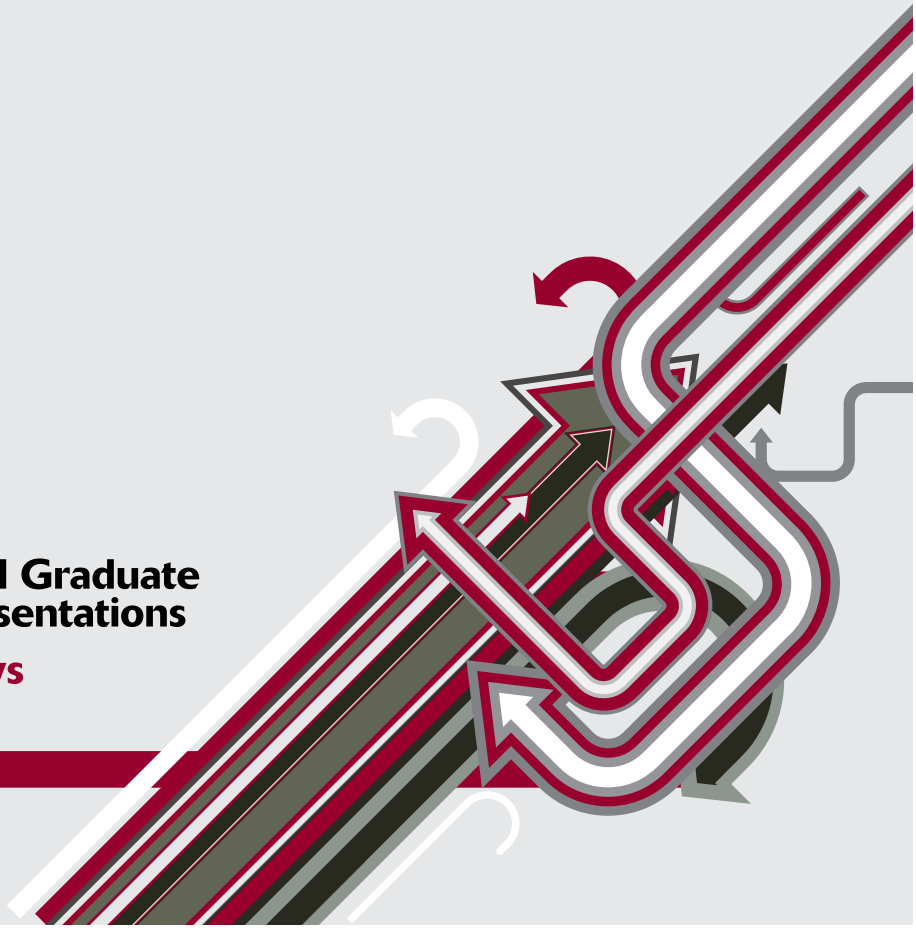
7th Annual
The Texas A&M University System
PATHWAYS STUDENT RESEARCH SYMPOSIUM

NOV. 13-14, 2009

TEXAS A&M INTERNATIONAL UNIVERSITY
Laredo, Texas



Undergraduate and Graduate Student Poster Presentations

tamiu.edu/pathways

TEXAS A&M INTERNATIONAL UNIVERSITY
A Member of The Texas A&M University System

November 13-14, 2009

Greetings and welcome to Texas A&M International University!

The administration, faculty, and students of your Laredo university are honored to be hosting the 7th annual Texas A&M University System Pathways to the Doctorate Student Research Symposium. Each of you is here because you have the drive and the dedication to pursue a project to its conclusion, a commitment to research, and a willingness to share your work with others. You are fortunate not only to have found a mentor who supports you, but also schools which maintain the standard of excellence that this conference represents. As you explore these poster sessions, all of you should feel deservedly proud of your accomplishments.

Exploit to their fullest potential the intellectual opportunities this Symposium offers as you contemplate the wide breadth of topics under research in the entire TAMU system. In addition, please get to know your fellow researchers, making of this Symposium a resource for future collaborations to continue your work. We know you will discover as you talk with each other how much we have in common, irrespective of our fields of study. All in university life share an insatiable curiosity and a love of learning.

We hope you will enjoy the Symposium and the beautiful TAMIU campus while you are here, and wish you all the very best with your continuing studies.

Sincerely,

Dr. Ray M. Keck, III
President
Texas A&M International University

Dr. Jeffrey Brown
Dean, Graduate Studies & Research
Texas A&M International University

Pathways Schedule/Agenda

Friday, Nov. 13

12 – 5 p.m.	Registration	Student Center Rotunda, 1st Floor
12 – 2 p.m.	Lunch	Student Center Outer Rotunda, 2nd floor
12 – 2 p.m.	Poster setup	Recreational Center, Gym Floor
2 – 2:30 p.m.	Welcome Remarks	Student Center Ballroom, SC 203
2:30 - 3 p.m.	Judges Briefing	Recreational Center, Room 128
3 - 4:30 p.m.	Poster Session #1 **Agriculture** **Business and CIS** **Engineering** **Social Sciences – Humanities**	Recreational Center, Gym Floor
3:00 – 4:30 p.m.	Humanities Oral Session #1	Rec. Center, Room 129 and Room 131 Student Center, Room 225, 230, and 231
4:30 – 6 p.m.	Poster Session #2 **Computer Science** **Education**	Recreational Center, Gym Floor
4:30 – 6 p.m.	Humanities Oral Session #2	Rec. Center, Room 129 and Room 131 Student Center, Room 225, 230, and 231
6:00 – 6:30 p.m.	Poster removal	
6:30 – 8:30 p.m.	Dinner and entertainment Fine and Performing Arts Music Ensemble Experience the exquisite sounds of the Department for Fine and Performing Arts Music Ensembles. The beautiful music of México, Spain, classics and the new will be performed by our talented student groups.	Student Center Ballroom, SC 203
	OR	
7:30 - 8:30 p.m.	David S. Gorfein, Ph.D. “Meaning Selection: On the interaction of experience and context.”	Student Center Auditorium, SC 236

Saturday, Nov. 14

8 – 10 a.m.	Registration	Student Center Rotunda, 1st Floor
8 – 9 a.m.	Breakfast	Student Center Ballroom, SC 203
8 – 9 a.m.	Dean's Breakfast Meeting	President's Dining Room, SC 202
8:30 – 9 a.m.	Judges' Briefing	Recreational Center, Room 128
8:30 – 9 a.m.	Poster Setup	Recreational Center, Gym Floor
9 – 10:30 a.m.	Poster Session #3 **Environmental Sciences** **Life Sciences** **Physical Sciences**	Recreational Center, Gym Floor
9 – 10:30 a.m.	Humanities Oral Session #3	Rec. Center, Room 129 and Room 131
10:30 a.m. - 12 p.m.	Entertainment A visit to the newly opened Center for Fine and Performing Art Theatre to experience the beauty of modern dance as well as journey through the folklore of Spanish and Mexican dance.	Center for Fine and Performing Arts Theatre
12 – 1 p.m.	Closing Ceremony	Center for Fine and Performing Arts Theatre

Master of Ceremonies and Guest Performer: Hal Langford

Door Prizes and Awards

Our Guest Speaker
David S. Gorfein, Ph. D.

Dr. David S. Gorfein is Professor Emeritus of Adelphi University and a Fellow of Division 3 (experimental psychology) of the American Psychological Association.

Professor Gorfein, "retired" from Adelphi University in 1996 to devote full-time to the fun part of his academic life- conducting research. That year he joined the University of Texas at Arlington, with a contract that gave him the privileges and obligations (except for teaching) of a full-time faculty member except that he neither received compensation nor earned tenure credit. In 2007 he moved to the University of Texas-Dallas. Since "retirement" he has been fully engaged in research and continues to supervise students in research. He has edited four books- the contribution to the most recent "Inhibition in Cognition" co-edited with Colin MacLeod reflects his current research which focuses on the processing of ambiguous words. His publications to date have included papers in attitude change, the authoritarian personality, conformity behavior, avoidance conditioning, episodic memory, implicit memory, memory and aging, and word association. His interest in lexical ambiguity grew out of his work on encoding processes in the Brown-Peterson short-term-memory task.

Friday, November 13, 2009
Welcome and Opening Session
2 – 2:30 p.m.
Ballroom, 2nd Floor, Student Center

Greetings and Introductions	Dr. Jeffrey M. Brown Dean of Graduate Studies and Research
Welcome	Dr. Kenneth R. Poenisch Associate Vice Chancellor of Academic Affairs TAMU System
	Dr. Pablo Arenaz Provost and Vice President for Academic Affairs
Announcements	Dr. Jeffrey M. Brown

Saturday, November 14, 2009
Awards Ceremony Activities
10:30 a.m. - 1p.m.
Center for Fine and Performing Arts Theatre

Pre Awards Entertainment	Fine and Performing Arts Dancers
Master of Ceremonies	Dr. Hal Langford, Dean College of Business and Technology Texas A&M - Commerce
Awards	Mary Treviño Associate Vice President for Academic Affairs
Traveling Scholarship Trophy	Dr. Pablo Arenaz
Closing Remarks	Dr. Pablo Arenaz

Oral Presentation Schedule
Friday, November 13th
3:00 – 4:30 p.m.

Recreation Center, Room 129

Abstract #	Presenter
1000	Sandra Shu-Chao Liu
1007	Shelly Fox
1012	Mario Martinez
1017	Christopher Warner
1025	Elizabeth Melton

Recreation Center, Room 131

Abstract #	Presenter
1003	D'Andra White
1005	Thomas Avila
1008	Karla Garcia
1023	Hermelinda Garcia
1024	Eva Harder

Student Center, Room 225

Abstract #	Presenter
1006	Abel De los Santos
1011	Luz Martinez
1013	Manuel Moya
1016	Tania Saavedra

Friday, November 13th
4:30 – 6:00 p.m.

Recreation Center, Room 129

Abstract #	Presenter
1001	Sergio Pizziconi
1010	Sean Kennedy
1019	Michele Arishita
1029	Juan Vasquez

Recreation Center, Room 131

Abstract #	Presenter
1002	Daniel Redo
1020	Jacob Cates
1022	Santos Dominga Trevino
1026	Maritza Morales
1027	Alexis Rodriguez

Student Center, Room 225

Abstract #	Presenter
1009	Andrew Johnson
1014	Lorena Robles
1018	Luis Aguila
1021	Emanuel Diaz
1028	Kirk Scarbrough

Activities

Friday, Nov. 13, 2009

3 - 6 p.m.	Poster Presentations and Judging	Recreational Center
1 p.m. and 3 p.m.	Campus Tour	Guided tour meets at SC 126
Planetarium Shows	Time's vary by show; LBV Science Center	

Show Times Friday, Nov. 13
12 p.m. – Star Signs
1 p.m. – Seven Wonder
2 p.m. – Stars of the Pharoahs

3-4 p.m.	Art Gallery and Exhibition Tour "Embracing Darkness and Loving Your Dreams"	Guided walking tour at Center for the Fine and Performing Arts
6:30-8:30 p.m.	Entertainment Experience the exquisite sounds of the Department for Fine and Performing Arts Music Ensembles. The beautiful music of México, Spain, the Classic and the New will be performed by our talented student groups.	
	OR	
7:30-8:30	David S. Gorfein, Ph.D. - "Meaning Selection: On the interaction of experience and context."	Student Center 236

Saturday, Nov. 14, 2009

9 -10:30 a.m.	Poster Presentations and Judging	Recreational Center
10:30 a.m.	Campus Tour	Guided tour meets at SC 126
Planetarium Show	Time's vary by show; LBV Science Center	
	Show Times Saturday, Nov. 14 10 a.m. – Extreme Planets 11 a.m. – Wonders of the Universe	
10:30-12:00 p.m.	Entertainment A visit to the newly opened Center for Fine and Performing Art Theatre to experience the beauty of modern dance as well as a journey through the folklore of Spanish and Mexican dance.	

