In five weeks we raised over \$2,000 by hosting a Style Your Sole event. We will share about the event and what we took away from the experience.

272

Increasing the odds of a healthy pregnancy: The benefits of prenatal care**Sabrina Phelps • NURS • Mary Rousslang • CMU ML • 2:30PM**

Approximately 500,000 of the 4 million births that occur in the United States each year are categorized as high risk because of maternal or fetal complications that develop. Improving these outcomes is contingent on the early identification and implementation of timely interventions during the perinatal period. By encouraging and educating newly expecting parents about the importance of receiving prenatal care throughout their pregnancy, research has shown morbidity and mortality rates can be significantly reduced. Highlights of this presentation will include recommendations made during prenatal care such as nutrition and exercise modifications, as well as what research has demonstrated about the benefits of prenatal care.

273

Demonstrating the 5-E model with a chemistry lesson**Dylan Walsh, Amanda Wickersham • BIOL • Alison Wallace • CMU G • 9:30AM**

We will present a chemistry lesson designed for high school students. After the lesson, we will provide a summary of the 5-E model of instruction and explain how the lesson exemplifies this model.

274

Demonstrating the 5-E model with a biology lesson**Joshua Carlson, Beau Kirkwood • BIOL • Alison Wallace • CMU UG • 1:00PM**

We will present a biology lesson designed for high school students. After the lesson, we will provide a summary of the 5-E model of instruction and explain how the lesson exemplifies this model.

275

Demonstrating the 5-E model with a geology lesson**Nika Gallo, Linsey Ness • BIOL • Alison Wallace • CMU UG • 2:30PM**

We will present a geology lesson designed for high school students. After the lesson, we will provide a summary of the 5-E model of instruction and explain how the lesson exemplifies this model.

276

Middle Eastern Ecotopia: Visions for a Future Sustainable Society**Leonard Beck, Payton Berger, Megan Boie, Addie Borgh, Ryan Wong • BIOL • Alison Wallace • CMU ML • 2:30PM**

Creating and maintaining ecologically sustainable societies in the face of growing human population, increasing use of natural resources, and a changing climate is humanity's greatest challenge. We will present an example of a sustainable community by describing plans for a city called Masdar in the United Arab Emirates.

277

Columbian Ecotopia: Visions for a Future Sustainable Society**Leagha Reynolds, Sara Schafer, Huanan Tao, Melinda Thompson • BIOL • Alison Wallace • CMU ML • 2:30PM**

Creating and maintaining ecologically sustainable societies in the face of growing human population, increasing use of natural resources, and a changing climate is humanity's greatest challenge. We will present an example of a sustainable community by describing a small sustainable town in Columbia called Gaviotas.

278

Brazilian Ecotopia: Visions for a Future Sustainable Society**Leandra Cota, Jennifer Donarski, Katherine Hanson, Andria LaFollette • BIOL • Alison Wallace • CMU ML • 2:30PM**

Creating and maintaining ecologically sustainable societies in the face of growing human population, increasing use of natural resources, and a changing climate is humanity's greatest challenge. We will present an example of a sustainable community by describing a large sustainable city in Brazil called Curitiba.

279

United Kingdom Ecotopia: Visions for a Future Sustainable Society**Alex Burke, Russel Connery, Amber Power, Durga Rijal, Gabrielle Welin • BIOL • Alison Wallace • CMU ML • 2:30PM**

Creating and maintaining ecologically sustainable societies in the face of growing human population, increasing use of natural resources, and a changing climate is humanity's greatest challenge. We will present an example of a sustainable community by describing a sustainable town in the UK.

280

Ecotopia in China: Visions for a Future Sustainable Society**Laura Brown, Kaleigh Cornwell, Courtney Scheidecker, Cami Thompson, Gina Walkup • BIOL • Alison Wallace • CMU ML • 2:30PM**

Creating and maintaining ecologically sustainable societies in the face of growing human population, increasing use of natural resources, and a changing climate is humanity's greatest challenge. We will present an example of a sustainable community in China called Dantang that is still in the planning stages.

281

Ecotopia in US: Visions for a Future Sustainable Society**Jordan Bruhn, Derrick Lewis, Rebecca Miller, Alicia Olson • BIOL • Alison Wallace • CMU ML • 2:30PM**

Creating and maintaining ecologically sustainable societies in the face of growing human population, increasing use of natural resources, and a changing climate is humanity's greatest challenge. We will present an example of a sustainable community in Kansas called Greensburg that is still in the planning stages. This community was nearly decimated by a tornado a few years ago and has decided to rebuild "green".

282

Cricket and Lacrosse: Simple Games or Sources of Cultural Identity? Sports in Colonial Societies

Natalie Petersen-Menefee • ANTH • Bruce Roberts • CMU ML • 2:30PM

This research project compares and contrasts two instances of sports influencing culture within colonial societies. The first example is the cultural evolution of the game of cricket for the Trobriand Islanders of Papua New Guinea. This was essentially a case where colonized peoples claimed a sport forced on them by their Australian colonizers; they then changed the rules of cricket to suit their own cultural values and mores. The second case under study concerns the adoption of the Native American game of lacrosse by their European colonizers and the transformation of lacrosse into a nationally recognized sport in the United States. This is a parallel example of the first instance since it involves a group of colonizers requisitioning a sport practiced by the colonized people.

283

Jazz styles in the 20th Century

Nathan Pitcher • MUS • Laurie Blunsom • CMU 208 • 10:37AM

Jazz consists of many different styles that have evolved since the early 20th century. My study involves an examination of the styles represented on my senior jazz recital in the form of extended program notes. The content of the study consists of a stylistic analysis of certain jazz works and descriptions of their composers which were active from the 1930's to the 1960's. For this presentation, I will discuss three tunes that represent different jazz styles. Specifically, I will examine a swing tune, a piece from the bop movement, and a piece with a more modern approach to jazz. Some of the issues I will discuss will be the different approaches to form, meter, melody, chord changes, as well as the different approaches to improvisation.

284

Chiral Relay: Diastereoselectivity of Nitrile Ylide Cycloadditions Involving Chiral Pyrazolidinones

Maria Lindsay • CHEM • Craig Jasperse • CMU ML • 2:30PM

The reactivity and diastereoselectivity of 3+2 dipolar cycloaddition of a nitrobenzyl substituted nitrile ylide to a butenoyl group attached to a chiral pyrazolidinone ring will be tested. The dipole is generated in situ by dehydrochlorination of iminoyl chlorides. The dependence of reactivity and diastereoselectivity on the C-substituent and the N-substituent on the chiral pyrazolidinone ring will be reported. The chiral relay concept is that the fluxional N-substituent will orient itself trans to the C-substituent and provide some face shielding.

285

Causes of Math Anxiety

Jennifer Glenski • ENGL • Stephen Hamrick • CMU 207 • 1:40PM

Math anxiety is common in western society. Math anxiety is a feeling of intense frustration or helplessness about one's ability to do math, or a fear of math. Like most fears of non-lethal things, math anxiety is not inherent- it has to be learned. There are many contributing factors of math anxiety. I am interested in the causes of math anxiety because I am a female studying mathematics, and am curious as to why so many people dislike this discipline, especially women. Math anxiety influences many lives. By researching the causes of math anxiety, they may be avoided or counteracted so that more people do not develop math anxiety, and are able to function better when dealing with mathematics.

