

Abstract Volume for the 3rd Annual

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Poster #1**WHEN AQUATIC LIFE CAN'T BREATHE IN THE SAN JOAQUIN RIVER,
NOTHING ELSE MATTERS**

Miguel Alvarez, Marshall Haueter, Stephanie Kong, Gary M Litton

Dissolved oxygen concentrations in the San Joaquin River near Stockton declined from 8 mg/L on January 1, 2003 to 0 mg/L in early February. This reach remained anoxic throughout most of February. This was the most severe dissolved oxygen deficit of record for the San Joaquin River. The environmental engineering research group at Pacific investigated potential causes for this phenomenon. A field and laboratory investigation was initiated to quantitatively determine the causes and mechanisms responsible for this extreme event. Kinetic rate studies of biochemical oxygen demand (BOD) and ammonia nitrification were performed in the laboratory and compared with modeled analyses of field observations.

High ammonia concentrations were measured in the San Joaquin River at concentrations that exceeded levels toxic to sensitive aquatic life. Nitrifying bacteria readily convert ammonia to nitrate and in the process these microorganisms consume four times as much dissolved oxygen as ammonia on a mass basis. The ammonia load to the River originated from the discharge of treated wastewater effluent from the City of Stockton Wastewater Treatment Facility. Near zero net flows in the San Joaquin River during February exacerbated the problem by limiting dilution of the treated effluent and dramatically increasing the residence time of the water in the critical reach near Stockton. The long residence time of the ammonia in the River also permitted acclimation of nitrifying bacteria to levels critical for nitrification rates to exceed reaeration rates. This work indicates that hypoxia in the San Joaquin River could be eliminated by additional treatment of the City of Stockton effluent, and better management of water diversions and resources in the Sacramento-San Joaquin River Delta.

Poster #2**DIGRAPHS THAT SATISFY A PARTICULAR GALLAI-TYPE THEOREM.**

Jason Albertson and Audene Harris

If x is a vertex in a digraph then the outset of x is the set of all vertices toward which x has an arc. The closed outset of a set of vertices is S together with the outset of each vertex in x . A set S is dominating if the closed outset is the vertex set. The lower domination number of a digraph is the smallest size of a dominating set in the digraph. The maximum outdegree of a digraph is the maximum size of an outset of any vertex in the digraph. Preliminary results toward characterizing digraphs satisfying the property that the sum of the lower domination number and the maximum outdegree of a digraph equals the number of vertices in the digraph are discussed.

Poster #3**IMPLEMENTING A CORPORATE KNOWLEDGE MANAGEMENT VISION AT A PLANT LEVEL: WILL MANAGEMENT ADOPT THE CONCEPT?**

James D. Martin, Dr. Abel Fernandez

Companies are developing innovative ways to increase productivity by utilizing their employee's captured knowledge to make future decisions. General Mills, a Fortune 500 company and leader in the cereal manufacturing industry, recognizes the need to develop knowledge management within their engineering divisions in order to retain industry leadership.

This research focuses on executing a corporate knowledge management solution within to engineering department at the Lodi, California plant and outlines challenges including integration and customization based on plant engineering requirements. Capturing the tacit knowledge behind capital project decisions is key in preventing additional investment dollars from being allocated on company knowledge that has already been developed in the past.

General Mills embraces the vision of knowledge management. However, quantifying the benefits is challenging due to the difficulty of quantifying "knowledge" and poses issues in convincing plant management to adopt the solution. Long-term productivity goals gained from a solution must outweigh the initial investment. Therefore, a benefit/cost ratio must remain above 1.0 for plant acceptance.

This research provides General Mills with an implementation plan to execute at the plant level. Knowledge management is critical to General Mills' viability in increasing productivity, decreasing capital project costs, and retaining industry expertise.

Poster #4**CHARACTERIZATION OF DIRHENIUM(III) CARBOXYLATE COMPOUNDS**

Bryan S. Euzent, Elizabeth F. Day

This research study focuses on determining the coordination of the nucleobase 9-ethyladenine with a quadruply bonded dirhenium(III) complex, $\text{Re}_2(\text{O}_2\text{CCH}_3)_2\text{Cl}_4 \cdot 2\text{H}_2\text{O}$. The coordination of metals with nucleobases is proposed to be the origin of anticancer activity in some cancer medications. N9 of adenine is substituted to simulate adenine in a natural system where it is attached to the sugar-phosphate backbone of DNA. The nuclear magnetic resonance (NMR) analysis of $\text{Re}_2(\text{O}_2\text{CCH}_3)_2(9\text{-EtAH})_2\text{Cl}_4$ will be discussed. It was originally thought that one N6 hydrogen migrated to N1 during synthesis to facilitate binding but this is not seen in the ^1H NMR spectrum. Initial work to obtain crystals of this compound for X-ray analysis was not successful but attempts will be discussed. Anion exchange of chloride ions may enable the isolation of crystalline product. Preliminary results of these exchange products will also be presented.

Poster #5**REDUCTION OF DNA DAMAGE BY INTERACTIONS OF DIETARY COMPOUNDS WITH DNA**

Tam L. Hoang, Hanh My Bui and Uta Hellmann-Blumberg

Plant-derived dietary compounds and supplements are potential sources of chemicals that reduce cancer risk. The purpose of this study was to examine the effect of genistein, a soy-derived isoflavone, on DNA adduct formation. Cisplatin, a DNA damaging agent used in anti-cancer treatment, was selected as a model for assaying genotoxicity *in vitro*. Since DNA damage frequently occurs at "hotspot" sequences, we chose the human p53 gene (exon 7 - 9) as "hotspot" target DNA. Target and excess of carrier DNA were incubated with cisplatin in the presence of genistein or control chemicals overnight at 37°C in buffered saline solution. The extent of DNA damage was detected by a polymerase chain reaction (PCR) and agarose gel electrophoresis assay developed for this purpose. Reduction in the amount of a p53-specific PCR product was taken as evidence of DNA damage. Genistein was found to negatively affect cisplatin-induced DNA damage. A significant retention of band intensity was observed at 2 mM genistein. Quercetin, another plant-derived flavone had a similar effect at the same concentration. The intercalator ethidium bromide also restored band intensity, indicating intercalation could be a mechanism involved in DNA damage reduction by flavones and isoflavones.