Agriculture

100	TITLE: No Title Submitted		
AUTHOR: Suheb Mohammed		Doctoral Level	Texas A&M University
AUTHOR(S):		MENTORS:	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

101	TITLE: Protection of Intellectual Property in R&D Outsourcing Contracts: When Sticks fail Carrots Prevail		
AUTHOR: Rajorshi Sen Gupta		Doctoral Level	Texas A&M University
AUTHOR(S):		MENTORS: H. Alan Love	
ABSTRACT: R&D outsourcing has become a strategic tool for companies seeking to abate production costs and/or develop new products. While sharing of intellectual property (IP) by client firms can facilitate vendor learning, it can also be misappropriated by the latter. We design an incentive compatible contract mechanism that can help clients protect their intellectual property should they go for outsourcing. In particular, a carrot and stick approach is proposed for the client firm: while the mechanism we develop shares less than optimal level of pre-existing know-how (stick approach), it also provides enough incentive payments to the vendor such that the latter does not misappropriate the shared IP (carrot approach).			
TYPE OF PRESENTATION: Poster			

102	TITLE: Incorporating Horticulture into a South Texas Community		
AUTHOR: Catherine R Simpson		Doctoral Level	Texas A&M University - Kingsville
AUTHOR(S): Gardiner Nelson		MENTORS: Nelson	
ABSTRACT: The use of horticulture in our environment is used to beautify our surroundings. This has developed into many different facets of professional landscaping. In the spring of 2009, the course "Landscape Design" was offered at Texas A&M University-Kingsville. For the course of Landscape Design, students learn professional techniques and skills dealing with designing, constructing and maintaining a landscape. To give students an applied perspective on this class a proposal was written and funded by the Quality Enhancement Program at Texas A&M University-Kingsville to provide students with professional Horticultural and civic engagement opportunities. The city of Kingsville, Texas is a town west of the Gulf of Mexico made famous by Captain King who established the King Ranch and the American ranching industry. Kingsville lies in an area known as the Wild Horse Desert, populated by mesquite trees, bunch grasses and hardy native vegetation. This landscape project was developed in conjunction with the city of Kingsville and "Keep Kingsville Beautiful" on city-owned land. The area chosen was a 9500 ft2 (˜ 1/5 acre) on what was formerly a detective's station. The climate and water limitations made it imperative for the landscape to be drought and heat tolerant, i.e. a xeriscape. This project was constructed during the spring 2009 semester over 12 weeks. The students were required to design a xeriscape garden according to			

specified requirements and then construct the landscape on the designated area. This project involved not only the students enrolled in the class, but over 100 members of the community and city employees. In addition to the grant awarded, there was over $6,000 donated in supplies and materials towards the completion of the project. The enthusiasm and positive response to this project from the citizens and students truly made this a successful community project.

TYPE OF PRESENTATION: Poster

103	TITLE: Use of a Barrier Teat Dip to Prevent New Intra-Mammary Infections during the Dry-off period in Dairy Goats	
AUTHOR: Kristin Baker	Master's Level	Prairie View A&M University
AUTHOR(S): Rucker, D.,L.C.Nuti Horner, S. Newton, G.R.	MENTORS: Newton, G.R.	

ABSTRACT: The largest percentage of new mammary infections leading to clinical mastitis occurs during the first two weeks of the dry-off period in dairy cattle and dairy goats. Therefore, the objectives of this study were to evaluate the effectiveness of two mammary treatments, administered at dry-off, on new incidences of infection and milk quality during the subsequent lactation. Approximately 50 Alpine does were randomly assigned to one of four treatment groups in a two by two factorial design with administration of a protective teat-dip and intra-mammary infusion of antibiotics as the main effects. At the time of dry-off, and at first lactation, goats were screened for the presence of intra-mammary infections using procedures for lab bacteriology and mastitis diagnosis, as outlined by the National Mastitis Council. Following kidding, duplicate samples were taken between 3-5 days for culture and Somatic Cell Count Analysis and also looked at fat, protein, lactose, and density. At the start of the dry-off period 80% of the udders sampled were negative for bacteria that cause mastitis. This percentage increased slightly to 84% at the start of lactation. Neither teat dip, intra-mammary infusion of antibiotics or their combination influenced the incidence of mammary infection at dry-off or at the start of lactation when compared to udders receiving no treatments. Somatic cell counts (a more sensitive indicator of sub-clinical mastitis) and other measures of milk quality (i.e. fat, protein, and lactose content) were not affected by mammary treatments. Therefore, in well-managed dairy herds where incidences of mastitis are low, the use barrier teat dips and intra-mammary injections do not significantly improve udder health or influence milk quality.

TYPE OF PRESENTATION: Poster

104	TITLE: Plant Population Effects on Lint Yield Among New Technology Varieties	
AUTHOR: Chris Buzek	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Schuster Nelson Fromme	MENTORS: Schuster Nelson	

ABSTRACT: New varieties of genetically modified cotton with improved technologies have stimulated new interest in reevaluating optimal plant population. Because of the increase in cost for this new technology, reducing the number of seeds per acre should in theory reduce the cost per acre to the producer. Manipulation of these plant densities could also affect lint yield and quality. This study will be initiated to

evaluate how manipulation of seed populations affect yield outcome. This research objective will determine the best plant population that offers reduced production inputs, yet optimal lint yield. Field experiments will be conducted in 2010 and 2011 growing seasons at the Texas Agricultural Experiment Station in Nueces County, Texas. Experimental design will be split-plot design with four replications of an early maturing and a mid-maturing variety on 3 different seeding rates at 2, 4, 6 seeds per foot on 38" row spacing. During the growing season, stand count, plant mapping, and insect management will be collected. For HVI analysis, fiber samples will be collected and sent to the International Textile Center at Lubbock, Texas. Statistical analysis for comparison in SAS utilizing the PROC GLM method.

TYPE OF PRESENTATION: Poster

105	TITLE: Onset of Initial Eye Opening in Captive White-Winged Doves		
AUTHOR: William C Colson		Master's Level	Texas A&M University - Kingsville
AUTHOR(S): William Colson Alan M. Fedynich Jay Roberson		MENTORS: Alan M. Fedynich	

ABSTRACT: White-winged Doves (Zenaida asiatica) are a popular game species in South Texas, necessitating improved assessment of their population dynamics. This study was initiated to determine whether inspection of the eyes of young nestlings could be used for aging purposes. As part of a wider study on hatch-year feather replacement in White-winged Doves, 60 adult White-winged Doves were captured, sexed, and paired. Each pair was placed into breeding pens at the Duane Leach Research Aviary at Texas A&M University-Kingsville in anticipation of the 2008 breeding season. Each breeding pen was supplied with 2 nesting platforms, nesting materials, as well as food and water. Nestlings were photographed, and data were recorded throughout their development beginning with Day 0. Photographic evidence and visual monitoring were used to assess the time required for initial eye opening of 19 White-winged Dove nestlings. Eyes opened in 3 stages: sliver or slightly-open (Days 2–5), half-open (Days 3–5), and fully-open (Days 4–6). All nestlings had fully opened eyes by Day 6. These findings will allow field biologists studying the nesting ecology of White-winged Doves to be able to determine age of young nestlings by eye examination.

TYPE OF PRESENTATION: Poster

106	TITLE: Cultivation and Yield Performance of Oyster Mushroom on Various Substrates		
AUTHOR: Andrea N Galindo		Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Nelson Tanner Skaria		MENTORS: Nelson	

ABSTRACT: The cultivation of mushrooms can be a profitable agribusiness in the U.S. Incorporation with non conventional crops in existing agricultural systems could provide economic benefits to farmers. Mushrooms are used in the preparation of many continental dishes, and have medicinal properties. Mushrooms contain about 85-95% water, 3% protein, 4% carbohydrates, 0.1% fats, 1% minerals and vitamins. Mushrooms contain an appreciable amount of potassium, phosphorous, copper and iron but low level of calcium. Mushroom protein is intermediate between that of animals and vegetables. Mushrooms also contain appreciable amount of niacin, pantothenic acid and biotin. The oyster mushroom (Pleurotus

ostreatus) is an edible mushroom sought for its excellent flavor and taste. It grows wild in hilly forest regions and is cultivated in temperate and subtropical regions of the world and belongs to the class of Basidiomycetes, subclass Hollobasidiomycetidae, order Agricals. The technology of artificial cultivation of mushroom is a somewhat recent innovation. The objective of this research experiment is to investigate the cultivation and yield performance of oyster mushroom on various substrates of agricultural by-products such as wheat straw, saw dust, and leaves. The results of this experiment will provide evidence as to which substrate will produce the highest yield, biological efficiency and number of fruiting bodies for oyster mushroom grown under artificial cultivation. Findings from this study will also provide support for home-grown oyster mushrooms for individual small-scale growers interested in enhancing their diet with mushrooms.

TYPE OF PRESENTATION: Poster

107	TITLE: Movement and Efficacy of Aldicarb in Relation to Flood Irrigation Timing	
AUTHOR: Raul R Hinojosa	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Nelson Setamou	MENTORS: Nelson Setamou	

ABSTRACT: Aldicarb (2-methyl-2-(methylthio) propionaldehyde O-methylcarbamoyl-oxime), a broad spectrum pesticide used in Citrus production, can be an effective treatment against Asian Citrus Psyllid (Diaphorina citri) and mites. However, Citrus producers in South Texas have observed variable pest control efficacy in the alkaline soils (pH = 8.0) of this region of the U.S. Several factors can influence aldicarb efficacy such as: soil pH, temperature, soil organic matter content, and soil clay content. Furthermore, field management practices such as irrigation timing before and after chemical application may be a contributing factor to the variable effectiveness of aldicarb. Understanding the downward movement, degradation and efficacy of aldicarb in relation to flood irrigation timing is critical for Citrus pest management. The objective of this study are to evaluate irrigation management practices that impact the fate and transport of aldicarb movement, including soil moisture and flood irrigation timing pre- and post- aldicarb application. Soil samples and efficacy evaluations were collected on a weekly basis. Concentration of aldicarb in soil was determined using reverse phase - high performance liquid chromatography. The efficacy of aldicarb for pest control was monitored by evaluating Asian citrus psyllid populations in the field after chemical treatment. Results from this study may allow growers to utilize less water during the growing season while maintaining good pest control and prevent pesticide leaching into groundwater systems.

TYPE OF PRESENTATION: Poster

108	TITLE: Lethal Yellowing and Date Palm Lethal Decline in South Texas	
AUTHOR: Jorge Lozano	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Schuster Anciso Ong	MENTORS: Schuster	

ABSTRACT: Lethal Yellowing (16SrIV-A) and Date Palm Lethal Decline (16SrIV-D) are two palm diseases caused by phytoplasmas that infect several species of palms. Phytoplasmas are nonculturable prokaryotic bacteria which lack a cell wall and therefore make identification of these phytoplasmas limited to

molecular techniques such as a Polymerase Chain Reaction (PCR). Lethal Yellowing has been present in the southern portion of Florida since the 1950's and by 1983 had killed an estimated 100,000 palms. In 2007, a third strain of Lethal Yellowing (16SrIV-F) was found in Florida. Currently there is no information concerning the group of phytoplasmas and the diseases that they cause in Texas. The purpose of this study is to 1) determine whether decline and mortality of palm trees recently observed in Texas is due to one of these three phytoplasmas, 2) determine the prevalence and 3) determine susceptibility of palm trees. Samples were taken by using a portable electric drill with a 6" long 5/16" drill bit and drilling into the trunk of the palm. The drill bit was sterilized by a portable propane torch and cooled by spraying deionized water onto the drill bit. Three grams of the inner wood shavings were collected. Preliminary data from ten palm trees from Kleberg County were sampled based on disease symptoms. Three out of the ten were positive for Date Palm Lethal Decline. This project will greatly enhance our awareness of these diseases and assist Texas in preventing them from becoming a quarantine issue for palm producers.