286

The Population Policies and Their Effects on Modern China

Aimee Heyne • SOC • Deborah White • LO 90 • 1:00PM

The population policies of modern China are some of the most controversial in the world. In addition to this, seldom few know or understand the making of these policies and specifically of China's notorious, "one-child policy". Looking at the theories of Marx and Malthus on population will in large part explain how and why this policy was devised. Another very important issue that needs to be addressed not only within China, but throughout the world, is the impact of this policy on the most populous country on the planet. One of the most pressing issues has become the imbalance of the sex-ratios, this overpopulation of males may in turn contribute to the further disadvantage of women, and perhaps destabilization of not only China, but the entire world. A literature review was conducted in order to synthesize the most current and applicable studies concerning these policies and their effects. These findings are important not only for the People's Republic of China, but also for the entire planet as the Chinese represent such an enormous percent of the total population.

287

A Critical Analysis of the Trinity Broadcasting Network Logo

Cliff Heyne • CMST • Jason Anderson • CMU 205 • 1:00PM

The Trinity Broadcasting Network (TBN) is the world's largest Christian broadcasting network. A critical approach to rhetorical theory and semiotics as developed by Roland Barthes was employed to analyze TBN's logo. A critical theorist seeks to find how power is communicated within culture, especially in a subtle manner. Semiotics is the study of signs and their meanings. This analysis shows that power is communicated through TBN's logo. The symbols on the logo suggest TBN's apocalyptic victory, royalty, and power.

288

Does A Woman's Income and Age play a role in whether or not she decides to have an Abortion?

Quintin Dimerson • SOC • Susan Humphers-Ginther • CMU ML • 2:30PM

The health related problem in my paper is the problem of abortion. Abortion is so tough on a woman's body it not only kills the fetus, but the urinary bladder can be perforated. A perforated bladder can lead to so many health problems for a woman among other things. Having an abortion can cause peritonitis, an inflamed, infected lining of the abdomen, with all of the pain this can cause, it is very dangerous and reparative surgery is needed. If the uterus is perforated, the intestines can become perforated also, causing nausea, vomiting, abdominal pain and fever, blood in stool, peritonitis and death if not treated quickly enough. And these are just a few complications that are left behind after getting an abortion. The abortion may help the woman through her time of need, but what happens when 6 years pass and she finds out she can no longer bear children because of a decision she made years earlier? Abortion is a major health risk for women and some may know the full health risks that come with getting an abortion others are left in the dark. Single women and families who have low incomes are more likely to get abortions because they don't have enough money to take care of a new baby. These women don't have the proper income to support the family they already have, so why not fix the problem with a quick abortion? My paper and presentation can shed light on this topic and raise questions that need to be asked in order to help these women in need. From my findings, I think the government would be able to come up with better solutions to help women in need who my feel like abortion is the out. Abortion is not the only answer and that's the message that needs to be spread. Larger implications of my findings are that women are given little support from the government and are suffering. My analysis of general social survey data reveals that the lower a woman's income is the higher the chances she will chose to get an abortion. Lets find a remedy to this situation

289

Politics of the American Climate Security Act

Suzanne Al-Kayali • POL • Barbara Headrick • LO 93 • 10:10AM

Please include this presentation among the panels for Dr. Headrick's Pol 341 Public Policy class. We request panels made up of members of the class. Thank you. A discussion of the various issues that surround the American Climate Securities Act. Analysis of the politics, problems, and policies that have contributed to its importance as a major piece of contemporary legislation. Discussion will be placed on what the bill entails and the implications of this act on the country as a whole.

290

Stellar Light Curves with the VYSOS 5 CCD Camera

Heather Cegla • PHYS • Juan Cabanela • CMU 218 • 3:30PM

The Variable Young Stellar Object Survey (VYSOS) provides systematic observations of early stellar evolution. Light curves obtained from pre-main sequence stars in the VYSOS survey allow us to determine many physical characteristics of young stars, providing insight into the beginning stages of star formation. I have extracted light curves from the VYSOS 5 CCD camera; VYSOS 5 is a Stellarvue 135mm Apochromatic Refractor. In order to extract the light curves, I first calibrated my images and then performed aperture photometry using IRAF software. In the process of obtaining a photometric calibration, I was also able to characterize the VYSOS 5 CCD and determine its limiting magnitude. I found the limiting magnitude by identifying stars of known brightness from a catalog in the field and determining at what flux level we could no longer reliably detect these standard stars. I will present my procedure for light curve extraction and limiting magnitude determination for the VYSOS 5 CCD.

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SUM ACM - Overview and projects: Cluster and Proteus
Richard Shores, Samuel Sussman, Christopher Williams • CSIS •
Michael Haugrud • CMU ML • 2:30PM
This poster is an overview of the projects that the MSUM ACM (Association for Computing Machinery), these include the Proteus Game object in C++, and the computer cluster project

12

Effects of Vocabulary Enrichment in Repeated Read-Alouds on Preschoolers' Vocabulary Knowledge
Ira Hanson, Sara Heimdahl, Sarah Peterson, Jessica Remhof, Lindsey Roy • PSY • Lisa Stewart • CMU ML • 2:30PM
The importance of vocabulary development in early literacy has been addressed with children of various ages. Many techniques have been utilized including pre-instruction of words, roots/affix analysis, contextual analysis, and dialogic reading. The purpose of this study was to assess the effects of added vocabulary enrichment within repeated read-alouds. Participants consisted of approximately 70 boys and girls in a Head Start program in a mid-size Midwestern city. All children were between the ages of three and five. Participants were assigned to either typical repeated read-aloud sessions or repeated read-aloud sessions with added vocabulary enrichment. At the beginning of the study, the children were given an individually administered 45 item vocabulary test that was constructed by the examiners based on the vocabulary terms in the books. Then, each class was read the same book Monday through Thursday. This took place for three weeks, with a new book being read each week. After the three weeks, the children were tested again with the same individually administered 45 item vocabulary test. The children's vocabulary growth was then analyzed. It was hypothesized that children would benefit more from repeated read-alouds with vocabulary enrichment compared to typical repeated read-alouds. Information obtained through this study will help to understand the effects of vocabulary enrichment on acquisition of new words in preschool-aged children.

13

King Lear and the Hopelessness of Man"
Sean Templeton • ENGL • Sandra Pearce • CMU 203 • 10:18AM
Shakespeare's Tragedy of King Lear presents the chronicles of the gendary prehistoric Leir of Britain in a gravid darkness unparalleled by any other artistic rendition. While many theatrical representations of the eltic king, including Chronicles by Raphael Holinshed and The Faerie Queen by Edmund Spenser, conclude romantically with Lear restored to power, Shakespeare's King Lear and King Lear alike are terminated in a pool of blood, regret, and betrayal recognized in vain (Bevington, 656). Furthermore, the earliest written account of the legend, recorded by Geoffrey of Monmouth in c. 1120 A.D., narrates the legend's conflict as not being initiated by Lear's daughters at all, but instead by the abhorrent husbands of his daughters, who are rightly surmounted without significant casualty (Flues, 2). Shakespeare produces the tale of King Lear in an ominous and sinister manner which, instead of optimistically implying that man can avoid catastrophe and achieve insight through that avoidance, suggests that perhaps mankind is a race ultimately doomed by its own sin, its own deceit, and its own inability to overcome such flaws. King Lear embodies an allegory for the downfall of man, in which the evil constituents of humanity first eradicate its remaining virtuous members and then destroy each other, leaving a shattered hope for the survival of mankind.