Poster #6**ISOLATION AND IDENTIFICATION OF WINE PRODUCTION WASTE MICROBES**

Huong Hunyh, Phuc Le, Victoria Leong

When it comes to consumption products, sanitation is a concern in every aspect of production. Many industries today strive to restrict levels of contamination in both their products as well as waste in order to meet optimal environmental and health standards. In the Van Ruiten-Taylor Winery, waste products emit an unusual odor possibly linked to bacterial growth. In order to assign proper disposal methods, we must identify the bacteria present. This can be achieved through a series of tests. Using the Gram Stain technique, we determined most of the bacteria present in the samples given to us by the winery to be gram-negative. Tests for oxidase activity revealed that most of the bacteria were oxidase-negative. This information along with results from API20 experiments allows us to determine the identities of several of the microbes. This information will provide the Van Ruiten-Taylor Winery with insight helpful towards development of safe disposal and treatment methods.

Poster #7**EXPRESSION AND SECRETION OF PROCHYMOSIN IN *PICCHIA PASTORIS***

William Giang

Pichia pastors is a popular yeast strain for heterologous protein expression. For example *P. pastors* has been used to express over 500 proteins. Heterologous protein expression allows a host organism to express a protein that is not normally in a host organism. *P. pastors* is an attractive host organism to use because it doesn't secrete a lot of its own protein, which means that little purification of the target protein needs to be done, once your target protein is secreted. Though it is advantageous to use *P. pastors*, there are some drawbacks. Some proteins do not secrete very well from *P. pastors*, meaning the protein stays trapped in the cell of the yeast.

The goal of this project is to isolate mutants of *P. pastors* which are super secretors, which are those that secrete more efficiently than the wild type. In order to accomplish this task, a reporter protein has to be set up to aid in screening the mutants. Prochymosin is used as the reporter protein because it has been used to isolate super secretors of *Saccharomyces cerevisiae*, and should be easy to use. In this project, prochymosin is expressed from the pGAP promoter. A pGAPza-prochymosin reporter plasmid was constructed and electroporated into competent yGS115 cells, which is a strain of *P. pastors*. The cells were then grown on Zeocin plates to select for colonies that had picked up the plasmid. These colonies were streaked for single colonies and assayed by Western to confirm that the *P. pastors* clones expressed and secreted the prochymosin. Once we understand how well the reporter protein works in the wild type, data can be gathered from the mutant strains and compared to see if it is a super secretor.

Poster #8**A QUICK & EASY TRANSFORMATION METHOD FOR *PICCHIA PASTORIS***

William Wong & Joan Lin-Cereghino

There are 2 traditional methods to transform DNA into yeast cells. One method is using chemical treatment (sold as Easy Comp kit by Invitrogen Corp. Carlsbad, CA). The second method is electroporation, which uses electricity to make the cell walls, of yeast, more permeable. Each method has its benefits and drawbacks.

Easy Comp procedure is quite long and requires many steps. However, preparation steps to make the yeast cells are quite simple and require little time. The transformation yield of Easy Comp is quite low compared electroporation.

Electroporation procedures are quite short. The drawback though, is that the preparation steps are lengthy. Overall, electroporation results in a high yield.

The objectives of these experiments are to combine the preparation procedures of Easy Comp with the transformation procedures of electroporation. In theory, this method should be the most time efficient process and with transformation efficiency similar of that of electroporation.

Poster #9THE EXPRESSION OF MET10 GENE IN *PICCHIA PASTORIS*

Alexander Amby, An Ngo, Benjamin Yount

With its wide range of uses such as human insulin and hepatitis vaccine, *Pichia pastoris* is a yeast that has been used to synthesize a vast array of vital heterologous proteins. In order to produce a foreign protein, a selectable marker, in this case a met 10, must first be isolated. The MET10 gene is fused to a foreign gene, and is introduced into *P. pastoris*, which will incorporate the foreign gene into its own DNA genome. For this experiment, a met lo strain, which cannot produce the amino acid methionine because it lacks a functional MET10 gene, will be used as a host. This means that this certain strain cannot live in an environment that has no methionine. In order to place the foreign gene into this host genome, the foreign gene must be fused to the functional MET-10 gene in a plasmid, which is a circular piece of DNA. Afterwards, it can be transformed into our met lo strain, the yeast cell that picks up the foreign gene and the MET10 gene will now be able to live in an environment that lacks methionine. Now we expect that a cell that lives in the absence or methionine to be able to make a foreign protein. We are genetically engineering yeast strains and plasmids for this MET10 system. Once this has been successfully completed, many new avenues will open and this will allow for the cheaper production of many products pertaining to the pharmaceutical and bioengineering industries.

Poster #10IDENTIFICATION OF CeABF-1 INTERACTING PROTEINS IN *Caenorhabditis elegans*

Phyllis Chan, Christine Phan, and Jeremy Lathrop

The gene CeABF-1 in the nematode *Caenorhabditis elegans* encodes a basic Helix Loop Helix (bHLH) transcription factor. The encoded protein is functionally similar to the product of the ABF-1 gene in mammals. The mammalian protein appears to be important during normal development and may also be misexpressed in certain abnormal cells. In order to further understand how this protein works in multicellular organisms, we are studying CeABF-1, in the hope that comparison of the simple nematode to the more complex mammal will elucidate fundamental principles of the function of this gene. As a first step, we are identifying proteins that interact with CeABF-1 using a "two-hybrid" screen. Thus far, we have cloned several possible interaction partners and confirmed the identity of several of these partners. One of the identified interactors is the gene CeE, which encodes the nematode homolog of a well-known ABF-1 partner. Other clones correspond to genes that have not been previously linked to ABF-1 or other bHLH transcription factors. Characterization of these genes may help us to understand how ABF-1 (and CeABF-1) function in normal cells.