TYPE OF PRESENTATION: Poster

109	TITLE: Preliminary Survey for Parsites in Northern Bobwhites in the Rolling Plains	
AUTHOR: Stacie Mahan	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Alan M. Fedynich Leonard A. Brennan Dale Rollins	MENTORS: Alan M. Fedynich	

ABSTRACT: Studies about the Northern Bobwhites' (Colinus virginianus) life history and ecology have been conducted over the years because of their economic importance as a gamebird species in Texas. However, little is known about endoparasites and how they may affect the Northern Bobwhite population. The two nematodes examined in this preliminary study were Oxyspirura petrowi, which is found in the nictitating membrane on the eye surface, and Aulonocephalus pennula (= A. lindquisti), which is found in the cecum and can migrate throughout the intestinal tract. Previous studies have found high numbers of A. pennula in quail and other gamebird species. There have been studies on O. petrowi conducted from western or northwestern regions of Texas, which found their presence in Northern Bobwhites (Colinus virginianus), Scaled Quail (Callipepla squamata), and Montezuma Quail (Cyrtonyx montezumae). Thirty-three bobwhites from the Rolling Plains region of Texas were examined, of which only 30 could be used for examination for eye worms; 20 (66.7%) were infected with 158 O. petrowi. Mean intensity of O. petrowi was 4.9 + 8.7 (SE) (range: 0–40; median: 5) and mean abundance of O. petrowi was 7.9 + 9.9 (SE) (median: 8). Out of the 33 original bobwhites, only 25 could be examined for cecel worms. All 25 (100%) were infected with A. pennula from which 3,903 worms were found. The intensity infection of A. pennula averaged 156.1 ± 119.8 worms per infected bird (range: 4–424; median 156). Findings from this preliminary study provide insight regarding the prevalence and abundance of O. petrowi and A. pennula in bobwhites from the Rolling Plains of Texas and points to the need for additional data collection.

TYPE OF PRESENTATION: Poster

110	TITLE: Insecticide Susceptibility in House Fly Populations from Four Dairies	
AUTHOR: Patrick L McClellan	Master's Level	Tarleton State University
AUTHOR(S): Jeffery K. Tomberlin David H. Kattes	MENTORS: David H. Kattes Jeffery K. Tomberlin	

ABSTRACT: The house fly, Musca domestica, is a major pest in and around dairy cattle operations. Not only a nuisance, house flies may also serve as vectors of pathogens that are harmful to humans and animals. House flies were collected from four Erath and Comanche County dairies from May until October 2007 and tested for insecticide susceptibility. A topical bioassay method was used to replicate insecticide exposure. Tests were conducted to determine susceptibility to three select insecticides, which include cyfluthrin, spinosad, and imidacloprid, on wood and vinyl. Additionally, 2 h and 24 h mortality rates were recorded. Within this study, cyfluthrin on wood showed to produce the greatest overall house fly mortality on wood (62.2%) and on vinyl (93.5%) during the 2 h observation. Spinosad produced the greatest overall mortality rate on wood (75.7%) and on vinyl (90.3%) during the 24 h observation. Imidacloprid resulted in the lowest overall mortality on both wood and vinyl, ranging from 5.6% to 52.2%. House fly mortality was highly variable across facilities and season.	
TYPE OF PRESENTATION: Poster	

111	TITLE: Use of Dual Binary Vector System to Introduce Multiple Genes into Citrus	
AUTHOR: Venessa Ochoa	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Buenrostro-Nava Molina Mirkov	MENTORS: Mirkov Louzada	
ABSTRACT: Citrus is one of the most important fruit producing trees grown in the tropics and subtropical areas worldwide. Citrus tristeza virus (CTV) is a global problem that has placed a yield and quality loss to citrus production. CTV is one of the most devastating diseases in the citrus industry. Recently it has been found that CTV resistance has been conferred by multiple genes. The new dual binary vector systems allow the delivery of multiple genes into the nuclear genome by using Agrobacterium-mediated plant transformation. This study was conducted to determine whether the dual binary vector system could be used to introduce multiple genes into citrus. Citrus cultivars were transformed by inoculating epicotyl segments. Nicotiana tobaccum were transformed by inoculating the leaves. These explants were co-cultivated on MS medium. The transformation was monitored by GUS histological assays. This Dual binary vector system seems to improve the efficiency of plant transformations through the development of binary vectors. Preliminary results indicate that by using this dual binary vector system it is feasible introducing multiple genes into tobacco and citrus explants.		
TYPE OF PRESENTATION: Poster		

112	TITLE: Growth rate in the stock type horse	
AUTHOR: Ashley Payne	Master's Level	Tarleton State University
AUTHOR(S):	MENTORS: Dr. Don Henneke	
ABSTRACT: The stock type horse is used for a variety of events utilizing many different body types. Due to their different body type compared to the thoroughbred, stock type horses grow at a different rate. Measurements taken included: height of wither, height of rump, circumference of cannon bone in the front and hind, knee height, hock height, heart girth circumference, weight and body condition score. The same measurements were taken of the mare and sire as well in order to determine a correlation between		

the measurements of the mare and sire and the measurements of the foal. Colts grew faster than fillies, and fillies had a more rapid rate of growth in most measurements compared to colts. All measures were highly correlated in first 60 days. Fillies reached 26.75, 37.06 and 50.62, and colts reached 26.05, 42.05 and 60.37 percent of dam weight by three, six and twelve months.
TYPE OF PRESENTATION: Poster

113	TITLE: An Evaluation of Mercury Levels in River Otters of Northeastern Texas	
AUTHOR: David Probasco	Master's Level	Tarleton State University
AUTHOR(S):	MENTORS: Dr. James Mueller	
ABSTRACT: Mercury is a toxic metal that is known to cause birth defects and neurological effects to both humans and wildlife alike. Mercury accumulates in water sources such as reservoirs, lake, ponds, rivers, and streams from runoff. The river otter (Lontra canadensis) is an aquatic mammal and can be characterized as a sentinel species for riparian ecosystems. River otters bioaccumulate toxic metals such as mercury from consuming contaminated fish and aquatic invertebrates. Mercury has not been tested since the early 1990s in the Sabine River watershed. This study is examining mercury levels in otters along the Sabine River, north of the Toledo Bend Reservoir. River otters (N=50) were trapped in 2008 and 2009 at 11 different locations throughout 4 counties in northeastern Texas. Hair samples from the head were analyzed for mercury levels using combustion, trapping, and atomic absorption. Mean mercury levels were found to be 17.93 ppm for females (N=18) and 17.2 ppm for males (N=32). The range of contamination was 2.79 ppm to 37.70 ppm. Mercury data will be compared and contrasted to suggested threshold levels for mercurialism. Previous studies have suggested levels of mercury >20 ppm may result in decreased survivorship; however, further statistical analysis and literature review is in progress. These results will provide information on mercury levels and potential effects of this heavy metal on top-level predators in northeastern Texas watersheds.		
TYPE OF PRESENTATION: Poster		

114	TITLE: Effects of Organic Production Practices on the Dynamics of Citrus Pests	
AUTHOR: Juan Raygoza	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Shad D. Nelson Mamoudou Setamou	MENTORS: Dr. Shad D. Nelson Dr. Mamoudou Setamou	
ABSTRACT: Organic agriculture has increased dramatically over the last 15 years. As world trends more towards sustainable and environmentally-friendly agricultural production practices, more consumers are interested and purchasing produce free of chemical residues and synthetic fertilizers.. However, the amount of scientific data available on sustainable perennial citrus production is considerably insufficient. The purpose of this project is to evaluate the effects of different compost sources on the uptake of major nutrients by citrus under organic practices management, to assess the population densities and fluctuations of key citrus pests treated with natural bio-pesticide products utilized in certified organic farms. This information will provide scientific data aimed at increasing the knowledge base of Citrus organic farming. Since there is limited research inorganic Citrus production, different compost sources were soil surface applied under the tree canopy, and complimented with an organic foliar and fertilization program. Pest populations will be managed using bio-pesticides commonly used by certified organic growers. Bio-pesticides and compost treatments will be compared against a control group of trees not		

receiving compost nor bio-pesticide treatment. Random soil and leaf samples were taken to determine the effect of using organic practices on soil physio-chemical properties and plant nutrition. Population densities and fluctuations of key Citrus pests were monitored weekly during the active growing season to evaluate bio-pesticide efficacy.

TYPE OF PRESENTATION: Poster

115	TITLE: Evaluating Skip Row to Conventional Cotton in Lint Yield and Quality	
AUTHOR: Russell Ritchie	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Schuster Nelson Fromme	MENTORS: Schuster Nelson	

ABSTRACT: High production cost and low cotton (Gossypium hirsutum L.) prices have raised the concern for higher yeilds and lower per acre input cost in the production of cotton. Skip-row cotton can help reduce the “down-the-row” input costs by decreasing inputs. Fewer linear feet of row per acre suggests potential savings in seed, chemical, and harvesting costs and increase returns if the yeilds can be maintained near that achieved on a solid planted basis. Cotton planted as skip-row has many physiological benefits. With fewer plants per acre the cotton plants have a greater oppurtunity to increase photosynthesis output by allowing more sunlight to penetrate the plants canopy. The objective of this research is to evaluate early maturing varieties in 38” solid, 36” 2x1 skip, 38” 1x2 skip, and 38” 1x1 skip row spacing to determine if maturity, yield, and fiber quality are affected by row spacing. Field experiments will be conducted in 2010 and 2011 growing seasons at the Texas Agricultural Experiment Station in Nueces County, Texas. Experimental design will be a randomized complete block design replicated 4 times. Each plot will be 6 rows by 40’ each. During the growing season stand counts, and plant mapping data will be collected to determine plant development. For HVI analysis, fiber samples will be collected and sent to the International Textile Center at Lubbock, Texas. Statistical analysis for comparison in SAS will be performed utilizing the PROC GLM method.

TYPE OF PRESENTATION: Poster

116	TITLE: Soil Depositional Loss of Foliar Pesticides on Citrus by Air-Blast Sprayer	
AUTHOR: Esmeralda Rodriguez	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Nelson Setamou Saldana	MENTORS: Nelson Setamou	

ABSTRACT: Pesticides are an essential component to an integrated pest management approach. The intention of foliar application of pesticides is for maximum foliar coverage and minimal loss to non-target ambience such as soil. A common chemical spray application method for foliar pesticides is with the use of an air-blast sprayer. The objective of this research is to quantify the deposition of Lorsban® 4E (chlorpyrifos) and Agri-Mek® 0.15EC (abamectin) on soil using an air-blast spray application by gravimetric determination. In addition the quantification of persistence of the pesticide Lorsban® 4E (chlorpyrifos) on foliage will also be determined. The significance of this research is to determine the potential volumetric loss using the air-blast sprayer technique and the chemical half-life on foliage. Depositional loss was determined using lined Petri Dishes strategically placed in a citrus orchard field. Gravimetric

determination of loss was then calculated after application of pesticides by the air-blast sprayer technique. Persistence of chlorpyrifos was determined by liquid extraction and analysis by gas chromatography-mass spectrometry. Results indicate an average loss ranging from approximately 0.5% to 13%. On average, depositional loss was significantly different in the location of the lined petri dishes. In addition, Lorsban® 4E showed the lowest depositional loss while the Agri-Mek® 0.15EC showed the highest. The half-life of chlorpyrifos was determined to be 1.14 days. This study can be used for adjustments to better management techniques using alternative foliar spray application methods. Continuing work includes the comparison of different application techniques and expansion of half-life determination for abamectin.