14

American Recovery and Reinvestment Act of 2009
Amanda Cappelle • POL • Barbara Headrick • LO 102 • 1:20PM
I will be talking about The American Recovery and Reinvestment Act of 2009, or better known as the Stimulus Plan. I will be talking about the policy and how it is moving along in the policy process and the effects of the policy on the economy after it was put into effect.

16

Diapers: Stickin it to the Man
Richard Johnson • CMST • Jason Anderson • CMU 205 • 1:20PM
Diapers: Stickin it to the Man" is a presentation showcasing diaper company's oppression toward men through advertising and underlying themes. The analysis is conducted through the critical approach to rhetoric and will analyze power relationships. The presentation will have a satiric edge caused by the highly unorthodox stance the rhetorician will take. The climax of the presentation will be the comparison of critical analysis to a simple objective survey which will leave the audience to decide the credibility of critical rhetoric.

297

Don't Ask, Don't Tell.
Marissa Peterson • POL • Barbara Headrick • LO 93 • 1:20PM
Please include this presentation among the panels for Dr. Headrick's POL 341, Public Policy class. We request panels made up of members of the class. Thank you.

298

The Role of Human Rights on International Extradition
Leia Fogel • POL • Andrew Corteh • LO 101 • 10:30AM
International extradition has been practiced for centuries, but is often not discussed among the public sector of society. The goal of this presentation is to raise awareness of how international extradition is implemented and how the principle of non-refoulement interacts with an individual's human rights when being considered for extradition. Today, international extradition generally takes place under bilateral or multilateral treaties that are developed through negotiations between the concerning nation states. It is important for nation states to find the correct balance between safeguarding an individual's human rights and obtaining beneficial cooperation when extraditing individuals. Under international law, nation states have the obligation of non-refoulement. The principle of non-refoulement is becoming increasingly more relevant to human rights law. Non-refoulement prohibits states from returning individuals to another country where they risk serious human rights abuses such as persecution or torture. Three important documents that prohibit refoulement are the 1951 Refugee Convention, the 1984 Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) (Article 3) and the 1966 International Covenant on Civil and Political Rights (ICCPR) (Article 7). Of these three treaties, at least one is in force in a majority of nation states throughout the world.

299

The Smoking Lamp is Out: The Possibility of a Statewide Smoking Ban in North Dakota
Nathan Benson • POL • Barbara Headrick • LO 101 • 3:10PM
This presentation will be covering the possibilities of a state-wide smoking ban in all bars and restaurants in North Dakota. I will explain the agendas of both the proponents and critics of this legislation, and the steps that must be taken in order for the legislation to succeed.

300

The American Recovery and Reinvestment Act of 2009
Amanda Cappelle • POL • Barbara Headrick • LO 101 • 9:50AM
This presentation will talk about The American Recovery and Reinvestment Act of 2009, or better known as the Stimulus Plan. It will talk about how the policy is coming along in the policy process, including how it is being debated now, after it has been passed and implemented.

301

No Child left behind
Amanda Osborn • POL • Barbara Headrick • CMU ML • 2:30PM
Please include this presentation among the panels for Dr. Headrick's POL 341 public policy class. we request panels made up of members of the class. thank you

302

Policy Formation in Minnesota
Heath Butrum • POL • Barbara Headrick • LO 101 • 3:30PM
This paper will examine policy creation in Minnesota. Throughout the procedure there are many intricate levels of formulation. In this presentation I will walk through the complete process.

303

Unsex Me Here: Gender Role Reversal and Natural Order in Macbeth
Kai Thorstad • ENGL • Sandra Pearce • CMU 203 • 9:30AM
This paper discusses the idea of the "Natural Order" present in Shakespeare's play that influences his tragedy "Macbeth." As Macbeth and his wife reverse the natural order within their marriage, issues arise in Macbeth's life, leading to his violent actions and tragic downfall.

304

About New Health Care Reform
Jin Ah Choi • POL • Barbara Headrick • LO 102 • 3:10PM
This is the project for Political Science 341. It's about the health care reform in Obama administration. I'll tell about what the health care reform, why it becomes issue, and what is debated.

305

Hunger in the United States

Erica Reishus • SOC • Susan Humphers-Ginther • CMU ML • 2:30PM

A child in school is having trouble concentrating in school because his or her stomach is growling constantly. The child's only meal of the day is lunch that is served at school and tries to ignore the stomach pains. Hunger is a prominent problem in the United States and is affecting all ages. From sending children to school on an empty stomach or a man standing in line at a food shelter, hunger is an issue that effects millions of people in our country. It is a bigger issue than that consistent stomach growl; it affects the health of the hungry. Hunger leads to malnourishment, which can be a chain reaction to different health concerns and illnesses. Data from the General Social Survey shows a relationship between the poverty status of a household and the opinion of the status of their own health. People who consider themselves poor were more likely to consider themselves to be less healthy. Hunger is a serious issue in the United States that can be decreased if dealt with properly. The United States has federal food nutrition assistance programs that are only the beginning of eliminating hunger. With millions of people being affected by hunger in our country, this issue should be a high priority to assist and fix.

306

Horizonlines.org | The online magazine

Christopher Franz, Michael Smith • MC • Regene Radniecki • CMU 203 • 1:35PM

Students interested in storytelling have an opportunity to participate in a unique publication. One that has drawn readers from Japan, Germany and Norway as well from the U.S. It is a magazine that has received over 30 regional and national awards and recently won a regional Emmy from the Upper Midwest Chapter of the National Academy of Television Arts and Sciences.

307

Climate Change and Collapse in Ancient and Modern Times

Larissa Harris • ANTH • Michael Michlovic • CMU ML • 2:30PM

Based on Jared Diamond's 5 Postulates of Collapse, climate changes and how societies respond to them can have a key role in a society's collapse. By using past examples of ancient civilizations whose collapse can be attributed to climate change and how they responded to it, I have found modern scenarios, both near and far, in which a similar outcome is possible.

308

A Cultural Phenomenon: The Family Vacation

Erika Bingham • ANTH • Bruce Roberts • CMU ML • 2:30PM

I'm doing a project for my Visual Anthropology course. It's topic is "Cultural Phenomenons" I'm using the Family Vacation as my personal topic. The assignment is going to include photos and an 5-8 page essay on my trip to Okinawa Japan that I'm taking over spring break. The posterboard will of course include photos of the trip, including the hassle of airports, loading luggage at ungodly hours and of course of the actual vacation. The whole project will of course include an anthropological perspective using visual anthropology and the basis is to outline a specific cultural phenomenon through still photography and text.

309

All Star Construction Daycare Facility

Derek Granquist, Tyler Serbus, Zachary Sullinger • CM • Norma Andersen • CMU ML • 2:30PM

We will be giving a quick overview of our company. We will explain why we chose the site and location for our project. Return on investment will be explained for the project. Building design and description will be given in detail to show a clear picture of what the project will look like. We will discuss the estimate costs and the schedule for the project. Going over any unforeseen conditions or issues will also be addressed.