Poster #11**IDENTIFICATION OF GENES REGULATED BY ABF- 1 USING REAL TIME PCR**

Anthony Eusebio

Activated B-Cell Factor-1 (ABF-1) has been seen to be a very important repressor in the regulation of the expression of numerous genes in B-cells and muscle cells. In cells infected with the Epstein-Barr Virus (EBV), ABF-1 expression levels have been observed to be above normal. It can be speculated that EBV is using ABF-1 as a defense to repress the expression of other genes that possibly contribute to the resistance of EBV. We have attempted to identify the various genes regulated by ABF-1 using Real Time Polymerase Chain Reaction (Real Time PCR). Real Time PCR is an extremely valuable tool that is used to quantify mRNA levels. B-cells and mouse muscle cells were transfected with ABF-1 in a TREX plasmid. As a control, we transfected B-cells and mouse muscle cells with a TREX plasmid without the ABF-1 gene. The mRNA used in Real Time PCR was obtained from these transfected cells. mRNA isolated from the transfected cells were reverse transcribed into cDNA as the template for Real Time PCR. To amplify our genes of interest we designed primers based on sequences obtained from the data base. Real Time PCR can quantify the DNA by SYBR Green Fluorescence. The data from Real Time PCR of ABF-1 transfected B-cells and control TREX transfected B-cells were compared to look at the regulation of ABF-1 on the various genes of interest. Throughout these studies, we can come to a better understanding of the function of ABF-1 and ultimately find correlation with the interest of EBV in ABF-1.

Poster #12**ISOLATION OF ACTIN CDNA FROM LACTRODECTUS HESPERUS**

Norma Reyes

Actin has a very important function in muscles of many organisms where it is necessary in the cytoskeletal processes of a cell. We have attempted to clone the actin cDNA from the black widow spider, *Lactodectus Hesperus*. This was done by first designing primers based on evolutionarily conserved regions of the actin gene of various organisms. These primers found and extracted a fragment, by Polymerase Chain Reaction (PCR), which matched a predicted size. The authenticity of the fragment will later be confirmed at the nucleotide level by DNA sequencing. We are interested in cloning the black widow's actin cDNA for a number of reasons. First of all because of its use as a normalizing agent. Actin is useful at quantization of RNA's in tissue sample comparisons because it is known to have relatively constant concentrations in most tissues. Another use of this cloned sequence will be for comparison of conservation in structure and sequence amongst organisms.

Poster #13

ISOLATION OF LATRODECTUS HESPERUS SPIDER SILK GENES

Paul Geurts

The two major proteins that make up dragline silk, major ampullate spidroin 1 (MaSp1) and 2 (MaSp2), have been cloned in different species of spider. To search for the homologues in *L. hesperus* (the black widow), we searched the literature and found conserved regions in the amino acid sequence of the MaSp1 and MaSp2 proteins across species, and assumed that those same motifs would be conserved in black widow silk. We made degenerate primers and obtained small fragments of cDNA corresponding to these regions; we used these retrieved cDNAs as probes to screen a silk gland cDNA library for longer gene pieces. We have isolated approximately 4 kb cDNA fragments of MaSp1 and MaSp2. We have partially sequenced each cDNA. A similar approach is being used to isolate the gene that comprises egg case silk from black widow spiders. This approach is a slight modification of the steps mentioned above due to the fact that there is no sequence information available from other species. For isolation of egg case cDNA, we have obtained peptide fragments from purified egg case silk and determined their amino acid sequence using matrix-assisted laser desorption ionization time of flight (MALDI-TOF) mass spectrometry. Designing primers from these fragments, we have performed PCR and isolated the gene.

Poster #14

OPTICAL FIBER-FED SPECTROSCOPY OF PULSATING VARIABLE STARS

Peter Torres

Cepheid variable stars are giant stars with unstable outer atmospheres which pulsate radially with periods of days to weeks. As the surface of the star approaches and recedes from the observer, there is a measureable Doppler shift in the star's spectrum. This Doppler shift can be used to measure the rate of change of stellar radius in kilometers per second, which can be used to infer astrophysically interesting properties of the star, such as size and radius.

In this poster, I describe a portable observational setup used to observe spectra of Cepheid variable stars. I used a 10-inch reflecting telescope, fiber-coupled to a small grating spectrograph, which imaged spectra with a CCD camera. The telescope and CCD were controlled by the same laptop computer. I designed and helped to construct a mirror fibercoupling for the telescope which allowed simultaneous guiding and spectroscopy. This component greatly improved the efficiency and reliability of the observations. I performed observations with this setup in an orchard in Salida from June 2002 to January 2003. I wrote a software package called "lambda" in the Interactive Data Language (IDL) which performs data processing and doppler shift measurements for the observations. I also performed similar measurements of the same data with the Image Reduction and Analysis Facility (IRAF) to double-check the results.

In this poster I describe the results from the current observations with a particular emphasis on the radial velocity versus time and phase for the star Delta Cepheus.

Poster #15**INTERVIEW AND OBSERVATIONAL RESEARCH ON STOCKTON UPTOWN BUSINESSES, PUBLIC AGENCIES AND EDUCATIONAL ORGANIZATIONS**

Robert Botto, Diana Padilla, Cecilia Roderiguez and Nga Lann

Results of four field studies associated with Jacoby Center research on the Midtown neighborhood of central Stockton are presented. The studies are intended to help students understand the functioning of Midtown institutions. Interviews were conducted with Midtown business representatives to determine their commitments to neighborhood revitalization, and observational research was undertaken to understand how agencies exercise social control over clients and involve themselves in community decision making. Results showed that willingness of business representatives to involve themselves in neighborhood revitalization efforts depended on the degree to which rational calculation of advantage accounted for responsiveness to community involvement opportunities, that efforts to control at-risk youth in an educational organization depended upon effective relationship building that facilitated Coup based peer decision making and sanctioning, and that similarly, public agencies involved in controversial projects invest substantial efforts in relationship building with constituents and other public agencies prior to direct efforts at decision-making on controversial projects.