TYPE OF PRESENTATION: Poster

117	TITLE: Sugarcane Organic Matter Impacts on Atrazine Adsorption in Soils	
AUTHOR: Madahy Romero	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Nelson	MENTORS: Nelson	

ABSTRACT: The trend of altering harvesting methods of sugarcane from traditional burning to mechanical harvesting, may increase the amount of organic matter residue found on the soil surface. This could lead to unanticipated changes in not only the chemical's movement in soil but also the environmental fate of chemicals applied. Atrazine (2-dichloro-4-ethylamino-6-isopropylamino-s-triazine) is a common herbicide used in the sugarcane industry for weed control that has been detected in surface and ground water sources at levels above the Environmental Protection Agency's maximum contaminant level of 3 µg/L. The objective of this study was to evaluate the outcomes changing harvesting methods could have on atrazine retention. Three South Texas soils were evaluated for native soil organic matter and residues incorporated from sugarcane leaf litter and ash. The three soil types used in this study are classified as clay, sandy clay loam, and sandy loam. An adsorption-desorption batch equilibrium method was used to quantify atrazine retention by different percentages of organic matter residue in soil. The batch equilibrium findings will then be coupled with results from column leach studies to evaluate the potential impacts that changing harvesting methods may have on atrazine movement in soils. The anticipated results of these laboratory investigations will provide a low cost method for evaluating potential leaching and groundwater pollution arising for changes in agricultural management practices.

TYPE OF PRESENTATION: Poster

118	TITLE: Fertility Indices for Dairy and Meat Goat Sires	
AUTHOR: Desiree K Rucker	Master's Level	Prairie View A&M University
AUTHOR(S): Kristin Baker Babara Johnson Louis Nuti	MENTORS: Gary R. Newton	

ABSTRACT: Fertility Indices for Dairy and Meat Goat Sires Rucker, D., K. Baker, L.C. Nuti, B. M. Johnson and Gary R. Newton, Cooperative Agricultural Research Center, Prairie View A & M University Prairie View, TX 77446-0519. Male sub-fertility is a serious problem in many farm species. Current clinical tests to screen for fertility indices include analyses of sperm number, morphology, motility, chromatin quality and acrosomal integrity. These endpoints may fluctuate due to factors that are unrelated to overall fertility. Our working hypothesis is caprine seminal plasma contains specific proteins that mediate sperm-oviduct

interactions during early pregnancy and may be a useful predictor of male fertility. To test this hypothesis, semen was collected monthly from Alpine (n=4) and Boar (n=4) bucks over a 12 month period. Seminal plasma was separated from spermatozoa by centrifugation and protein concentrations in seminal plasma were determined. Isoelectric focusing and SDS-Page were used to characterize seminal plasma protein profiles in ejaculates. Analysis revealed a complex profile of seminal plasma proteins. Major proteins were identified with approximate molecular weights of 139.0, 132.0, 96.7, 75.2, 61, 55.5, 41.6, 33, 22, 17.7, 16.9, 15.7 and 14.9 kDa. Of particular interest were a complex of low molecular weight (<20 kDa) proteins with isoelectric points between pH 4-7. These proteins have physical characteristics that are strikingly similar to bovine seminal plasma proteins known to mediate sperm – oviduct interactions during estrus. MALDI-TOF has identified bodhesin-2, a spermadhesin, and human kinesin related protein MKLP-1. MALDI-TOF will be used to further identify and characterize these low molecular weight proteins. Identification of key seminal-plasma proteins that may be involved in sperm-oviduct binding may ultimately lead to tests that will allow limited resource farmers to predict, at an early age, the utility of goat sires used in animal production systems.

TYPE OF PRESENTATION: Poster

119	TITLE: Host Range Study of the Asian Citrus Psyllid, Diaphorina citri, on	
AUTHOR: Jose L Sandoval	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Dr. M. Setamou Dr. J.V da Graca	MENTORS: Dr. M. Setamou Dr. J.V da Graca	

ABSTRACT: The Asian citrus psyllid (ACP), Diaphorina citri Kuwayama, is an invasive species native to southern Asia. Vectoring huanglongbing, (citrus greening disease), ACP has the potential to be the most devastating and destructive pest within the citrus industry. By evaluating its preferences on several Rutaceous species native to North America it may be possible to identify species that could prove to be a suitable host not only for psyllid development but could potentially harbor greening disease. Choice and no-choice testing trials will be conducted to determine psyllid preference and suitability of Rutaceous species. The olfactometer and gas chromatography-mass spectrometry (GC-MS) will be carried out to further analyze adult psyllid*s olfactory senses and host volatile components respectively. Choisya ternata and Choisya arizonica trials have already proven to support and sustain the Asian citrus psyllid's development with Amyris madrensis supporting partial development. Esenbeckia berlandieri does not appear to be a suitable host for psyllid reproduction. These initial results indicate that the Asian citrus psyllid, Diaphorina citri Kuwayama can in fact thrive on other species other than citrus. Further testing is still in progress on these plant species as well as five others.

TYPE OF PRESENTATION: Poster

120	TITLE: An Evaluation of Vitamin E and Selenium as a Treatment for Capture Myopathy	
AUTHOR: Thomas P Schutz	Master's Level	Tarleton State University
AUTHOR(S):	MENTORS: Dr. Jeff B. Breeden Dr. James M. Mueller	

ABSTRACT: Capture and relocation is commonly used to reintroduce Rio Grande wild turkeys (Meleagris gallopavo intermedia) to areas of low numbers. However, isotonic muscle contraction during the capture and restraint process reduces blood flow to muscles and may induce the stress related disease, capture myopathy. The goal of this study was to determine if intramuscular injections of vitamin E and selenium

could be an effective treatment for capture myopathy. Rio Grande wild turkey hens (n=54) were captured during spring 2007, 2008, and 2009. Hens were divided into a treatment group (vitamin E and selenium) and a control group (sterile saline). Blood samples were collected from each bird after capture and again prior to release after birds were held for approximately 48 hours. Radiomarked birds were located at 14 days post-release. Survival rate of relocated turkeys was found to be 81.3% for both the treatment and control group. Further analysis showed that the survival rate of birds in the treatment group (92.5%) was higher than birds in the control group (86.6%), when birds that died during the transport process (n=3) were excluded. Statistical analysis found no difference in survival rates, enzyme levels, and log ratios between the control and treatment group. The failure to understand how vitamin E and selenium affected capture myopathy could have been caused by small sample size, variation in enzyme levels, and trapping methods used. A continuation of this study is necessary to increase sample size and determine the usefulness of this treatment.

TYPE OF PRESENTATION: Poster

121	TITLE: Different Water Regimes on Aldicard Efficacy for Citrus Rust Mite Control	
AUTHOR: Manjula Talari	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Setamou Nelson da Graca	MENTORS: Setamou Nelson	

ABSTRACT: Citrus is a perennial fruit crop that is infested by many insect and mite pests and citrus rust mite (CRM) is the major pest of citrus in Texas. The CRM (Phyllocoptruta oleivora) feeds on leaves and fruit causing extensive economic damage to the crop. Aldicarb (Temik) is the most common soil-applied systemic pesticide used to control CRM in Texas. However, the efficacy of CRM control by aldicarb has come into question recently as variable levels of pest control have occurred throughout South Texas. The soil condition and timing of irrigation prior to and after chemical application can affect the efficacy of aldicarb in control of CRM. The objective of this study was to evaluate the effects of soil moisture pre and post application of aldicarb and its CRM control efficacy. A factorial experiment was conducted to evaluate the combined effects of soil condition (dry or wet) pre-application and different timings of irrigation (0 day, 2 days, 7 days and 14 days) post application on the efficacy of aldicarb in CRM control. Weekly monitoring of the pest population on leaf and fruit was done and the results showed that CRM control was best achieved under the moist soil condition pre-application of aldicarb with no post-application irrigation. Highest infestation of CRM on leaf and fruit was observed when irrigation was given the same day as aldicarb application under moist soil condition, probably as a result of aldicarb leaching. Whereas, under dry soil conditions, the timing of irrigation post application did not significantly affect CRM infestation. Results from this study suggest that the best irrigation management plan to effectively control CRM with aldicarb is moist soil condition pre-application with no irrigation post application.

TYPE OF PRESENTATION: Poster

122	TITLE: Studies on Citrus Tatter Leaf Virus Seed Transmission	
AUTHOR: Justin Tanner	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Kunta da Graca Nelson	MENTORS: da Graca Nelson	

ABSTRACT: Citrus tatter leaf virus (CTLV) spreads in citrus predominantly by mechanical means. The possibility of CTLV seed transmission was studied in seedlings grown from infected field trees because of reported seed transmission in lily and Chenopodium quinoa. Seedlings were propagated using seed collected from four citrus trees of different varieties previously shown by biological indexing to be infected with CTLV. Out of 23 Meyer lemon seedlings and 136 Eureka lemon seedlings tested by PCR, only two Eureka lemons showed the presence of CTLV. PCR tests on 114 Meiwa kumquat seedlings and 114 Clementine mandarin seedlings are in progress. PCR results will be confirmed by biological indexing using graft transmission and mechanical leaf abrasion.	
TYPE OF PRESENTATION: Poster	

123	TITLE: Rainwater Harvesting: Satisfying Municipal water demand in Texas Panhandle		
AUTHOR: Rachna Tewari		Master's Level	West Texas A&M University
AUTHOR(S): Tamara R. Sagniere-Guerrero		MENTORS: Lal K. Almas	
ABSTRACT: Increase in water demand affects the sustainability of the Ogallala aquifer which can be recuperated by application of conservation technologies like rainwater harvesting. This research aimed at ascertaining the underlying potential of satisfying municipal water demand through rainwater harvesting technology for the counties of Potter and Randall, both accounting for about 56% of the total population of the area. Three scenarios were assessed to determine if the potentially available supply met the estimated demand requirements. These aimed at satisfying the total estimated demand, total indoor and outdoor non potable demand and outdoor non- potable demand only, respectively. The third scenario for non-potable outdoor use only, was found capable of satisfying an estimated demand of 14,289.8 gallons and 13,632 gallons per household for Potter and Randall counties respectively. The potential water savings for the two counties combined were approximately 1,055 million gallons or 3,240 acre feet of water. Savings for each household were estimated to be at least $46 per year in both counties. Realizing the water stress experienced by ground water resources and not enough surface water supplies to augment it, rainwater harvesting can be a potential and viable alternative to meet the growing water demand and storing rainwater in days of abundance, for use during the lean days.			
TYPE OF PRESENTATION: Poster			

124	TITLE: Initiation of the Northern EarthKind Rose Trial		
AUTHOR: Barbara C Villarreal		Master's Level	Texas A&M University - Commerce
AUTHOR(S): Steven George Derald Harp Christopher Dunlap		MENTORS: Derald Harp	
ABSTRACT: The EarthKind ™ program helps to provide recommendations on rose selection based on research. In this evaluation and selection process, many regional and non-regional cultivars were selected. The roses are arranged in a randomized complete-block design. Prior to installation, 7.6 cm (3in.) of compost is incorporated into the native soil. After the planting, the beds are mulched with 7.6-10.1 cm (3-4 in.) of organic mulch. Plants are then irrigated with a drip irrigation system to aid in plant establishment. No pesticides or additional fertilizers are applied during the study. Performance data is			

collected monthly from year two through four. Currently, seventeen cultivars have been labeled EarthKind™ for the southern United States region. The Northern EarthKind™ Rose Trial began in 2007 identifying landscape roses with a cold hardiness for USDA zones 3-5. Twenty cultivars were selected for inclusion in the trial: Alexander Mackenzie, Brite Eyes, Carefree Beauty, Frontenac, George Vancouver, John Cabot, John Davis, Lena, Morden Blush, Ole, Polar Joy, Prairie Joy, Quadra, Rablin' Red, Seafoam, Summer Wind, Sunrise Sunset, Sven, William Baffin, and Yellow Submarine. The trial cultivars were planted in 2007 in Minnesota, Kansas, and Texas. Kansas and Texas were added to the trial to acquire performance data in warmer regions for possible inclusion in future trials. In addition to the current sites, Nebraska, Iowa, Colorado, and Minnesota were planted in 2008. Data collection on performance should be completed in 2011 with the possibilities of the first Northern EarthKind™ winning roses announced in 2012.