310

Evaluating Voices in Different Languages

Luke Berglund, Natasha Maw • PSY • Magdalene Chalikia • CMU ML • 2:30PM

This study will investigate how voices in foreign languages are rated on the basis of 3 different dimensions, following Osgood (1957). The speakers are 18 males and 18 females in various languages, other than English. Voice segments are 2 seconds long and have been matched for volume. The dimensions represent evaluative, potency, and activity judgments, with 3 scales representing each for a total of 9 judgments per voice. The participants will be presented with 9 instances of each voice in a random order and make one judgment after each presentation. The

presentation of the stimuli will be controlled by Media Lab. We are interested in examining if a consensus is formed among participants on how these voices are rated.

311

The Workings of the Hypothetical DLX Processor

Kirby Price • CSIS • Andrew Chen • CMU ML • 2:30PM

The basis of the Hypothetical DLX processor will be covered in this presentation. This includes a brief history of the processor itself and the design criteria for the Instructional Set Architecture and an overview of the distinguishing features of the ISA. The presentation will also include the types of accepted instructions and usage examples of the ISA of this processor.

312

The Cap and Trade Bill

Linda Nielsen • POL • Barbara Headrick • LO 101 • 2:00PM

President Obama plans to tackle climate change by imposing caps on emissions of greenhouse gases. I will be sharing my research on the Cap and Trade bill that is currently being debated. Information will include some of the following : where this policy originated, why it is being debated, each side of the debate, pros and cons, who is really paying for this, and whether this bill is worth being passed.

313

Personal experiences with screening for early detection of cognitive impairment

Karmen Ternes • SLP • Nancy Paul • CMU ML • 2:30PM

The benefits of early detection as a result of cognitive screenings are being recognized and becoming widely accepted. As the benefits of cognitive screenings become more universal and well-known, professionals are taking the initiative to administer memory screenings to individuals at risk. However, this experience has yet to be explored from the participant's point of view. This research project provided a basic understanding of the participant's experience with the cognitive screening process. This study investigated personal experiences of 13 individuals (ages 65+) participating in a screening process for the early detection of cognitive impairment. This was a qualitative research design and was based on face to face, audio taped interviews compiled of 7 open ended questions after the individual completed the screening process. The screening process used the Mini-Cog (Borson, 2000) to indicate a "pass" or "refer" for further assessment. This research study identified themes concerning how individuals viewed their experience with the screening process.

314

Filppin' for a Cure

Jebby Abraham, Trevor Christiansen • LEAD • Denise Gorsline • CMU 205 • 3:00PM

This is a presentation in regards to a fundraising event that took place in the fall of 2009. Flippin' for a Cure raised money by hosting a free will donation breakfast. This presentation will go through the difficulties and obstacles we faced and how we overcame them and in turn taking more from the project than we ever imagined.

315

No Child Left Behind

Imade Omonuwa • POL • Paul Kramer • LO 102 • 2:50PM

I will be talking about the No child left behind: Its history, and how it was implemented. My main focus will be on the prospects of it being reauthorized.

316

Presentation of a Feasibility Study for Increasing Faculty's Participation at Freshmen Advising.

Vaneesha Dusoruth • ENGL • Hazel Retzlaff • CMU 207 • 2:50PM

Retention has been an issue at MSUM for many years. While many programs have been set up to help out students, who are at risk of dropping out, there are many other measures that can be taken to deal with this issue. One of them might be to encourage and motivate faculty members to be present when incoming freshmen register for their classes. The actual process involves the new students mainly dealing with peer advisors. Involving faculty members can be beneficial in many ways. This presentation evaluates the actual programs, the proposed strategy, its benefits and costs as well as a final recommendation.

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contemporary experimentalist Kyja Kristjansson-Nelson. Specifically, I plan to present review of personal backgrounds, guiding themes and cinematic ideas, and brief analysis of individual films.

322

Properties of Similar Triangles

Laura Kohtala, Andrea Korczak • MATH • Justin James • CMU 227 • 9:30AM

A similarity is defined as a transformation that preserves the ratio of distances. A similarity transforms a figure into a similar figure. This talk will discuss the notion of geometric similarity as it applies to the properties of similar triangles and other similar figures in a planar geometry.

323

Three Dimensional Geometry

Paula Holm, Jared Swanson • MATH • Justin James • CMU 227 • 1:20PM

Two dimensional geometry concerns itself with the properties of points, lines, circles, polygons, and other figures in a single plane. Three dimensional geometry gives a richer structure that allows for skew lines, intersecting and non-intersecting planes, and a notion of volume and solid figures in space. This talk will discuss the three dimensional Euclidean Geometry as well as other three dimensional geometries.

324

The Golden Ratio

Jasmine Henrich, Tanya Rensvold • MATH • Justin James • CMU 227 • 1:45PM

Two quantities satisfy the golden ratio or "divine proportion" if the ratio of the sum of the quantities to the larger of the two quantities is equal to the ratio of the larger quantity to the smaller one. The talk will discuss occurrences of the golden ratio in geometry, its impact on art and architecture, and some natural phenomena that reflect the golden ratio.

325

Violent Portrayals and Aggressive Behavior: The Role of Parents

Kyungyun Kim • MC • Martin Grindelund • CMU ML • 2:30PM

Violence is portrayed through media such as television, video games, the internet, and music. I want to investigate the effects media violence has on young, vulnerable children. Studies by researchers will be presented to show scientific findings. Also, the role of parents as part of this process will be clarified in an effort to show what parents can do to reduce the negative effects.

326

Constructible angles and regular polygons

Patrick Bevans, Haewoong Jeon • MATH • Justin James • CMU 227 • 10:20AM

An angle is constructible if it can be produced using only an unmarked ruler and compass. A regular polygon is constructible if its central angle is constructible. This talk will discuss methods to construct various angles and polygons using an unmarked ruler and compass. We will also discuss the fact that while some angles and regular polygons are constructible, it can be shown that others cannot be constructed.

327

The Moulton Plane

Anthony Batesole, Tyler Otteson • MATH • Justin James • CMU 227 • 9:55AM

The Moulton Plane is a planar geometry in which the lines have been modified from standard Euclidean lines. Rather than having all "straight" lines, the lines bend or "refract" when they cross the y-axis in the plane. Changing the definition of lines in a geometry, not surprisingly, changes its geometric properties. This talk will examine the geometric properties of the Moulton plane and how they differ from those of the standard Euclidean planar geometry.

328

Hyperbolic Tessellations and the Art of M. C. Escher

Joshua Ogaard, David Peterson • MATH • Justin James • CMU 218 • 1:20PM

Unlike Euclidean geometry, which describes objects in a flat plane, Hyperbolic geometry describes objects on a curved surface. The curvature present in a hyperbolic geometry gives this geometry symmetry patterns that are quite different from those in the standard Euclidean plane. This talk will look at tessellations of the Poincare disk model of the hyperbolic plane and how they were used by M.C. Escher to create his Circle Limit prints.

Low Transmission Hologram

in Rosenau • PHYS • Stephen Lindaas • CMU ML • 2:30PM

Rainbow transmission hologram is a specific type of transmission hologram in which, when viewed with white light, the holographic image is seen with the spectral colors spread out across the image, similar to that of a rainbow. The process to make a rainbow transmission hologram is done in two stages. In the first stage, a transmission hologram (the master) is created using a specifically collimated, plane-wave reference beam. This master hologram is then set up against an opaque screen with thin horizontal slits to make a copy hologram. This slit, or copy, hologram retains horizontal parallax, but loses the vertical parallax. Using the reconstruction of the scene, the slit hologram uses the stereoscopic, or real, image. I will attempt to create a rainbow transmission hologram using this method.