Poster #16**THE BATTLE, IN THE GARRISON: PUBLIC HEALTH AND PREVENTIVE MEDICINE IN THE BRITISH ARMY DURING THE AGE OF ENLIGHTENMENT**

George Yagi Jr.

For many, 18th century British Military Medicine conjures up images of surgeons with bloodies saws accompanied by screaming patients. This image however, is incorrect as military medicine in the British Army consisted of much more than the use of saws since they were mainly employed during and after a battle. British Military Medicine during the 18th century did not primarily focus on the use of leeches, purges, and surgeons saws. It focused on the preventive measures that could be taken in order to prevent diseases from arising among the soldiers. Although the mortality rates of soldiers continued to be high up until the 20th century, it was during the 18th century that there began an increasing practice of preventive medicine and an increasing awareness to the idea of public health. This was primarily due to the work of Sir John Pringle, a renowned British physic fan who accompanied the army during the War of the Austrian Succession, and the Forty-Five Rebellion in Scotland during the 1740s. From his observations of the army, Pringle wrote his book *Observations on the Diseases of the Army* which had a tremendous impact in promoting the idea of public health and preventive medicine by describing the conditions that were unhealthy and deadly to the soldiers so that they could be avoided in order to ensure that the soldiers remained healthy. Such preventive methods had the potential to be effective in preserving the health and lives of the soldiers. What mattered in the end was how effective officers were in putting the methods to practice.

Poster #17**MARIJUANA TOLERANCE AT UOP**

Davey J. Larson, Tiffany Rillon, and Stefanie Grijalva

Utilizing Borgardus' Social Distance Scale in a unique manner, this study measures the "social distance" of tolerance concerning marijuana usage on the UOP campus. In our study we attempted to examine how University of the Pacific students felt about the use of marijuana and to identify the social characteristics of those who were the most tolerant. We focused on a comparison of students who live on and off campus, as the 2001 New Hampshire Higher Education Alcohol, Tobacco, and Other Drug Survey found that students who lived off campus used significantly more tobacco, alcohol and marijuana. We also asked participants in our survey for various other demographic criteria which we hope can be used in further research of drug tolerance. In general, the results of this study indicated that off campus students have a higher tolerance of drug usage than do those who reside in campus dorms, apartments or Greek housing.

Poster #18**COLLEGE STUDENTS' UNDERSTANDING OF LEARNING DISABILITIES AND NEEDED ACCOMMODATIONS**

Karen Sanford

Students with learning disabilities have an added challenge to reach college success. It is made even more difficult when their peers and professors do not understand their disabilities and need for classroom accommodations.

Participants were randomly assigned into two groups and were given information to read. One of the groups read information about learning disabilities, while the other read information about college success. Participants completed a 5-point Likert scale to determine their understanding of learning disabilities. While the results indicated no significant difference between the mean ratings of the two groups (read information on learning disabilities, $N = 81$, $M = 3.52$; read information on college success, $N = 86$, $M = 3.52$), the data suggest that college students do not understand learning disabilities completely, and would benefit from more information.

Poster #19**INTERACTION AND INTEGRATION IN THE MENTAL LEXICON**

Ananda P. Case

Currently, there is no agreed upon model for language acquisition that successfully represents the interactive nature of the mind *and* accounts for the gradual integration of new words into the mental lexicon. This paper unites two models: an interactive model and the Depth of Individual Word Knowledge (DIWK) model. The proposed model is tested through an experiment that seeks to answer two questions: 1) How can links between concepts and words be strengthened? 2) Do some methods result in stronger links than others? Two main hypotheses are proposed in regards to second language (L2) vocabulary: 1) Tactile input will result in increased retention and 2) Decreasing first language (L1) interference will yield increased retention. Results suggest that tactile input is not a major factor in strengthening links; however, limiting L1 interference is much more successful. These results leave much unknown about the role that other types of linkages - such as sensory input and episodic memory - may play in strengthening interaction and integration in the mental lexicon.

Poster #20**EASTERN EUROPEAN PROVERBS**

Jonelle Michael, Lauryn Bole, Crissy Woodward, Danille Schrader, Fabiola Duran, Patricia Hogan

Through proverbs this study wants to show culture characteristics of Russian, Swedish, German, Polish, and Belgium countries. According to the Sapir-Whorf Hypothesis, language shapes and influences how people perceive their world and culture. Therefore, we can correctly discern that the proverbs of each country clearly reflect its culture, which in turn reflects people's thoughts. After researching these five Eastern European countries, we found that each country has its own unique characteristics; yet at the same time, some of the countries do share similarities. Poland's culture is very individualized, business-orientated, social, and traditional. Russia's culture places spirituality over material belongings, promotes integrity and honesty, and values its past history of overcoming tragedy. Sweden's culture is easy-going, old-fashioned, informal, and future-orientated. Belgium's culture focuses on history and religion, promotes the country's unity, and values family bonds. Germany's culture seeks risk-aversion and is a collectivist culture. From analyzing and researching these Eastern European countries, we have found that although the proverbs of each country accurately reflect the countries cultures as a whole; however, one can not accurately conclude that all of these countries share the same beliefs, values, attitudes, and behaviors.