TYPE OF PRESENTATION: Poster

125	TITLE: Evaluation of Herbicides for Control of Buffelgrass and Kleberg bluestem	
AUTHOR: Lauren S Bales	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Eric D. Grahmann, Forrest S. Smith Michael W. Hehman	MENTORS: Timothy E. Fulbright	

ABSTRACT: Buffelgrass and Kleberg bluestem have been used extensively for erosion control and forage plantings in south Texas, but these aggressive exotic species create monocultures that limit habitat availability for wildlife. Once established, they can dominate a site and commonly reduce native plant species diversity and subsequently, wildlife use. Control of these grasses using herbicides is difficult and often requires multiple applications to achieve even modest results. Verdict 520® and Clincher SF® herbicides containing the active ingredients Haloxyfop and Cyhalofop will be applied in experimental trials at four rates to buffelgrass and Kleberg bluestem monocultures. The Daubenmire method for estimating canopy cover will be used to determine percent canopy cover of both species before, and at several intervals following treatment. We will also randomly select 5 plants per plot, mark them semi-permanently, and count tillers to determine individual plant mortality or injury caused by the herbicide applications. Experimental plots will be mowed prior to spraying to ensure similar growth stage of all plants, and remove to litter. Results of the study will hopefully provide a method of reestablishing native forbs and legumes in areas dominated by monocultures of buffelgrass and Kleberg bluestem.

TYPE OF PRESENTATION: Poster

126	TITLE: Antioxidant Activity and Stability of Lycopene	
AUTHOR: Natalie Delahoussaye	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Jeneanne M. Kirven	MENTORS: Adela Mora-Gutierrez	

ABSTRACT: Lycopene, a carotenoid with particularly effective antioxidant activity, is present mainly in tomatoes. Lycopene prevents lipid oxidation by trapping free radicals. Clinical studies have demonstrated that lycopene reduces the risk of prostate and lung cancer as well as heart disease. Lycopene is also used as a natural pigment for the food, cosmetic and pharmaceutical industries. However, exposure to oxidative stressors (oxygen concentration, heat, light) promotes depletion and bleaching of lycopene. The objective of this work was to study the antioxidant activity and stability of lycopene in corn oil stored

under photooxidation and authooxidation conditions. Samples were stored for 4 weeks under light (4330 lux) at 24 oC to promote photooxidation, and in the dark at 60 oC to study authooxidation. Residual lycopene concentration was analyzed by HPLC. Corn oil oxidation was analyzed by peroxide values. Measurements were taken at 0, 1, 2, 3, and 4 weeks. The highest peroxide value and lycopene depletion were observed in samples stored in the dark at 60 oC, as the oxidized pigment probably acted as prooxidant; final lycopene concentration under these conditions was 8.02%. Lycopene was retained in samples stored in the dark at 4 oC; corn oil peroxide value under these conditions was 5.7 mEq/Kg. Packaging systems incorporating UV light blocking agents can offer protection against lycopene degradation and bleaching. Storage at low temperature can further improve the stability of lycopene. Due to the considerable surplus of tomatoes in the USA, this cultivar can be a source of added-value pigments and antioxidants in the formulation of colored oil products increasing their stability against oxidation.

TYPE OF PRESENTATION: Poster

127	TITLE: Msl 1 expression profile in different developmental stages of Ae. aegypti a	
AUTHOR: Roel Lerma	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Craig Coates Khurshida Begum	

ABSTRACT: The MSL (Male Specific Lethal) complex in Drosophila melanogaster is vital for dosage compensation for X linked gene products in males. Up-regulation of the X chromosome by twofold in males is needed to balance the X-linked gene expression between males and females. Unlike Drosophila melanogaster, the mosquito Aedes aegypti does not have sex chromosomes, yet a key player of the MSL complex (msl 1) was found in this mosquito. This study focuses on the msl 1 expression profile in different developmental stages of Ae. aegypti and msl 1 knockdown in the ATC-10 cell line. Expression patterns of MSL transcripts were determined by RT-PCR/q-PCR. Aedes aegypti ATC-10 cells were grown in L-15 culture media and treated with msl 1 double stranded RNA for specific gene knockdown. After 72 hours of incubation with dsMSL 1, RNA was isolated, cDNA prepared, and gene knockdown was analyzed by RT-PCR and q-PCR. Higher levels of the MSL 1 transcript were found in the early stages (embryo/larvae) than that of the adult stages of the Ae. aegypti mosquito. Successful gene silencing lead to an increased expression of three different retrotransposons; Gypsy, Pao, and Zebeede.

TYPE OF PRESENTATION: Poster

128	TITLE: Measuring Leaf Temperatures in Texas Green Roofs using Thermal Imagery	
AUTHOR: Megan D McGuffey	Undergraduate Level	Texas A&M University - Commerce
AUTHOR(S): Ben Cranor David Anderson	MENTORS: Derald A. Harp	

ABSTRACT: The primary function of plants in green roof gardens is the interception of incoming radiation and the utilization of that energy for photosynthesis and water evaporation, rather than the absorption of incoming radiation and conversion into sensible heat. A preliminary study was conducted during summer 2009 at the Texas A&M University – Commerce green roof garden to measure leaf temperatures among six different species successfully used in Texas green roofs. Leaf, planting media, and roof temperatures were measured using a FLIR ThermaCam B400 thermal camera. Average air temperature during data acquisition was 34°C, with a maximum temperature of 35.8°C. Weather conditions were clear and sunny,

and uncovered roof surface temperatures averaged 61.1°C. Planting media was relatively warm, with temperatures between 44 and 54°C. Leaf temperatures, across all species did not vary, but were significantly cooler with leaf temperatures between 34 and 43°C, demonstrating a surface temperature reduction of 27.1°C. This study demonstrates that leaf surface temperatures do not exist among the various species tested, but that plants do provide significant roof surface temperature reductions, a result that should reduce heat absorption by the building and lower cooling costs.

TYPE OF PRESENTATION: Poster

129	TITLE: Soil Nitrogen Hotspots From Peanut Stover	
AUTHOR: John C Patton	Undergraduate Level	Tarleton State University
AUTHOR(S): Donald G. McGahan David Kattes James Muir	MENTORS: Donald G. McGahan	

ABSTRACT: Soil Nitrogen Hotspots from Peanut Stover Cole Patton1,*, Donald G McGahan1,2, David Kattes1, James Muir2 1Tarleton State University 2AgriLife Research Center Stephenville *presenting author Nitrogen is necessary for adequate growth and development of vegetation. Soil N is usually the most limiting nutrient. Green manure is one method of adding N to soils. A natural grass legume mix experiment displayed linear traces of more vigorous growth in vegetation that crossed plot treatments. We thought that the linear vigorous vegetation growth seemed to be associated with peanut harvesting residue (peanut stover). A green manure crop is usually a legume that is plowed into the soil as an N source. Peanuts are legumes. Therefore, we speculated that the more vigorous current vegetation growth is linked to peanut stover acting as a green manure addition as the field was removed from peanut cropping and purposed as a research field. We hypothesized that soil nitrogen would be greater where grass was more vigorous. Total soil nitrogen was measured by the Dumas method for soils collected with a push probe to a 19 cm depth below visually determined to be vigorous and less vigorous vegetation. Bulk density was measured and total nitrogen calculated for the soil. Vegetation was sampled and vegetation nitrogen measured by the Dumas method. A mass balance of nitrogen, total soil and vegetation, was calculated. The vigorous growth vegetation biomass was generally greater (27 to 66.9 g m2) than the less vigorous growth (32 to 36 g m2) confirming our visual estimation of vigorous growth. Vegetation nitrogen was greater in the vigorous growth (6 to 14 g m2) than the less vigorous growth (3.7 to 6 g m2). Soil nitrogen was generally not greater in the soil underlying the vigorous growth vegetation. The summation of soil and vegetation nitrogen was not greater in the vigorous growth as we hypothesized. We cannot account for nitrogen lost via leaching below 19cm and nitrogen lost by denitrification. Greater nitrogen in no-growth soil suggests that leaching may have been a pool of nitrogen not measured. We cannot verify peanut stovers contribution as a green manure that contributed to the more vigorous growth coincident with the peanut stover deposition line.

TYPE OF PRESENTATION: Poster

130	TITLE: Inreasing the Yeild of Peanut Oil for Biodiesel Production	
AUTHOR: Sanique South	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Tassine K. Brown Sherventina Williams	MENTORS: Dr. Godson Osuji	

ABSTRACT: Peanut oil is produced for mainly food purposes. However, there is a growing interest in its use for biodiesel production. In order to provide enough peanut oil to satisfy the food industry, there has to be enough peanut yields. Glutamate dehydrogenase (GDH) synthesizes RNA that regulates mRNA encoding Acetyl Co-A carboxylase. Acetyl Co-A carboxylase is the enzyme that converts Acetyl Co-A to Malonyl Co-A. Peanuts were grown and treated with different mineral nutrients. At maturity, the seeds were harvested and the fat content was analyzed by gravimetry. Glutamate dehydrogenase was purified from the seeds and made to synthesize RNA in the presence of the four NTPs (GTP, CTP, ATP and UTP). GDH- synthesized RNA's were electrophoresed on agarose gel and trans-blotted unto nitro cellulose membrane and then hybridized with labeled cDNA probe for mRNA encoding Acetyl Co-A carboxylase. The Glutamate dehydrogenase that was synthesized from the control peanuts had an abundance of bands that encoded Acetyl Co-A carboxylase in comparison to the GDH that was synthesized from the phosphate and Nitrogen (NH4Cl) treated peanuts. The phosphate peanut has more of the inhibitors of the mRNA encoding Acetyl Co-A carboxylase. Therefore, the phosphate peanut has less accumulation of peanut oil. The peanut oil content was recorded for each mineral treatment. The control peanut was 50.5%, 47.4 % was recorded for the phosphate treated peanuts, and 51.8% for the NH4Cl. These results support the trend of the copy numbers of the inhibitors of Acetyl Co-A carboxylase mRNA. Therefore, the best mineral treatment for increase production of peanut oil is NH4Cl.

TYPE OF PRESENTATION: Poster

131	TITLE: No Title Submitted		
AUTHOR: Vanessa R Walker		Undergraduate Level	Prairie View A&M University
AUTHOR(S):		MENTORS:	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

132	TITLE: Treatments to Restore Native Plant Microorganisms and Plant Performance	
AUTHOR: Leanne Wiley	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Smith McCuistion	MENTORS: Smith McCuistion	

ABSTRACT: Restoration of native grasses is limited by soil modification resulting from exotic grass invasion and historical soil disturbance in south Texas. Absence of native plant microsymbiots is thought to contribute to native grass restoration failures. Suggested treatments to restore symbiots are the addition of small amounts of soil from remnant native sites, endophyte containing tissue (such as native hay of target plants), or arbuscular mycorrhizal fungi containing tissue (root tissue) to the planting site. However, little scientific research has tested the effect of these practices in a controlled environment. Our objective was to determine if additives of soil, root, or vegetative material from remnant native sites improved plant vigor through above and below ground biomass production of 2 native grasses 60 days after seeding. Greenhouse pots of 2 south Texas native grasses, Arizona cottontop (Digitaria californica (Benth.) Henr.; AZ) and plains bristlegrass (Setaria vulpiseta (Lam.) Roem. & Schult.; PB), were subjected to 4 treatments: 1) control 2) addition of soil from native populations of each species respectively, 3) root

material from wild populations, or 4) vegetative material from wild populations. Above and below ground biomass production, leaf area, and plant height were measured 60 days after planting. Results indicate no difference between treatments in above ground biomass production (AZ P=0.59; PB, P=0.48), below ground biomass production (PB, P=0.20), leaf area (AZ, P=0.07; PB, P=0.52), or plant height (AZ, P=0.98; PB, P=0.30). In this experiment, common methods used to restore native plant microsymbiots did not improve plant growth characteristics 60 days after planting. This experiment suggests these treatments have little effect on early establishment or restoration potential of AZ or PB, and raises doubt as to the usefulness of these techniques. Long-term implications of these treatments should be studied to determine if microsymbiot associations develop in later stages of plant establishment.