Age, Socioeconomic Status, and Health

Issa Malers • SOC • Susan Humphers-Ginther • CMU ML • 1:15PM

The United States Census predicts that by the year 2030, approximately 20 percent of our population will be sixty-five years of age and older. In the last decade alone the number of elders within the American population has increased thirty-one percent. With an aging population, countries all over the world have changed the way we view old age, and we have been motivated to do more research on all the different aspects of aging and geriatrics. The research topic that I have chosen is on old age, socioeconomic status, and the effects these variables have on an individual's health. This area is particularly important to research because there have been more occurring issues with the elderly, poverty, and trouble accessing proper care. By obtaining a level of understanding we can take measures as a society to prevent negative health affects that have come from having a lower socioeconomic status. The Administration on Aging has been trying to formulate a 'profile' of older Americans for a decade to start learning specific behavior, financial, and economic patterns. For instance, did you know that there were almost 20,000 people in the United States aged 100 years or more in 2008? This is an estimated 150% increase since the year 1990. With technological improvements to health and technology, we have the ability to extend life expectancy; it's seniors being able to get access to the proper care that is pushing seniors into poverty and away from a long life expectancy. In the year 2009, only 39% of all older Americans (65 years and older) reported their health was very good, or excellent. Well what about the other 61% that reported having 'mediocre' or just 'alright' health statuses? This number should be enough to show that, in regards to elder care and health status due to income, more research and social surveying needs to be done at this time.

9

Britain's attack on Asylum: A critical analysis of the impact asylum seekers had on xenophobia and the rise of the political far right in Britain

Andrea Cook • INTL • Andrew Conteh • CMU 200D • 2:50PM

There is a rising concern for individuals who are using asylum as an alternative path to immigrate for economic or family reunification purposes in Britain. Politicians and newspapers have capitalized on this concern and have effectively discredited the intent of asylum. Asylum-seekers are a vulnerable target for discrimination; unlike migration from within the EU, the number of asylum claims can be controlled and thus has become a central topic in political debates, especially for the growing far right. This paper will critically assess the relationship between asylum-seekers, xenophobia and the rise of the political far right in Britain.

20

Environmental effects of war on Vietnam

Jacob Purrier • HIST • Nathan Clarke • CMU 208 • 3:15PM

We will be analyzing the effects of chemical warfare on the environment, as well as the people, of Vietnam. I hope to find a strong correlation between the use of chemical warfare and environmental depletion.

21

Understanding Experimental Cinema

Simone LeClaire • FILM • Anthony Adah • CMU 208 • 9:50AM

Experimental cinema is often perceived as inaccessible and even irrelevant to the average person. My presentation provides a starting point for understanding experimental cinema by establishing context for the work of three women experimentalists. Beginning with the Classical French avant-gardist Germaine Dulac, I continue through the (frequently referenced) American Maya Deren and finish with a look at the

329

The Euler Line of a Non-Equilateral Triangle

Seth Anderson, Alexander Freed • MATH • Justin James • CMU 218 • 2:10PM

Any non-equilateral triangle has a line called the Euler line that is defined as the line passing through the orthocenter, circumcenter, centroid, and center of the triangle. In this talk, we will discuss how the orthocenter, circumcenter, centroid, and center of a triangle are defined in terms of points on the nine point circle of a triangle. We will also discuss why these points end up being collinear so that they form the Euler line.

330

Titanium Tetrachloride Catalyzed Synthesis of Novel Bisimine Ligands for Lewis Acid Solvation

Josiah Bjorgaard • CHEM • Craig Jasperse • CMU 218 • 10:30AM
Novel bisimine ("bim") ligands have been prepared in one step from 3,3-dimethyl-2,4-pentanedione and various primary amines using titanium tetrachloride in good yields. As an HCl scavenger, either Triethylamine or DABCO was used. A protocol for isolation of "bim" and monoimine from the crude material has been developed. The purified "bim" ligands have been found to decompose under acidic conditions but are otherwise stable at room temperature. The ability of the various "bim" ligand analogs to form stable complexes with Lewis acids was explored. The use of the complexes in activation of a cycloaddition reaction was determined. For further experimentation with enantioselective reactions, a chiral analogue has also been prepared.

331

Analysis of phenolic acids upon chemically induced SAR in *Cucumis sativus*

Omar Abdi, Sondra McGregor • BIOL • Andrew Marry • CMU ML • 2:30PM
Systemic acquired resistance is a whole plant defense mechanism that works by activating various biosynthetic pathways which lead to increased protection in the cell wall. This response can be induced by a number of pathogens and greatly reduces the severity of infections. Upon exposure to a pathogen, endogenous salicylic acid (SA) accumulates at the site of the infection and acts as a long distance signal molecule by spreading throughout the plant bidirectionally in the phloem. SA is associated with local and systemic induction of pathogenesis-related (PR) proteins, which are thought to contribute to resistance by possessing an anti-microbial effect. SAR can be chemically induced through exposure to salicylic acid, ethylenediaminetetraacetate (EDTA), or isonicotinic acid and tobacco mosaic virus (TMV) inoculation. These substances have shown to duplicate pathogen infection and cause the same expression of PR proteins as an actual infection. While a great amount of research exists on the chemical effects of SAR, little has explored the immediate effects upon induction. Our goal is to identify the chemical changes that occur during the initial stages, specifically the presence of phenolic acids. By exogenously applying salicylic acid to the cotyledons of 2 week old *Cucumis sativus*, we were able to induce SAR. We allowed the SA to stress the plants for intervals of 20 minutes, 40 minutes, 60 minutes, and 16 hours. Liquid nitrogen, Tris HCl with 1% SDS, ethanol, and acetone were used to extract the cell wall. The extracted material was mixed with KOH or acetic acid, along with methanol to achieve pH levels of 4, 6.8, and 12. Using a spectrophotometer, we measured the amounts of ferulic acid, caffeic acid, and p-coumaric acid that were present in the cell wall. Although the experiment is still in progress, our preliminary runs have shown an increase in the amount of all three acids for the first three time intervals, but a slight drop in the levels of the acids by 16 hours.

332

Singing the Blues, and Seeing Them, Too: How Music can Influence Emotional Perception

Carlie Brekke • PSY • Rochelle Bergstrom • CMU ML • 2:30PM
People constantly attribute emotions to others within the context of daily interactions. Many studies have examined the process of perceiving emotions from visual and auditory cues, and how people combine these signals to form judgments of others. Emotional attribution seems to be a multimodal process that can be influenced by environmental factors. This study examined whether music, which has already been shown to influence people's emotions, might also influence the way people perceive emotions in others. Undergraduate students viewed images of facial expressions while listening to emotional music, and then rated the emotions they perceived. It was hypothesized that music would influence participants' perceptions of emotional facial expressions, so that participants who were exposed to sad music would rate the expressions more negatively than those who listened to happy music. The results offer insight into the nature of emotional attribution, a process that is critical for most human interactions.

333

Chiral Relay: Diastereoselectivity of Nitrile Imine Cycloadditions Involving Chiral Pyrazolidinones

Erin Driscoll • CHEM • Craig Jasperse • CMU ML • 2:30PM

The reactivity and diastereoselectivity of 3+2 dipolar cycloadditions of a nitrile imine to pyrazolidinone crotonates will be reported. The dipole is generated in situ by dehydrobromination of a hydrazonyl bromide. The dependence of reactivity and diastereoselectivity on C-substituent R1, N-substituent R2, and Lewis acid will be reported. The chiral relay concept is that the fluxional N-substituent R2 will orient itself trans to the R1 group and provide some face shielding.