Poster #21**IRISH CULTURE AND HERITAGE AS TOLD BY PROVERBS**

Jenny Avon, Aly Dodell, Rachel Leith, April Liggett and Kevin Olson

Many different aspects of Irish culture and heritage are addressed in this paper, mainly through the use of proverbial sayings passed down from generation to generation. This paper tackles the subjects of work, social life, familial duty, education, religion and politics by stating and interpreting various proverbs to provide an insight to Irish life. The goal of this paper is to show that Irish culture today is deeply rooted in the rich past of Ireland and its people through proverbs. What better way is there to show this than by using sayings established long ago by these very people?

Poster #22**ASIAN PROVERBS**

Tamika Bolden, Sok Heng, Uyen Hoang, Andrea Jacobsen, Rachael Navarrete, Linda Phin, Kristen Sasaki, Azin Tarifard, Huong Tran

The purpose of this study is to examine the commonalities and differences among Asian cultures through the use of proverbs. By analyzing chosen proverbs from Vietnam, Cambodia, Nepal, Thailand, Philippines, China, India, and Japan, it was evident that there are many common values and beliefs among Asian cultures. The Internet as well as close family and friends became great resources while conducting this research. They helped to support our initial assumptions that Asian cultures value conformity, honor, intelligence, and education. After analyzing the results, we were better informed about ideas that were significant to these specific cultures. This helps to create better intercultural communication skills.

Poster #23**FINDING CULTURAL SIMILARITIES WITHIN THE DIFFERENT GEOGRAPHICAL REGIONS OF AFRICA BY STUDYING PROVERBS**

Tonquise Jabari, Jenny Hogan, Natalie Lyms, Alisha Betoke and Lisa Menestrina

The focus of our research project is to develop a better intercultural communication understanding of the uses of proverbs in Africa. Our group has divided the continent into five different regions: North, South, East, West, and Central Africa. Our goal is to find a central theme of the uses of proverbs in Africa by studying the similarities of the social and cultural uses of proverbs in the five regions. Our interest in the study of African proverbs is to increase our intercultural communication awareness by studying the origin and history of the role of proverbs in a cultural so rich in oral tradition. By uncovering the cultural and social characteristics of the uses of African proverbs, we hope to find similarities in its uses throughout Africa.

Poster #24

Western European countries have many different views and beliefs surrounding the way their world functions. Each country can relate in their own way to certain areas and aspects of life such as food, dance, work, and many other things that may come along. All of these Western European cultures have many similarities, these similarities and values along with ideas will be compared by using our proverbs we have gathered from certain sources for each country. The comparisons between each of the countries will show how the individual (cultures way of thinking as well as the rest of Western Europe. Showing how these proverbs have made and molded this area in our world.

Poster #25**LATIN AMERICAN CULTURE**

Frank Scottie, Jennifer Ortega, Jessica Banks, Beatrice Castaneda and LaTosha Stigler

The complexity of a culture can be studied through numerous modes of research, yet the study of structure and use of language is by far one of the most revealing. Proverbs, for example, when studied carefully can provide insight on the cultural rules regarding gender, elderly, fate and religion. In using a collection of proverbs from various Latin American countries, this paper presents a common culture as seen through the values alluded through these traditional sayings through research.

Poster #26**GENDER EFFECTS ON SPORTS VIEWING**

Jessica McGovern

We took a sample of 628 college students from both Delta Community College and University of the Pacific of the Pacific campuses to test whether or not gender plays a role in affecting how people feel about men and women being equally allowed to play the same sports. We collected data from each student in the form of a survey. The survey consisted of a variety of issues such as demographic information, emotional intelligence, self-esteem and individual variables. The responses I will be studying will be taken from the demographic information as well as the individual variable section. I will then conduct a t-test to find any correlation between the two variables.

I anticipate that females and males will feel differently about men and women being allowed to play the same sports. I think that females will be more likely and males less likely to think that they should be equally allowed to play the same sports. I also anticipate that females will be more likely than males to enjoy watching women play the same sports that men play.

Poster #27**RECRUITING STUDENTS**

Alexis Louie

A sample of 700 college students test which method most effectively recruits males and females into school organizations. We collected responses from these students to survey a variety of issues such as gender and individual's behaviors. Many school organizations often wonder how they can effectively reach students and draw their interest to become more involved.

To answer this question a survey was given to students at two local colleges. The nonprobability sample was based on the convenience and volunteerism of students from the Spring 2003 Communication 160: Communication Research Methods class.

When testing this research question, the survey requested students' gender and for them to choose a method would most effectively recruit them for school organizations. They were given a list of recruitment options. Possible recruitment method choices included recommendations from professors, friends, parents, flyers, presentations, or a choice entitled "other" where students could write another method that was not originally included.

My anticipated results are that males will most likely be recruited for a school organization by their professors. However, I anticipate that friends will most likely recruit females for a school organization.

Poster #28**ON CAMPUS STUDENTS' COMMITMENT TO SUCCESS**

Cathy Schieberl

Students that live on campus but spend most of their time off campus because of direct access to a vehicle may not be committed to achieving success. Should on campus students be allowed to have vehicles if it hinders their academic success? We collected responses from a sample of 700 college students to test a variety of issues including housing situation, self awareness, mode of transportation and time spent off campus. On campus students are those that live in dorms, university apartments and Greek housing located on campus. The commitment to success is based on the on campus students' perception of themselves. Most students away from home want to experience what's new and exciting. If those students have direct access to a vehicle, success may not be the highest priority. I believe that the results will confirm that on campus students who spend a lot of time off campus because of direct access to a vehicle, are not fully committed to achieving success.

Poster #29**MEDIA USE: THEN AND NOW**

Alexander Lu-Pon

A sample of 700 college students tested the correlation between students having a favorite television cartoon they watched everyday as a child, and watching televisions to be better informed. We also tested the correlation between students' interests in watching old episodes of their favorite childhood cartoons, and their spending habits on entertainment. We collected responses from college students to test a variety of issues such as media use and self esteem.