TYPE OF PRESENTATION: Poster

Business & Computer Information Systems

200	TITLE: Analysis of Market Power Exertion in the U.S. Railroad Industry	
AUTHOR: Zafarbek Ahmedov	Doctoral Level	Texas A&M University
AUTHOR(S):	MENTORS:	

ABSTRACT: Before 1980, the railroad industry in The United States was heavily regulated by the Interstate Commerce Commission. Railroad companies did not have any flexibility in determining market based freight rates nor were allowed to divest non-profitable lines. As a result, the industry became inefficient, service quality decreased, low return on investment, and many of the carriers were bankrupt due to inability to raise capital. The Staggers Rail Act of 1980 removed many regulatory restraints and gave railroad industry more flexibility in determining their rates and allowed for differential pricing. The Staggers Rail Act had significant impact on how railroad industry was restructured and transformed into more efficient lean and profitable industry over the years. However, United States Government Accountability Office (GAO) expressed concerns over competition in railroad industry and reports that captivity issues still remain in its 2006-report to congressional requesters. This paper considers a framework to study the market power exertion in the U.S. railroad industry between 2000 and 2003. Future research will incorporate changes in pricing behavior due to the recent fuel price fluctuations.

TYPE OF PRESENTATION: Poster

201	TITLE: Evaluation of Forecasting Ability of Moving Average and Autoregressive Mode	
AUTHOR: Rafael Bakhtavoryan	Doctoral Level	Texas A&M University
AUTHOR(S):	MENTORS:	

ABSTRACT: Mean absolute percentage errors (MAPEs) for settlement prices of corn futures contract for four quarters obtained from the moving average and autoregressive models are compared across the two models for determining better model for out-of-sample forecasting. For that purpose, quarterly US data ranging from 1979 quarter 1 through 2007 quarter 4 on corn futures settlement price are employed. The paper provides empirical evidence that for this particular dataset autoregressive model of order one is superior to the moving average model of order two in terms of generating out-of-sample forecasts.

TYPE OF PRESENTATION: Poster

202	TITLE: Do Pharmaceutical Corporations gain with Health Care Reform	
AUTHOR: Sean K Byrne	Doctoral Level	Texas A&M International University
AUTHOR(S):	MENTORS: William Gruben	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

203	TITLE: Market Value and Patent Claim Structure	
AUTHOR: Ahmed Elkassabgi	Doctoral Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Kent Hung	
ABSTRACT: Recently, methods of accurately valuating intellectual properties have gained interest. Past studies have used variables such as increases in firm value as a result in R&D expenditures, and patent citations as indicators of the market value of firms' intellectual properties. Patent claims are the keystones in which examination and litigation are based, and therefore hold great importance. This research proposes valuating patents based on claim structure as well as the elements in the claims as an indicator of an increase or decrease in market value of a patent. This research finds a direct correlation between claim structure (including elements in a claim) and market value of the patent. The research finds that an increase in the verticality of the claim structure, and an increase of elements in the first few levels of the claim structure, corresponds to a decrease in the value of the patent.		
TYPE OF PRESENTATION: Poster		

204	TITLE: Study on the improvement method of VaR based on support vector machine	
AUTHOR: Jun Huang	Doctoral Level	Texas A&M International University
AUTHOR(S): Guoyong Zhang	MENTORS:	
ABSTRACT: The traditional calculation methods of VaR mainly are delta-positive method, Mont Carlo method and history imitate method, these three methods exist some weakness such as thick tail, not line, big estimate error, calculation complications etc. this paper uses support vector machine to improve the traditional method of VaR, and obtain the good result. It is very meaningful to expand the foundation calculation method of VaR.		
TYPE OF PRESENTATION: Poster		

205	TITLE: The optimal portfolio strategy during the period of financial crisis	
AUTHOR: Kuo-Hao (Howard) Lee	Doctoral Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Ken Hung	

ABSTRACT: Harry M. Markowitz (1952), in his initiated contribution to modern portfolio theory, mentioned that the task of reducing the overall risk could be done by investors to arrange a well forming of diversified portfolio on their investments. The supposition underlying this international portfolio is that stock markets of different countries tend to present minor levels of comovement than stocks trading in the same stock market. However, some recent studies found that if markets exhibit increased comovement during turbulent periods, such like financial crisis period, then the risk-sharing motive behind diversification may fail to deliver the perceived benefits in times when they are most needed. We will discover the fact that whether domestic portfolio would outperform international diversification or not especially in the downside market when the investors need the shelter of international diversification most. We will then provide an optimal strategy for international investors to set up their portfolio in downside market.

TYPE OF PRESENTATION: Poster

206	TITLE: No Title Submitted		
AUTHOR: Mengxuan Ding		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS:	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

207	TITLE: The Relationship between U.S. Trading Partners' Level of Per Capita Income		
AUTHOR: Julian A Gelvez		Master's Level	TAMU - Corpus Christi
AUTHOR(S): Adolfo Benavides		MENTORS: Adolfo Benavides	
ABSTRACT: This paper employs the Grubel-Lloyd model to estimate the Intra-Industry coefficients of U.S. trade with thirty two of its trading partners and to establish the patterns of the United States' trade with high-income and low-income nations. It concludes that there is a statistically significant direct relationship between the level of trade in the same industry categories and the per capita income of the countries with which the United States trades and closes with a strong argument in support of free trade.			
TYPE OF PRESENTATION: Poster			

208	TITLE: Analysis on characteristics of accounting restatement		
AUTHOR: Zhiqiang He		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS:	
ABSTRACT: With the increases of the complexities of accounting systems, fierce competitions, globalization and deregulation, the number of restatements soared dramatically from 1997 to 2006. According to GAO's reports, an increase of 309% on numbers of restatements occurred from 1998 to 2002. This number kept increase through 2003 to 2005. The restatement number was 102 in 1998 and the number became about 657 in 2005. Facing the quick increases of restatements, regulators, investors,			

company directors and other related parties are keen to find the factors that lead to companies' increasing restatements. Many attempts to explain the restatement have been made, which could be categorized into three big categories. First, the regulatory factors may lead to company's restatement. Obviously, the change of Accounting Requirements by authorities can easily cause the restatement (however, this kind of restatement are not included in GAO's researches). The increasing complexity of the accounting requirement also caused the increase of restatement. Second, deteriorations of companies' financial situations also lead to incentives to managing earns, which easily cause restatement later on. Companies managed their earnings to meet the covenant with lenders, increased investor's confident and keep or maintain their ratings. Third, auditors or auditor committees also play certain role on restatements. People found that significant association between tax-service fees and restatements, suggesting that the qualities of financial reporting may improve when auditors do more tax work. We investigated factors that may cause restatements and our founds are as followings:

TYPE OF PRESENTATION: Poster

209	TITLE: Impact of Change in Oil Pricing Strategy on the EU Oil Imports	
AUTHOR: Olga Kudoyan	Master's Level	Texas A&M University
AUTHOR(S):	MENTORS:	

ABSTRACT: The paper shows the relationship between the European Union (EU) oil imports from Organization of the Petroleum Exporting Countries (OPEC) and the changes in oil pricing strategy for the period of January 4, 1980 to December 31, 2005. Stable Aggregate Currency (SAC) was used in the paper to minimize the volatility of the exchange rates. Following other studies that commonly use Ordinary Least Squares (OLS) regression, this paper uses OLS regression in order to analyze and quantify the impact of oil price in US dollar and SAC on EU oil imports. To compare results between different oil pricing strategies, two regression models were used: one with oil price in US dollar and the second one with oil price in SAC. Results showed that according to the first model, (where the influence of oil price in US dollar on oil imports is analyzed) changes in the oil price denominated in US dollar has no statistical impact on EU oil imports from the OPEC member countries. However, the second model showed strong relationship between EU oil imports and oil price in SAC both economically and statistically.

TYPE OF PRESENTATION: Poster

210	TITLE: Financial Intermediation: Current State of Retirees in the United States	
AUTHOR: Collyn McClendon	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Dr. Nathan Harness Dr. Hal Langford	

ABSTRACT: The current study was conducted to shed light on the decision making of retirees and the impact of working with a financial intermediary. One of the largest cohorts in American history is beginning to reach the age of retirement, yet little research has been devoted to financial planning behavior of retirees as a whole. This survey collected information from 1,524 participants who; have been retired longer than one year, are between the ages of 55 and 75, and who have $100,000 or more in household investable financial assets. We find that female decision makers, college graduates, widows, people ages 65 to 69, those with greater investable assets, and those with considerable debt are more likely to work with a financial intermediary when controlling for demographic and financial variables. In contrast, males, those who are divorced, those with high school as the highest level of education, and

people ages 70-75 are less likely to work with a financial intermediary. We also find that working with an advisor prior to retirement and even during retirement significantly increases the likelihood of retirees completing basic activities to determine whether they can afford to retire.
TYPE OF PRESENTATION: Poster

211	TITLE: Feral Hogs	
AUTHOR: Meredith Rhodes	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Dr. Steven Shwiff Dr. Hal Lanford	
ABSTRACT: The existence of invasive species is the direct result of economic activities, such as international trade and travel, and the magnitude of their expansion depends on human behavior. Whether deliberate or accidental, human activity aids in the transporting of species, which allows them to expand freely into different regions. In Texas, the feral hog is a nonindigenous animal that has become especially problematic. The Texas population of feral hogs is over two million, and it continues to expand every year and across counties. Along the way, they cause significant ecological, environmental, and agricultural damage, totaling to an estimated economic cost of $51.7 million in losses annually in Texas alone. Because feral hogs represent an externality, managing and mitigating them would benefit the entire society. Initially the costs of damages are absorbed by the landowners but are ultimately transferred to consumers in the form of higher prices. Consequently, it is imperative to implement a cost effective method to alleviate the feral hog situation in order to improve the welfare of society.		
TYPE OF PRESENTATION: Poster		

212	TITLE: The opportunities in Indian retail sector for the Venture Capitalists.	
AUTHOR: Sriram Prasanna Sambasivam	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Ananda Mukherji	
ABSTRACT: Abstract This objective of this paper is to explain the hidden potential in the retail sector of, World's fastest growing free market democracy & the world's back-office of Information Technology, India. The dynamics in emerging venture capital markets differ compared to those of developed markets. The emerging private equity markets focus primarily on minority equity participation and it presents a host of opportunities. Veteran retail investors are amazed by the potential revenue per square feet in the malls and stores. There are about nine million small grocery shops in India, India's middle class is growing rapidly and never forget they are the majority in the India's 1.2 billion population. The Indian retail sector is now worth $250bn a year, but it is heavily immature. Well over 95% of the market is made up of small, family run stores. My paper mainly concentrates finding the hidden avenues for venture capitalists in the fast growing Indian economy and also it focuses on the winning strategy in the Indian markets.		
TYPE OF PRESENTATION: Poster		

213	TITLE:	
AUTHOR: Lindsey J Withrow	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Dr. Stephanie Pane	

	Dr. Hal Langford
ABSTRACT: Personality tests have become a tool sometimes used in job market as a means to hire new employees. These tests have caused considerable debate regarding whether or not they are actually a good measure of a person's work ethic and performance. In the case that these tests are reliable and valid, a proposal and corresponding empirical study have been developed in order to explore whether potential employees who include personality test results as a part of their resume portfolio will have a greater rate of hire as opposed to those having a resume alone. If the hypotheses are supported, two practical conclusions can be drawn: (1) requiring personality assessments of job applicants may be a growing trend among American businesses and (2) job applicants should consider including personality test evaluations as part of their application portfolio.	