334

STM spectroscopy

Deyan Mihaylov • PHYS • Stephen Lindaas • CMU ML • 2:30PM

Quantum mechanics explains the physics of the smallest constituents of matter. When studying the behavior of protons, neutrons and electrons, one finds that behavior to be governed by laws quite different than the ones we experience in our everyday lives. The Scanning Tunneling Microscope is a probe into the world of quantum physics. Through the use of the Scanning Tunneling Microscope we are not only able to generate an image of the atom, but also obtain information about its identity.

335

Optimized Synthesis of N-substituted Pyrazolidinone Rings

Rachel Bloms, Christina Poudyal • CHEM • Craig Jasperse • CMU ML • 2:30PM

The purpose of this research was to develop a procedure to be used in organic chemistry II lab for the spring of 2011. The procedure will involve several reactions. A simple reaction for making a chiral cyclic amino amide ("pyrazolidinone"), followed by reductive addition of benzaldehyde has been accomplished. For the pyrazolidinone ring, much research has been focused on optimizing a time efficient way to get a clean substance. The reductive N-alkylation using benzaldehyde, a small aldehyde, worked well. Ongoing efforts are exploring the ability to use other and larger aldehydes.

336

The Adaptation of American Comic Books to the Screen

Fernanda deOliveira • FILM • Anthony Adah • CMU 208 • 10:05AM

American comic strips have a discernible compositional and narrative technique, as well as a discernible style, and to transfer it to cinema the creators of the movies 300 and Sin City had to create innovative ways of filmmaking that were at once specific to the film medium, but also very faithful to the comics they adapted. This fidelity is not only at the level of the story, but also in the graphic and spatial elements that the Sin City and 300's comic books have. To comprehend this relationship it is necessary to understand what the formal and stylistic aspects of American comic books are, what exactly has been done by movies that adapt them to the screen, and why, specifically, 300 and Sin City are considered to be very innovative. My presentation demonstrates that it is in their manipulation of aspects of the mise-en-scene and editing, as well as a creative use of new technologies that 300 and Sin City achieved their remarkable success.

337

The Effect of Music on Helping Behavior in Second Life: An Exploration of Inter-reality

Ethan Dahl, Casey Lloyd • PSY • Richard Kolotkin • CMU ML • 2:30PM

Over the last few years there has been a growing sense that those immersed in virtual worlds experience these worlds as if they were actually living in them in their real life (i.e. inter-reality). Despite this, there have been few studies which have specifically examined this assumption. It is the purpose of this study to explore the viability of the idea of inter-reality using the virtual world of Second Life and the influence of music on helping behavior as points of departure. The reason for this is that there is a substantial body of evidence that music affects helping behavior in real life (RL), with studies having shown that uplifting music leads to more helping than annoying music, and because music is ubiquitous in the virtual world of Second Life. It is the goal of this research to determine if much discussed notion of inter-reality can actually find empirical support when explored and subjected to research scrutiny. A 3 (type of music) x 2 (type of helping task) independent subjects factorial design will be used to explore the concept of inter-reality. Three music groups will be studied (uplifting music, annoying music, and no music), and the two types of helping tasks will be evaluated (low-cost task and a high-cost task). The low-cost task will be asking participants to join a group in support of Second Life research.

The high-cost task will be asking participants to recruit other participants for research. If inter-reality is a viable construct, it is expected that there will be no differences between the three music conditions in the low-cost helping task. It is expected that uplifting music will lead to significantly more willingness to help on the high-cost task relative to the other two groups.

338
The Politics Behind NASA's Flagship Budgetary Projects
Alexander Boche • POL • Barbara Headrick • LO 101 • 1:40PM

This is for Dr. Headrick's POL 341 class. This presentation will cover the range of political motivation behind the drastic reduction in budget for NASA's current flagship programs, and possible alternatives being proposed. It will examine how the agenda for space exploration has changed and how that affects NASA's flagship program budgeting. The current administration's desire to fall on private interests for supplying space travel for government programs will be explored and its roots in the political realm.

339
The Show Must Go On: How MSUM Campus News Producers created a show during the 2009 Spring Flood.
Lezlie Johnson, Nathan Matson, Andrew Tichy • MC • Aaron Quanbeck • CMU 203 • 1:00PM

The spring flood of 2009 brought students face to face with a natural disaster. Many students spent the extra weeks off from class sandbagging, while others skipped town to wait for things to settle down.

This posed a problem for producers of MSUM's Campus News, a weekly television newscast - written, reported, shot and produced by students - that airs on Prairie Public TV. What was usually a team of more than 30 students dissolved into only a handful of producers and other Campus News staff who stuck around during the flood fight - maybe 10 people at most. Since Campus News airs every Saturday at 7am, producers were faced with a challenging decision: Either cancel that week's show, or produce a flood-centered, college-centered show about the once in a lifetime catastrophe. We chose the latter.

Even though the MSUM campus was closed, producers met and hatched out a game plan. Each producer took on at least one large story and several smaller stories. We followed a Concordia professor on the verge of losing his house, we interviewed sandbaggers in the middle of the night at Fargo's sandbag central, we witnessed college students banding together to save the Fargo-Moorhead area, and we managed to put together a show that rivaled many newscasts around. For our presentation at the Student Academic Conference, we would like to show the Campus News flood show and take questions from the audience. We will also talk about what it is like to produce a newscast about a catastrophe with an extremely small staff and limited resources.

340
Nagorni-Karabakh - Cornerstone in South Caucasus Peace
Zuleykha Asadova • POL • Henry Chan • LO 101 • 1:00PM

This presentation brings to light the conflict that arose in 1991 between the neighboring countries of Azerbaijan and Armenia. This conflict is based on the possession of the regions of Nagorno and Karabakh. Following years of tension and sporadic fighting, a full scale war erupted between the two countries. Even though a cease fire was signed between the two countries, Armenia remained in control of a Karabakh and its surrounding territories, accounting for 20% of total territory of Azerbaijan. This presentation will talk about the effects of the conflict, both political and economical and how till today it leaves a trail of hatred among the populations of the two countries for each other.

341
Optimization of the synthesis of the semicarbazide adduct of cyanoborane
Ismael Banla • CHEM • Gary Edverson • CMU 218 • 9:50AM

Semicarbazide hydrochloride and sodium cyanoborohydride were reacted in various solvents in an attempt to get an optimal synthesis of the semicarbazide adduct of cyanoborane, H₂NCONHNH₂·2CN, (1). The synthesis was performed in THF, acetonitrile, ethylmethylimidazolium bromide ([EMIM]Br), diglyme, hexylmethylimidazolium bromide and dimethyl sulfide. The progress of the reactions in THF, dimethyl sulfide and [EMIM]Br were monitored using ¹¹B NMR spectroscopy. In THF, the progress of the reaction was also monitored as the semicarbazide HCl was slowly added. Our analysis suggested a reaction pathway that started with the formation of a cyanoborane oligomer followed by the formation of (1) and, in diglyme

and EMIMBr, the production of a borazine derivative. With the exception of [EMIM]Br, the yield of (1) was greatly affected by the formation of a cyanoborane oligomer. The isolated yield of (1) was 52.4% when the reaction was carried out in refluxing THF for 2 hours with a 10% excess of semicarbazide HCl and (1) was precipitated by adding hexane to form a 1:1 THF:hexane mixture.