We tested the students by using a non-probability sampling of the population, mainly through convenience. Each student in our research class took the survey to our most populous class, without overlapping, and surveyed the students in those classes. Additionally, we went to Delta College and surveyed students as well.

The data collected from these 700 students allows us to investigate the research question: does a student having a favorite television cartoon show as children, make students more comfortable receiving information through television as adults. Anticipated results are that if a student had a favorite cartoon show as a child that they rarely missed, they will be more inclined to use television as their means of becoming informed. This correlation is based on the hypothesis that the students that had a favorite cartoon show to teach them morals and entertainment in the past are more inclined to use the hypothesis that the more interested a student is in revisiting childhood memories, the more interested they will be on entertainment and preservation of the ideals of childhood; fun and enjoyment.

Poster #30**HOW DOES A STUDENT'S EMOTIONAL INTELLIGENCE AFFECT THEIR PARTICIPATION IN RISKY BEHAVIORS?**

Tanja Solheim

A sample of 628 college students tests how emotional intelligence (EQ) affects student participation in risky behaviors. It is anticipated that emotional intelligence negatively correlates with participation in risky behaviors. Examples of risky behaviors include not wearing a seatbelt or exceeding the speed limit while driving, engaging in pre-marital or unprotected sex, smoking marijuana, driving under the influence of alcohol, binge drinking and smoking cigarettes. The cross-sectional survey included college students from two universities in Central California.

Poster #31**BELIEVE IN YOURSELF**

Kristin Stern

In a study of 628 college students attending both Delta College and University of the Pacific in Stockton, CA it is evident that there is a positive correlation between those students who possess a high self-esteem and emotional intelligence, and people who tend to date more often. The research method was a non-probability survey from a convenience based sample of students. The survey included 81 questions and 8 different sections. Using self-esteem and emotional intelligence as independent variables and dating habits as the dependent we see the connection. This study reveals that if a person is confident with them self and knows who they are and what he/she wants from others, then this person will date more often and have more successful relationships.

Poster #32**TV NEWS VIEWING AND EMOTIONAL INTELLIGENCE**

Allie Wager

A sample of 638 students tests how television news viewing affects individuals' emotional intelligence. It is expected that television news viewing positively correlates with a higher level of emotional intelligence when viewing television news. The rationale behind this is that television news informs the viewers and helps viewers develop a sense of control and a sense of knowing themselves. Some initial results from the study show that there is a significant positive correlation between emotional intelligence and television news viewing. Other types of news consumption such as using internet to seek information, reading newspapers to learn about the nation and the world, and listening to radio for information all have significantly positive correlations with emotional intelligence. It is interesting to see that using chat rooms on the internet to kill time does not have a significant correlation with emotional intelligence. The cross-sectional survey included students from two universities in the central part of California.

Poster #33**THE AMERICAN RED CROSS AND 9/11**

Gregory W. Ahlback

On the morning of September 11, 2001, the United States experienced the cruel power of terrorist group's first-hand. Four planes headed to different destinations and were hijacked by terrorists. The outcome was both tragic and devastating, and lead to two planes crashing into the World Trade Center in New York City, one plane into the Pentagon in Washington D.C., and the last plane crashing into a Pennsylvanian field. During this time the United States was in a total state of flux. People were worrying about locating loved ones and our government was attempting to find answers about what happened, as well as gain an explanation of why it happened. Many of us were looking for help forcing us to turn to none other than ourselves for comfort and guidance. At this point, non-profit organizations were pushed into the spotlight to attempt to calm and comfort our nation during the wake of the attacks. An organization that aided in the relief effort was the American Red Cross. By being thrust to the forefront of America's attention, several public relations problems surfaced. By doing an analysis of the American Red Cross' public relations response on both national and local levels, we can gain insight to both the effectiveness and appropriateness of the organizations action after September 11, 2001.

Poster #34**HOLLAND AMERICA AND SEPTEMBER 11, 2001**

Christina Evelyn Cerri

The purpose of this study was to examine how Holland America dealt with the September 11, 2001 tragedy. Research was taken from three individual interviews. The interviewees included: (1) a previous Holland America Hostess and Cruise Director; (2) a passenger onboard September 11, and (3) a graduate student. Many issues were reviewed regarding Holland America's handling of the September 11 events. What was Holland America's main objective during the crisis? What was the extent to which the situation was handled? What was the effect the crisis situation had on Holland America Line? The explanations and details given by the individuals were similar throughout each question. The interviewees agreed upon and confirmed Holland America's main objective throughout this particular crisis. They also established that because of Holland America's communication and public relations strategies, it handled and continues to handle the September tragedy with class, care and professionalism. The interviewees shared that in any crisis, public relations is always "the right answer."

Poster #35

MORGAN STANLEY AND 9/11

Melissa M. Chanslor

This particular case study examines the crisis management plan of Morgan Stanley, a global financial services firm, before, during and after the infamous terrorist attacks of September 11, 2001. Although Morgan Stanley was the largest tenant in the World Trade Center, the firm had one of the lowest casualty rates in comparison to other companies. The results of this case study demonstrate that by taking a proactive approach, Morgan Stanley was able to deal with the crisis much more effectively than if it had failed to do so. Also, by maintaining open communication with the company's primary publics throughout the crisis, Morgan Stanley demonstrated a prime example of crisis management.

Poster #36

A MEMORIAL OF TRAGEDY: AN ACCOUNT OF FLIGHT 93

Clarissa De La Rosa

Through research and personal interviews this case study examines the tragedy of United Airlines, Flight 93, the only terrorist attempt that was unsuccessful. The plane, en route to San Francisco was hijacked by terrorists, but overtaken by brave crew members and passengers who took a stand against terrorism. Shanksville, Pennsylvania, the final resting place of the victims of Flight 93, is an old community, a township of only 245 people. This study shows how the community came together and helped a nation mourn. It gives a detailed account of the last moments of the horrific flight, the aftermath that was created and the public relations effort by some to ensure the dedication of a memorial.