Computer Science

300	TITLE: An Attribute Concept Hierarchy Based Conceptual Search Engine		
AUTHOR: Sri Ganesh Anaparthi		Master's Level	Texas A&M University - Commerce
AUTHOR(S):		MENTORS: Dr. Sang C. Suh	
ABSTRACT: Most of the common techniques employed in search engine are based on the term frequency. To achieve a more accurate analysis, the underlying representation should indicate terms that capture the concepts of text. In this paper we present how the concepts can be represented using Hierarchy of Attributes and concepts using clustering technique and propose a methodology to extract documents against a query using this method. Initially, the entire space of terms could be generated by a set of (linearly) independent terms over a numerical field. The total number of concepts to be generated over a numerical field using a given number of attributes. An algorithmic implementation of Hierarchy of concepts and attributes (HAC) is developed and experimental results are presented using concepts from the field of education.			
TYPE OF PRESENTATION: Poster			

301	TITLE: Fast Density-Based Lesion Detection in Dermoscopy Images		
AUTHOR: Dilip Baluguri		Master's Level	Texas A&M University - Commerce
AUTHOR(S):		MENTORS: Mutlu Mete	
ABSTRACT: Dermoscopy is one of the major imaging modalities used in the diagnosis of melanoma and other pigmented skin lesions. Automated assessment tools for dermoscopy images have become an important research field mainly because of inter- and intraobserver variations in human interpretation. One of the most important steps in dermoscopy image analysis is the automated detection of lesion borders. In this study, we introduce a border-driven density-based framework to identify targeted skin legion(s) in dermoscopy images. Unlike the conventional density based algorithm, our algorithm expands regions refereeing to current border of region, which is represented as a simple polygon at any time. We tested our algorithm on a dataset of 100 dermoscopy images, which have also ground truth borders. The result shows that accuracy of assessment averages out at 95%.			
TYPE OF PRESENTATION: Poster			

302	TITLE: Nanotechnolgy		
AUTHOR: Rishikesh Baral		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Dr. Rohita Goonatilake STEM-RRG	
ABSTRACT: Nanotechnology Nanotechnology also known as nanotech, is the study of the control of matter on an atomic and molecular scale. In its original sense, nanotechnology refers to the projected ability to construct items from the bottom up, using techniques and tools being developed today to make complete, high performance products. Thus, nanotechnology is an expected future manufacturing technology that will make most products lighter, stronger, cleaner, less expensive and more precise. So, the presentation will be totally based upon the definition of nanotechnology, its origin, its implication, its advantages and disadvantages, and its future.			
TYPE OF PRESENTATION: Poster			

303	TITLE: Nueces Bay Environmental Data Visualization		
AUTHOR: Anh Tuan Do		Master's Level	TAMU - Corpus Christi
AUTHOR(S): Ram Kumar Vangala Ruby Mehrubeoglu		MENTORS: Dr. Scott A. King	
ABSTRACT: In this paper we present a system which can be used as a tool to visualize georeferenced scientific data. The system can display several attributes at the same time using color, lightning, glyphs, or animation. We used this tool to visualize salinity levels for the Nueces Bay. Currently, the Nueces Bay is the home of many water species such as fish, shrimp, and blue crabs. In order for these animals to survive, the environmental factors must be within their tolerance. Since 1991, the Division of Nearshore Research (DNR) has kept track of the salinity as well as other parameters and they can be accessed through web queries. However, the website does not show the correlations between the data. This motivates us to create our visualization system.			
TYPE OF PRESENTATION: Poster			

304	TITLE: No Title Submitted		
AUTHOR: Archana Gudala		Master's Level	TAMU - Corpus Christi
AUTHOR(S):		MENTORS:	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

305	TITLE: User friendly Image Indexing and retrieval		
AUTHOR: Santosh Kaparthi		Master's Level	Texas A&M University - Commerce
AUTHOR(S):		MENTORS: Dr. Nikolay Metodiev Sirakov	

ABSTRACT: In the recent years very large amount of research is going on the field of Image Database organization and retrieval. Big companies like Yahoo and Google are building image databases with efficient content based image indexing and retrieval. The retrieval procedure heavily depends on the indexing. In the early years text based indexing has been used. This type of indexing experiences difficulties to label the image with respect to its content. To overcome this disadvantage indexing methods have been developed on the base of two kinds of image features: low level; and high level features. The first class consists of features linked to a particular region: geometry, texture, homogeneity, color….etc. Some of the useful high level features are the objects relationship. The low level features contain local information of the image and can't be used alone to describe the image as a global entity. While high level features contain global information. But to get an indexing providing efficient organization and fast narrow image retrieval a combination of high level feature and low level features is needed. This work is developing a tool to extract image semantics, in other words the relations between the objects in an image. To do so a set of low level features are used to describe objects' relationships, represented in natural language by using formal grammar. The purpose of this work is to facilitate the database querying. The presentation will discuss also the tradeoff between performance and speed of the database depending on the number of features selected for annotation. If the number of features increases the probability of the retrieval system to increase its accuracy of image detection increases as well. But it will lead increasing the run time of the system. A demonstration will be given by a software developed on the theory.

TYPE OF PRESENTATION: Poster

306	TITLE: Computing with CUDA		
AUTHOR: Sarin Kizhakkepurayil		Master's Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS: Dr. Wei Da Hao	

ABSTRACT: Compute Unified Device Architecture(CUDA) is a parallel computing architecture developed by Nvidia.in last few years there was a rapid development in GPUs(Graphical Processing Units) and they have contributed high order increase in computing power at lower cost. The CUDA programming model provides a straightforward means of describing inherently parallel computations and delivers high throughput on massively parallel problems. This poster attempts to describe the CUDA architecture, performance compared to traditional CPU and its applications on scientific parallel computing.

TYPE OF PRESENTATION: Poster

307	TITLE: Numerical Solution To The Direct Problem With Mathematica		
AUTHOR: Muhammed Ozturk		Master's Level	Texas A&M University - Commerce
AUTHOR(S):		MENTORS: Dr. Hasan Coskun	

ABSTRACT: The production of human speech can be summarized as follows:The air in the lungs travels back, it passes through the vocal cords, the opening vocal cords (glottis) is adjusted depending on the sound produced.The pressure created at the glottis puts the nearby air molecules in the vocal tract into longitudinal vibrations. These vibrations come out of the lips as a pressure wave,which is the sound created. Here we have two important questions: For a given shape of the vocal tract, can we determine the absolute pressure P(k,x) at the lips and the effective velocity of all air molecules V(k,x) as a function of k and x, where k is the angular wavenumber measured in rad/cm and x is the distance from the glottis?

This is known as a direct problem. Conversely, can we determine the shape of the vocal tract when we know the absolute pressure P(k,x) for k is an arbitrary number between zero and infinity. This is called the inverse problem. In my poster, I will represent a brief summary for both of these problems, the numerical solutions to these problems and a computer program to obtain the solutions easily.

TYPE OF PRESENTATION: Poster

308	TITLE: Prog. Efficiency-Effects of implementing efficient code in inefficient way	
AUTHOR: Jyothi Pamulapati	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Dr. Dan Creider	

ABSTRACT: Computers and their applications are a fast growing field in the modern era of science and technology. One of the most important aspects of computers is the speed of a computer and the amount of time it takes to execute programs. This trend did affect the programming field as well. While the number of CPU cycles has increased, programmers have taken advantage of this speed and have not been careful to make sure that the programs are implemented to produce the best speed possible. Hence while designing algorithms the programmer has to take care that he implement's the algorithm in the most efficient method possible. Though, implementing the most efficient algorithm is really important there are some pitfalls which should not be overlooked. Implementing the most efficient algorithm in an inefficient way will reduce the speed of the program. Depending on the algorithm and the actual code generated by the programmer, the reduction in speed could be non-existent or minor or could drastically reduce the speed of the program. The focus of this poster presentation is to illustrate this concept using a simple algorithm to obtain a frequency count of a single value in an unordered data set implemented in three different ways. The typical implementation that most programmer would write; a modified implementation of the algorithm that combines the loop termination test and the value test into one test to increase the speed of the implementation; and an incorrect implementation of the modified algorithm which has a detrimental impact of the speed of the algorithm. The three implementations of the algorithm are timed for several different percentages of the search value in the data set and several different sizes of the data set. The base line comparison is the typical code that a programmer would write. The results shown illustrate that as the percentage of the search value increases in the data set the modified implementation starts out faster than the typical implementation of the algorithm and approaches the speed of the typical implementation when the search value occurs 100 percent of the time. The modified implementation always outperforms the typical implementation. However, the incorrect modified implementation of the algorithm initially outperforms the typical implementation but becomes much slower as the percentage of the search value increases in the data set. When the search value occurs 100 percent of the time, the incorrect modified implementation is almost three times (2.9 times) slower that the typical implementation.

TYPE OF PRESENTATION: Poster

309	TITLE: Active Contours for Semantics Extraction and Tracking	
AUTHOR: Karthik Ushkala	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Nikolay Metodiev Sirakov	

ABSTRACT: The main goal of this study is to develop an approach and design a software system called Image Semantic System (ISS) capable of defining the objects' relations in an image. This work is based on a segmentation approach, which uses active contours and shells to separate the objects inside of an image. The active contour model is developed on the exact solution of a special form of the geometric heat differential equation. An important property of the method is its ability to preserve the boundary connectivity, which makes the model suitable for objects' relations detection. Image semantics deals with the special, structural and motional relationships between the image objects. It makes the semantic very useful for object tracking and analysis. In the present approach we first segment the image using shells [1, 2]. Then the active contour model is applied to extract low level objects' features such as convex-hull [2], concavities [3], shape and mass centre. During the next stage the features are stored in a database. Further they are used to extract relations in the form left, right, up, down, rotation and translation, which are considered high level features and could be used for tracking. [1] N.M.Sirakov, K. Ushkala, 2009, An Integral Active Contour Model for Convex Hull and Boundary Extraction, Lecture Notes in Computer Science, Springer Verlag, ISVC'2009. Nov.30-Dec.02, 2009, in printing. [2]. Sirakov,N.M., 2006. A New Active Convex Hull Model For Image Regions, Journal of Mathematical Imaging and Vision, Vol.26, Num 3, pp:309-325 [3]. Sirakov,N.M., Simonelli, I., 2006, A New Automatic Concavities Extraction Model, SSIAI-2006., IEEE Computer Society, Denver March 2006, 178-182. ISBN: 1-4244-0069-4

TYPE OF PRESENTATION: Poster

310	TITLE: Source Code Visualization: Python Code on spreadsheet	
AUTHOR: Hyung Jun Yoo	Master's Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS:	

ABSTRACT: A source code can be written in a way which it is easy to read and understand. However, some codes are hard to read when in a different stage of development, different kinds of source code editor is used, some tabs are inconsistent, tab can be a tab, 3 spaces, 4 spaces or more. This project shows how to eliminate problems with tabs by using cells in spreadsheet.

TYPE OF PRESENTATION: Poster

311	TITLE: Storage Resource Broker Based Data Integration	
AUTHOR: Yan Zhang	Master's Level	TAMU - Corpus Christi
AUTHOR(S):	MENTORS: Longzhuang Li	

ABSTRACT: This project will implement a prototype to apply Storage Resource Broker (SRB) technology to help the Gulf of Mexico (GOM) research community collect data from heterogeneous resources. This SRB based prototype will build on previous work, which involved other data collection technologies for different purposes, such as virtual data integration and materialized data integration. The purpose of the design is to provide a backup system to allow continuous data and information availability to the local end user. Another consideration is to develop a flexible and robust framework which could easily integrate the new data source or new domain to the current system.