342
Gender Gap in US Unemployment
Tiffany Zilka • ECON • Zachary Machunda • LO 93 • 1:00PM

The purpose of this presentation is to explore and explain the gender unemployment gap in the U.S. from when I turned one year old until a year before the onset US financial crisis. Specifically, I intend to seek answers to the following research questions: Did the gender gap in US unemployment narrow during the period from 1991 to 2007? What factors have contributed to the narrowing gender gap in US unemployment in my lifetime? Has the narrowing of the gender gap in unemployment in my lifetime been greater than the narrowing of the gender gap in unemployment during the period from 1980-1990? If so, what were the possible causes of the speed up in the narrowing of the gender gap in US unemployment, during the period from 1991 to 2007?

343
MIPS
Sarah Altmann • CSIS • Andrew Chen • CMU ML • 2:30PM

This is going to be an introduction to MIPS architecture. MIPS implementations and MIPS assembly language will also be discussed. The history of MIPS will be touched on, as well as its current uses and news.

344
The Making of the Documentary Titled "inspired by Nature"
Kathryn Anderson, Nathan Matson, Cole Ryg • MC • Martin Grindeland • CMU 203 • 2:30PM

"Inspired by Nature" was produced by the broadcast documentary class at MSUM and broadcast on Prairie Public Television on February 6, 2010. The program features Larry Woiwode, writer; Charles Beck, artist; Jim Brandenburg, photographer; Barry and Holly Mawby, herb farmers; and Chad and Natasha Deplazes, state park enthusiasts. The documentary will be shown as part of the presentation followed by a discussion of how the program was created.

345
The quality of Life in the USA, Thailand and Turkey: Does Economic Growth Matter?
Amjad Habouch • ECON • Zachary Machunda • CMU ML • 2:30PM

In this project, we will compare and contrast different economic, social, technological and environmental indicators that shape the quality of life in the United States, Turkey and Thailand. We will consider three distinct cases, the difference of quality of life between the United States and Thailand, the gap between Turkey and the United States, and finally, the variation between Turkey and Thailand. We will also look into the reasons why such differences exist, and examine the possibility of integration in the quality of life the developing world.

346
Save Energy and the Environment
Farha Rahman • PHYS • Linda Winkler • CMU ML • 2:30PM

Fossil fuels, a primary source of electricity, are dwindling every day. According to Hubbert's Peak, we've already reached the peak production of oil, so in the near future; the worldwide demand for oil will overcome the worldwide production of it. To conserve fossil fuels, we've decided to design an energy efficient home that will utilize renewable sources of energy and a proper use of structures to trap natural heat or wind as needed depending on the climate condition of the area. In our research we will focus on Minnesota climate, and use a sealed thermal envelope to trap heat and save electricity needed to run the heaters.

347
Operation Christmas Child
Amy Frauenberg, Brooke Wendlick, Chenchen Zhao • LEAD • Denise Gorsline • CMU 207 • 3:10PM

Operation Christmas Child is operated through the Samaritan's Purse organization. The goal of the organization is to fill shoe boxes to deliver to children who are less fortunate around Christmas time so they have gifts. Our goal was to raise the most amount of money in a very short amount of time through our leadership class. We will be discussing our goals, successes and failures while we rose over \$4,000 for Operation Christmas Child.

348

The Feasibility of an Ethnographic Field School

Theona Denzer · ENGL · Hazel Retzlaff · CMU ML · 2:30PM

This project discusses the feasibility of implementing an ethnographic field school for anthropology students. The study will investigate how other universities set up and maintain their field school programs, student interest, alumni experiences, professor availability, benefits and problems. Using this study, the Anthropology Department would have a basis for which the decision of possible implementation could be made.

349

The Art of Piano Accompanying

David Watson · MUS · Laurie Blunsom · CMU 214 · 1:20PM

While solo piano performance is often expected when considering an accomplished "classical" pianist, the piano is more often used as an accompanying instrument. The art of piano accompanying involves more than correct pitches, timing, and dynamics. It also involves an understanding of inherent differences in genre and style, as well as, a "sixth sense" of anticipating the soloist's desires and needs. This presentation will articulate the inherent differences an accompanist faces when collaborating with instrumental and vocal soloists, and the various instantaneous responses required by a professional accompanist.

351

Invasion and hybridization in conspecific *Typha* (Cattail) at the Rice Creek Field Station (RCFS)

Ismael Banla · BIOL · Hyi-Gyung Kim · CMU ML · 2:30PM

The cattail *Typha*, resistant to extreme like coldness, salinity and heavy metal, is ecologically important in many fresh to brackish wetlands. Some species produce large amounts of biomass, comparable to the most productive agricultural crops. Three species (native *T. latifolia*, invasive *T. angustifolia* and a putative hybrid *T. x glauca*) are sympatric in Rice Creek Field Station (RCFS). Morphological introgression among three sympatric species is very common between native and invasive species of cattail. Our study suggested that hybridization between introduced species/invasive species and native species seems to threaten the existence of the native population. The study also suggested local climate with strong influence of the lake effect might enhance the dynamics of population in favor of hybrid. Using molecular markers, we aim to assess the genetic variability of conspecific cattail, understand the genetics of adaptation for invasive species, and examine the underlying nongenetic (ecological and physiological) roles for introgressive hybridization and adaptation of invasive species. We will present preliminary ecological and genetic data on cattail. This study will help gain deeper insight on evolutionary mechanism in cattail and provide the unique opportunity to predict what factor contributes to the evolution of survival of the invasive population via hybridization.

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Investigating the Effects of Agricultural Nutrient Pollution on Semi-aquatic Bryophytes

Morgan Eifelt · BIOL · Linda Fuseller · CMU 204 · 10:10AM

Bryophytes, mosses, liverworts and hornworts, are a group of non-vascular plants that have been used as indicators for air, water and soil pollution. Here in central-western Minnesota mosses are common in wetlands that are surrounded by agricultural fields where soils are typically high in nitrogen. I am investigating whether or not increased nitrogen levels in agricultural areas affect the morphology of semi-aquatic bryophytes, and if bryophytes growing in these areas are adapted to high levels of nutrients. Multiple individuals of the moss *Brachythecium acuminatum* were collected from five wetlands in agricultural and prairie areas with high and low concentrations of soil nitrogen, respectively. Plants were cultured in three levels of nitrogen to determine the degree to which differences in growth rates between the two population types is due to genes or phenotypic plasticity. I hypothesize that moss originally collected from areas with high levels of nutrient pollution from agricultural runoff will grow more successfully on all nutrient levels compared to moss from prairie sites. Thus, I predict those moss genotypes that are established on nutrient rich soils have become better adapted genetically to high nutrient levels than those from prairie sites. I also expect that those plants collected from more nutrient poor areas will grow more successfully on media containing lower levels of nutrients, and show less plasticity in the range of medias on which it will grow successfully.

10 APR, 2010

Housing News

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• The ARO provides academic services including peer tutoring, Academic Service-Learning, Graduation with Distinction in Engagement, and the Honors Apprentice program.