Poster #37

BROADWAY THEATRE IN NYC & 9/11

Amy C. Magoun

The theatre community in NYC was hit hard with the attacks on September 11th. It was hit both emotionally and economically. In this case study, I will discuss how the pulling together and the support of a community can help a city heal, both emotionally and economically: first, nationally, with the support of our leaders and authorities in office; second, internally, those involved with Broadway itself, and third outside business support. I will give examples of each of these three areas and discuss more in depth how each of these had an effect on the Broadway theatre industry.

Poster #38**AIRPORT SECURITY SINCE 9/11**

Kelly C. Howell

Ever since the terrorist acts that shook the nation on September 11, 2001, numerous questions have been raised. How did this happen? What can be done to prevent similar strikes in the future? What caused the attacks? Many people believe that it was the fault of airport security. Terrorists were able to find weaknesses in the security system which allowed for such a horrendous event to occur. These weaknesses were of course recognized and standards have been raised. Numerous adjustments have been made to all airports in the country. These changes have come into effect because of the guidelines set by the Transportation Security Administration (TSA). TSA is a federal administration, which was put into effect on January 19, 2002 by President George W. Bush. Their mission is to protect the Nation's transportation systems, and to ensure freedom of movement for people and commerce (www.tsa.gov). A vital part of airport security is that of the screeners. During their training they come to understand what to look for in the bags, but also how to evaluate passengers. Although passenger flying rates have decreased since 9/11, many steps are being taken to change that. Airport security have recognized their faults and have adjusted to certain set backs. Immediately following the tragedy, specific steps were taken to ensure total safety of passengers when in either the airport, or an aircraft, and that continues to date. It has been the standard of airport security that safety comes above all else.

Poster #39**NEW YORK FIRE DEPARTMENT AND SEPTEMBER 11, 2001**

Lydia Islas

Organized fire fighting began in New York in 1648, when the first Fire Ordinance was adopted by the Dutch settlement of New Amsterdam. The uniformed force is under the command of the Chief of Department and consists of more than 11,400 Fire Officers and fire fighters. After the 767 jet liner crashed into the World Trade Center building creating the worst terror attack in history, a fire burned for 56 minutes inside the WTC building number two. The top 20 floors of the building collapsed on the 90 floors below. After a fire burned inside WTC number one for 102 minutes, the top 30 floors collapsed on the lower 80 floors. The Twin Towers were dramatically different structural design as the exterior was used as the load-bearing wall. The outer wall carried the building's vertical loads and provided the entire resistance to wind.

Children's fire toys have become more popular and the FDNY action figures have recently been released. The atmosphere of a fire house is easily compared to a family or fret-house. After 9/11, many FDNY survivors tattooed fallen members names on their backs.

Poster #40**THE DAY THE MEDIA BURIED COMPETITION**

Miles Kirkpatrick

Early on the morning of September 11, 2001, the American way of life was changed forever. Four hijacked planes were used as tactical weapons against the United States of America. Two planes were flown into the World Trade Center, another one into the Pentagon, and the last into the Pennsylvania countryside. Within minutes of the first plane crashing into the North Tower of the World Trade Center, mayhem erupted on the streets below.

With everything to lose, journalists gave the public what it desperately needed. They provided a taste of what it felt like to be in New York City that day. They put the public into a New York fireman's hat. They provided the gut-wrenching footage that made us understand how it felt to pull a human body out of the rubble, or to be clutching a fellow New Yorker on the streets watching the tragedy unfold. The drama was unprecedented, and so was the cooperation between reporters, photographers and news organizations. Especially during the first two chaotic days, news organizations put aside traditional rivalries and helped each other get out the news. This 9/11 case study will focus on how members of the news media joined forces on that fateful day to provide some of the most unforgettable images and statements our country has ever witnessed.

Poster #41**THE WASHINGTON DC CONVENTION AND VISITORS BUREAU AND
SEPTEMBER 11**

Lisa Kissler

The Washington DC Conventions and Tourism Corporation has made many valiant contributions to D.C.'s tourism campaign since September 11, 2001. With generous contributions from numerous companies and foundations, the WCTC has teamed up with local restaurants and district officials to make Washington DC, once again a positive place for visitors. The district early on found that immediate visitations after the tragedy had sky-rocketed with the assumption that people were traveling to visit friends and family. But soon after, they began to notice the slump and knew that it would be a down fall if actions were not taken. The WCTC started its research with surveys of what was on in the district, and became educated on what particular fields they needed to market. They were responsible for implementation of the "Be Inspired in Your City" campaign, which led to other such events. The Restaurant Week, which has now become a local tradition, and other campaigns actively brought the community together and made people want to come to D.C. Washington, DC was fairly lucky after September 11, 2001. Surveys showed that hotel attendance and other such visitations were up from past years.

Poster #42**PORT AUTHORITY AND SEPTEMBER 11TH**

Sager Kopchak

The Port Authority of New York and New Jersey was established as the first of its kind in the Western Hemisphere and the first interstate agency created under a clause of the Constitution permitting compacts between states. The Port Authority is many things, owning lands including the World Trade Center in both New York and New Jersey, and controlling almost all of the bridges, tunnels and airports in the region. Ernesto Butcher, the Port Authority's Chief Operating Officer, discussed what had to be done immediately after the Towers came under attack. Since the Port Authority is in charge of most of the public transportation in the greater New York City region, information about what was still running needed to get out to the community. Butcher remembers, "The first think I thought of when I saw the Towers being hit by the airplanes was, 'Oh my God. All those people.' I wanted to grieve, but what you are in this kind of situation, you need to go into automatic mode, and try to turn off your emotions until your business is attended to" (March 15, 2003, Phone Interview). September 11th was a day full of news releases for the Port Authority. Ernesto Butcher sent out another news release for staff assigned to the World Trade Center. The Port Authority deployed more than 150 of fliers to assist in rescue operations at the horrid crash site. Butcher remembers deciding to close all Port Authority Marine Terminals, the Port Authority Bus Terminal, and the Port Authority Airports, Newark, Kennedy, and LaGuardia. "I understood the danger that we were all in at that point. None of us knew if there was going to be another attack or not, so all public entrances and exits had to be closed in order to ensure the safety of everyone" (March 15, 2003, Phone Interview). This new generation will ask "Where were you on September 11?" instead of, "Where were you when Kennedy was shot?" It was a day that will forever change all of our lives, and a day in which the Port Authority of New York and New Jersey was able to shine. The horrible event brought a nation together.