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Location • Flora Frick 151

Phone • 218.477.4318

Peer Advising line • 218.477.2282

Hours when classes are in session • Mondays – Thursday 8 – 7, Friday 8 – 4:30

Hours when classes are not in session • Monday – Friday 8 – 4:30

ARO



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The Office of International Programs salutes all students participating in the Student Academic Conference, particularly our International Students who contribute in immeasurable ways toward the academic and cultural vitality of Minnesota State University Moorhead.

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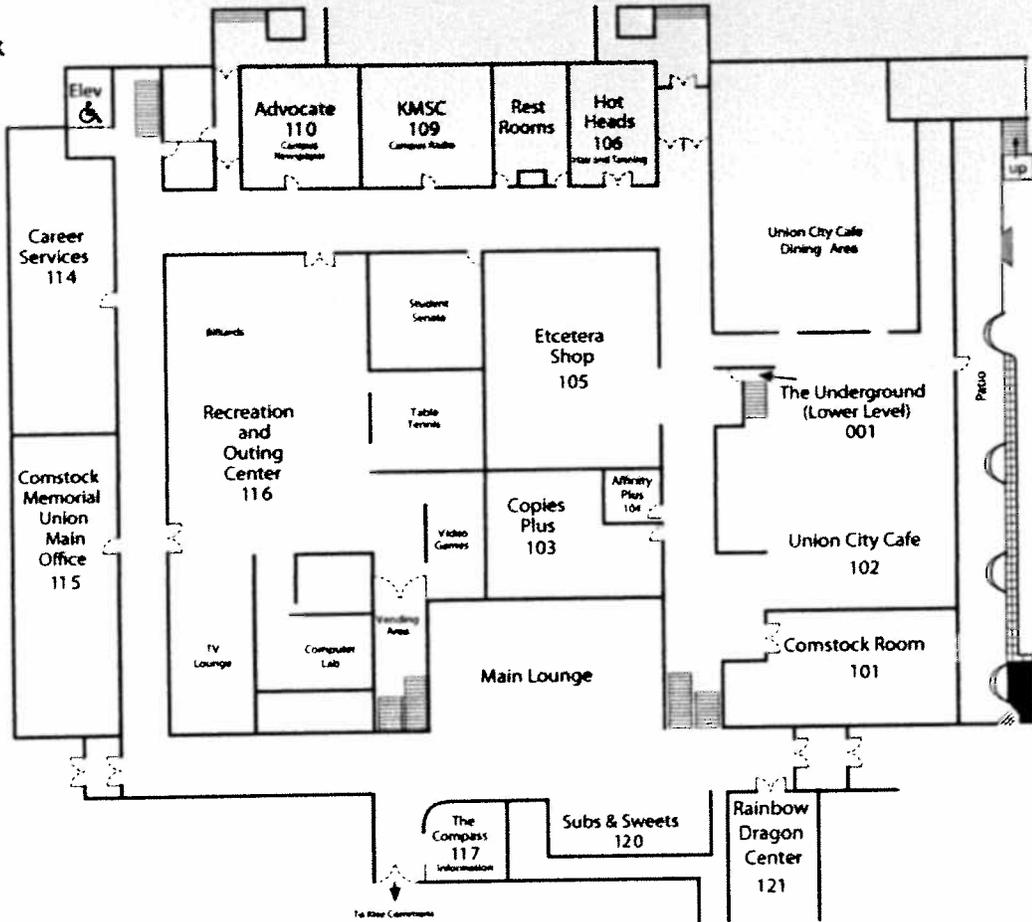
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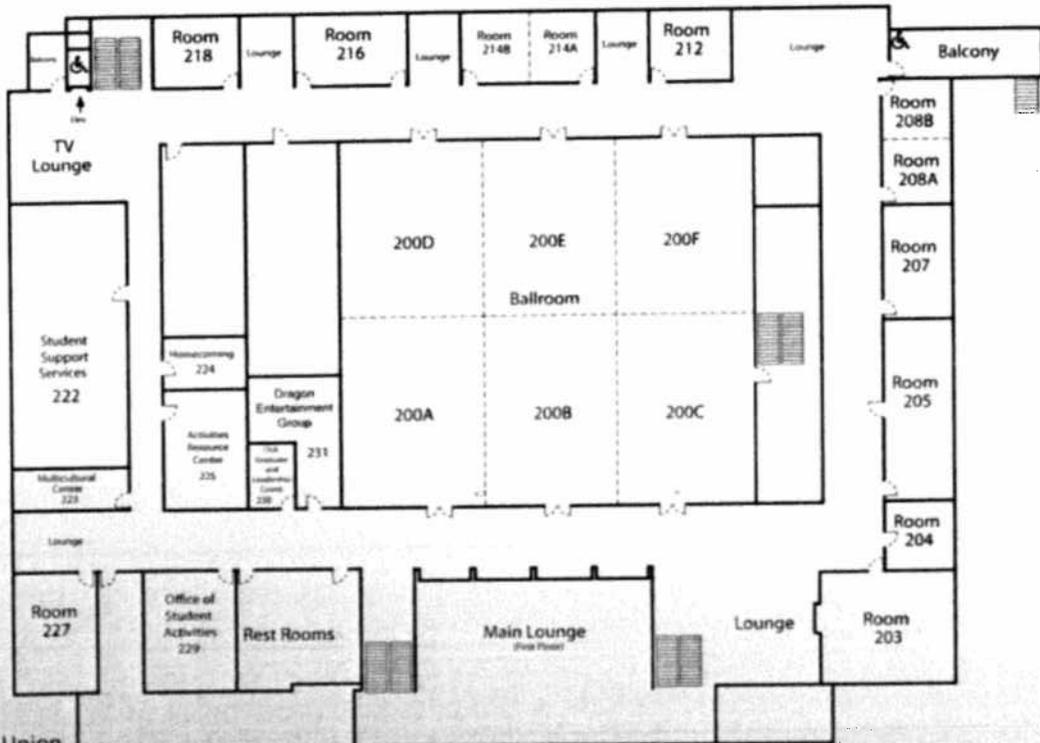


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Dr. Teri Walseth, Dean of Education & Human Services

"The conference is a prime example of what makes MSUM a special place. Student research and creativity, mentored by faculty, is worth celebrating!"

Doug Hamilton, Executive Director of Public Relations

"The SAC is a rewarding experience for all who attend or participate, the return being a breadth of knowledge with real-world application."

Anna Rieke, Undergraduate

"The Student Academic Conference provides a wonderful professional development opportunity to showcase their research and work plus giving them the experience of panel discussion and public speaking."

Kathy Schmidt, Office Manager, Comstock Memorial Union

"The Student Academic Conference should be a part of every student's educational experience during their time at MSUM. The conference offers students the opportunity to discuss their disciplinary knowledge with others in a professional and supportive environment, which helps prepare them to be more confident and experienced when they enter the workforce."

Dr. Michelle Malott, Dean of College of Social & Natural Sciences

"The College of Business & Industry is extremely proud of its student participants. What an excellent opportunity to showcase their knowledge and preparation for life!"

Dr. David J Crockett, Dean of Business & Industry

"Every accomplishment starts with the decision to try. Corrick Center students participate in the annual Student Academic Conference because they are passionate about learning, determine to succeed, and motivated to graduate. The SAC is for all of us. It puts the 'U' in University. Remember, a small group of determined people really can change history."

Dr. Jarilyn Gess, Corrick Center