Poster #43**THE FUTURE OF GROUND ZERO**

Danielle M. Schrader

Since the tragic collapse of the infamous Twin Towers, millions have given their input on what should and should not replace them. Owners, Port Authority of New York and New Jersey, have a lot of pressure behind them to rebuild something remarkable and complementary to everyone's needs. After September 11, the Lower Manhattan Development Corp. (LMDC), a joint city-state agency, was developed to guide the rebuilding at Ground Zero. The quandaries facing the LMDC are the current condition at Ground Zero, what should be built, and whom they should bring in to design a new plan. With heavy criticism waiting in the wings, the LMDC's final plan will take creativity, dedication and time.

Poster #44**THE SEPTEMBER 11 TRAGEDY & THE RESPONSE OF THE BANKING INDUSTRY**

Emily Ledford

The September 11th tragedy is a disaster that goes beyond saying, one of the worst days the world has ever seen. One industry in particular that was immensely affected by the events that unfolded that day was the banking industry. Many large banks are headquartered in New York City, so when the World Trade Centers went down, the banking industry also went down. During the week of September 11, 2001, the widespread destruction of physical communications supporting financial institutions in and around the World Trade Center and extensive telecommunications breakdowns throughout the region caused dislocations in the financial market. U.S. equity markets were closed for four days and most bond trading, including government securities trading, halted for two days. There were significant disruptions in the clearing and settlement mechanisms for government securities, repurchase agreements, and commercial paper. At the same time, the extraordinary levels of cooperation by the financial industry in the aftermath of the September 11th events, helped overcome limitations within the companies. Some firms were accommodated by other organizations (including competitors) in New York City by finding office space for staff. Customers and counter parties helped re-create transaction records that were lost. Institutions extended credit to customers and counter parties vulnerable by liquidity shortfalls despite the inherent uncertainty and lack of reliable information in the marketplace about their current financial condition. Large numbers of people inside and outside the financial industry worked long hours to restore communication links that had failed. In fact, the most often cited lesson learned from the tragedy is the importance of people, including considerations for their personal safety.

Poster #45**THE NEW YORK TIMES AND 9-11**

Cory Peterson

"How easy it is for us to be professional. In a company packed with so much talent and so much experience, how easy it is for us to think of the news as something that happens only to someone else. How easy to forget that we are human, and that this time, we are the victims as well as the storytellers" (The New York Times). Everyone will remember where he or she was the day The World Trade Center towers went down on September 11, 2001, and even though we might not have had any connection to the event, we were all touched by that day. Have you ever wondered what it was like to be there, what it would have been like to look out your window and see this happening right before your eyes, or even be close enough to feel the heat and the impact of ash on your face, to wake up in the morning and know from this day forward, your life will never be the same again? For the employees at The New York Times this literally happened. Some were so close that they had to run into a shelter, in order to avoid getting hit by falling debris. This day changed the lives of these journalists forever.

Poster #46

SAN FRANCISCO TOURISM AND SEPTEMBER 11, 2001

Kira M. Mello

The tragic events of September 11, 2001 had an effect on almost everything in the United States of America, especially tourism. The paper examines the hotel industry, the restaurant industry and the San Francisco International Airport, to see how tourism has been affected in San Francisco. By focusing on restaurants, hotels and the San Francisco International Airport, the effects of September 11 can be seen. All three of these areas rely heavily on the tourism industry. By analyzing statistical research and interviewing people who work in these areas, the economic impact this tragedy has had on San Francisco's tourism is clear. The average income of San Francisco's restaurants decreased by 40% in 2001 due to September 11 and the already declining economy (Sims, 2002). The hotel industry is still suffering from dropping occupancy rates. San Francisco International Airport has experienced the worst effects from September 11. Due to the fear of terrorism, lack of tourism and a poor economy, SFO is having the hardest time recovering. The combination of September 11, the poor economy and the war has caused the tourism industry to suffer considerably in the past few years. Each industry is gradually improving, but not fast enough to repair the damage that was done.

Poster # 47

SEPTEMBER 11TH AND THE FILM INDUSTRY

Tanja Solheim

The objective of this case study was to examine how the events of September 11 affected the film industry as well as how the industry dealt with issues surrounding the attacks. Topics include delayed releases of films, content editing and changes in the film industry itself. Research for this case study included interviews with a film studio distribution executive and a film studies professor from University of the Pacific. The conclusion drawn is that although studios did indeed act in order to protect their reputation and their bottom line, they were also sensitive to the grief and tragedy that the nation was experiencing.

Poster #48

NYPD AND FIRE DEPARTMENT: ACTIONS CRITICIZED (9/11)

LaTosha Stigler

Instead of focusing on the terrible events of 9/11, many complained that the NYPD did not communicate well with the Fire Department, causing confusion on the whereabouts of each group. The two groups were accused of operating from their own separate command centers, creating a glitch in communication between the two. The main issue that was brought up was that "the information relayed to police at street level by their counterparts in helicopters was not quickly passed along to fire officials (McKinley)." This caused problems, because the two were supposed to be working together, and this left on group completely blind of a situation for a few moments. Steps have taken by both organizations in order to assure that in the event of another terrorist attack or crisis, they are prepared to handle the situation in a more acceptable manner than before.

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