TYPE OF PRESENTATION: Poster

312	TITLE: Simple Java		
AUTHOR: Joseph R Brysch		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS: Dr. Young Lee	
ABSTRACT: Software developers lose a lot of time going through there colleagues source code, as time is crucial when meeting deadlines. Most of the time source code is always hard to follow, especially if the code is not of your design. Software developers find it difficult to find a class that performs a specific function when testing and debugging. In order to find these functions, software would have to be developed that can find the specific class and show the user the function the class contains. The software would have to show the prewritten source code and specify what parts are classes. The user would have to click on the class that may contain the function and a preview box of that class' source code will be displayed. The program Simple Java performs these tasks without any problems.			
TYPE OF PRESENTATION: Poster			

313	TITLE: Nuclear Isotopic Abundances for Assessment of Radiation Biology Application		
AUTHOR: Daimien J Burks		Undergraduate Level	Prairie View A&M University
AUTHOR(S): Premkumar Saganti		MENTORS: Premkumar Saganti	
ABSTRACT: Radiation transport calculations with the implementation of energy level spectral characteristics are expected to enhance the understanding of radiation damage at cellular level. Implications of these excited energy spectral calculations in the assessment of radiation damage to the human body may provide understanding on the long-term space radiation exposure including the anticipated deep-space human explorations in the next two decades. Nuclear Shell model based calculations of the Selective-Core (Saganti-Cucinotta, 2002) approach are very promising and are being expanded for several nuclei fragments including proton and neutron knockout reaction mechanisms. We are currently expanding the nuclear cross-sectional databases for about 190 isotopes identified to be of significant contribution in the context of space radiation environment from H (Z=1) through Ni (Z=28) in the energy range from 25 MeV/n to 1000 MeV/n. From the list of about 11 identified nuclei projectiles, four nuclei (C, N, O, and Ne) and their corresponding isotopes are being considered to augment the nuclear cross-sectional data base for the following: C (A=9 thru 16), N (A=12 thru 18), O (14 thru 20), and Ne (A=18 thru 24). These cross-sectional data from National Nuclear Data Center (NNDC) as well as other recent measurements and publications will be presented in an effort for implementation into the radiation transport calculations in the context of the Quantum Multiple Scattering Fragmentation (Cucinotta, 1996-2006) calculations. This research is being supported in part by NASA Grant - NNX07AL91G and NASA Co-op Agreement – NNX07AT25A (PI: Dr. Saganti)			
TYPE OF PRESENTATION: Poster			

314	TITLE: Pattern Recognizing Artificial Neural Networks		
AUTHOR: Matthew Caudill		Undergraduate Level	Texas A&M University at Texarkana
AUTHOR(S): Claude Ramsey David Watson IV		MENTORS: Dr. Igor Aizenberg	

ABSTRACT: We considered two image recognition problems: recognition of blurred images and classification of textured images. Traditional methods of pattern recognition are often inefficient and require immense computer power to process. Blurring complicates automatic recognition of images by conventional methods and most cases visual recognition. Since the Fourier phase spectrum is less susceptible to information loss due to blurring, it is used as a feature space for recognition of blurred images. Just phases corresponding to a few lowest frequencies are used to construct learning and testing data for use in a multilayer neural network based on multi-valued neurons (MLMVN). This type of multilayer network provides a higher efficiency and is more accurate than traditional neural networks and more flexible than statistical methods. Classification of textures is important for automatic image segmentation. Principle component analysis is used to create a feature space for solving this problem. Just a few principle components are used as the features. Manipulating neural network structures with various sizes of images, we performed learning and testing to see which arrangements worked best. Results from experiments have confirmed that our approach has significant advantages for solving these types of recognition problems. Further research and testing may prove this method as an important tool for research in medical, satellite, and other areas of image processing.

TYPE OF PRESENTATION: Poster

315	TITLE: Student Task Oriented Visual Environment		
AUTHOR: Donald S May		Undergraduate Level	Texas A&M University - Commerce
AUTHOR(S): Alexandra Von Ausdal Mohammad Imran		MENTORS: Dr.Sam Saffer Dr.Gilbert Naizer	

ABSTRACT: PURPOSE: The purpose of this research is to create a virtual 3d lab where middle school students can experiment with various concepts in the physical sciences. This work uses the Open Cobalt framework and looks at ways to incorporate 3d physics simulation and mathematical visualizations to a 3d virtual collaborative world. The goal is to implement a modified version of the Bullet physics engine into Open Cobalt and to create a 3d island that demonstrates physics concepts using this physics engine and various Squeak morphs. In order to ensure numerical accuracy across different computer architectures and operating systems, the Bullet physics engine will be modified to use the fdlibm library. To communicate with Bullet in Open Cobalt, we will be using VMMaker and Smalltalk primitives. RESULTS: Previous results were aimed at learning where the challenges are in teaching math and science to middle school students using 2D game programming in the Microsoft XNA Framework. Preliminary results show the need to reduce typing, and to provide an environment that reduces the amount of programming required to visualize concepts. *Funded by a grant from the National Science Foundation.

TYPE OF PRESENTATION: Poster

316	TITLE: Low Inversion Density Sort		
AUTHOR: Jeff Wilson		Undergraduate Level	Texas A&M University at Texarkana
AUTHOR(S): Dan Brower Matthew Caudill		MENTORS: Victor Govindaswamy	

ABSTRACT: The field of sorting is thoroughly studied; sorts such as the Mergesort and QuickSort which manage efficiency on the order of nlog(n) are difficult to compete with. However these algorithms are designed to sort an array of random numbers most efficiently. In a real world situation, one knows

something about the nature of the data they are sorting, and often these features can be used to sort more efficiently. In our project we made and experimented with some new algorithms and studied how they compared to the forerunners in the field. In particular, we examine a new algorithm Clump Sort meant for low inversion density applications including data recovery.
TYPE OF PRESENTATION: Poster

Education

401	TITLE: Urban Leadership, the Arts, and Multimedia Technology: Interactive School a	
AUTHOR: Angela M Cornelius	Doctoral Level	Texas A&M University
AUTHOR(S):	MENTORS: Dr. Stephen Carpenter Dr. Chance Lewis	
ABSTRACT: The arts offer ways of engaging with the world that other modes of inquiry do not. The current emphasis on high-stakes testing and increased class-time devoted to traditionally centralized school subjects like math and science do not allow students to know the arts. In this context few students come to know how the arts enable democratic and caring ways of engaging in the world or encourage personal success. Urban leadership through the arts can embody hope and offer a model for visionary thinking. The 2009 Texas Governor's School in Arts, and Humanities for Urban Leadership at Texas A&M University was a summer educational program open to all high achieving 11th and 12th grade students from Texas public high schools. The students who attended represented different racial, ethnic, cultural, socio-economic, linguistic, geographic, and gender groups. Among the four college-level courses offered during the Governor's School was the course, Urban Leadership, the Arts, and Multimedia Technology. The objective of the course was to introduce students to the importance of 21st century multimedia technology on urban leadership and the arts. The central project for the course was the "Interactive School and Community Media Service Project." Students first learned about graphic design processes. They then divided into learning communities and developed goals which they thought were relevant to their own communities or more global problems if they desired. Next, the students collaborated, negotiated and identified a product or service and then produced a final graphic product. The results of the project revealed a heightened sense of community and power that many students expressed they did not possess prior to the Governor's School.		
TYPE OF PRESENTATION: Poster		

402	TITLE: A Snapshot of Quality Systems in Charter Schools	
AUTHOR: Guadalupe Cortinas	Doctoral Level	Texas A&M International University
AUTHOR(S): Jose Perez III	MENTORS: Dr. George Potter	
ABSTRACT: There has been long debate within the educational realm whether charter schools are effective. The production of high achieving scores would make it logical to assume charter schools are indeed effective. However research shows that the population enrolled in charter schools is composed of diverse learners as in American Public Schools. The quality of education that is provided in successful charter schools revolve around many central themes including culture, missions, people, as well as quality structures and systems. The interrelationship of these elements is essential for a quality educational system equipped for promoting student success. It is imperative to have a well-defined institutional culture geared towards achieving the schools clear mission. The organizational structures and systems		

must be supporting student learning, professional staffing, and must be able to understand the schools mission. The organization must be committed to achieving its goals and willing to carry out their responsibilities to support their students in their learning environment. This project examines the trends in current practices, looked at the history of quality in charter schools, and carried out a comparison between two South Texas charter schools. It illustrates the many contemporary economic, demographic, and accountability issues within the educational settings. The goal of the project is to seek degree of quality in the organizations studied and provide strategies promoted in the review of the literature to sustain, improve, and/or plan for effective quality systems in charter schools.

TYPE OF PRESENTATION: Poster

403	TITLE: The pragmatic side of stereotypes		
AUTHOR: Laura Di Ferrante		Doctoral Level	Texas A&M University - Commerce
AUTHOR(S):		MENTORS: Dr Salvatore Attardo	

ABSTRACT: Taking into account the linguistic shapes of stereotypes, it is possible to analyze them as crystallized beliefs that can be observed from a pragmalinguistic perspective. Besides, the strong relation between stereotypes and the culture they are produced in, give us a privileged perspective to look at some culturally and ethnically marked conversation strategies. The analysis of this object, already explored by other social sciences, allowed us to individuate some general pragmatic functions stereotypes assume, and it has been also possible to observe the on-going fulfillment of these functions within the different contexts they are uttered in. A first goal here is to propose a pragmatic definition of stereotypes, a second one is to establish the pragmatic status of stereotypes along three dimensions connected with the context, their role in relation to the Cooperative Principle, and the perlocutionary force. I shall be able to show that: 1. from the point of view of the context, for a stereotype in order to make sense, there is the need that the utterer refers to it and that the addressee would recognize the utterance as conveying a stereotype; 2. in relation with the Cooperative Principle launched by Paul Grice (1967; 1989) and its famous four maxims, stereotypes violate the maxim of quality, and therefore the Cooperative Principle. I shall state, borrowing and overturning the Allport concept of “kernel of truth”, the existence of a “kernel of falsity” of stereotypes; 3. finally, I will demonstrate the rationality of stereotypes and that it is not possible attributing to stereotypes a perlocutionary force.

TYPE OF PRESENTATION: Poster

404	TITLE: Instructional improvement through administrator presence		
AUTHOR: Susana P Garza		Doctoral Level	Texas A&M International University
AUTHOR(S): Keri Shannon		MENTORS: Dr. George Potter	

ABSTRACT: This study involves school districts in South Texas that have increased administrative presence in the classrooms through various forms of teacher observations. Data shows how increased presence has impacted instruction and student outcomes.

TYPE OF PRESENTATION: Poster

405	TITLE: Improving Science TAKS Scores for Bilingual and Economically Disadvantaged

AUTHOR: Jose R Lopez	Doctoral Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Humberto Gonzalez	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

406	TITLE: From Paper to Video The Adaption of Academic Writing to Visual Language
AUTHOR: Luca Morazzano	Doctoral Level	Texas A&M University - Commerce
AUTHOR(S): Dr. Salvatore Attardo	MENTORS:	
ABSTRACT:		
TYPE OF PRESENTATION: Poster		

407	TITLE: Teacher Quality and Teacher Preparation Programs
AUTHOR: Mayra Pena	Doctoral Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Humberto Gonzalez	
ABSTRACT: Due to the increasing focus on accountability, issues of reform have been increasingly in the forefront of education. Accountability measures indicating poor performance of schools has led policy in the direction of school reform. These measures are not only affecting the public education system, but higher education as well. No Child Left Behind mandates as well as the Higher Education Act of 1965 require that students be taught by highly qualified teachers. Teacher quality has become an increasing focus of colleges and universities. This research seeks to compare local and surrounding teacher preparation programs to those around the country in an effort to identify trends in teacher preparation and quality.		
TYPE OF PRESENTATION: Poster		

408	TITLE: Teen Pregnancy: School Administrators' Decision-Making Process and Its Impa
AUTHOR: Liliana R Portilla	Doctoral Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. George Potter	
ABSTRACT: This study examined school administrations' decision-making processes regarding teen pregnancy with respects to changing accountability policies, funding, and intervention practices. Researchers examined the decision making process within a context of defining a school administrators' perceptions of teen pregnancy from a perspective of its effects on student achievement. This study further examined and assessed the administrator's perspectives on teen pregnancy with relation to possible indicators, contributing factors, and practices. As noted by Dr. Pedro Noguera (2002), many		

stakeholders tend to adhere to outdated and erroneous beliefs about students and academic success when teen pregnancy is a factor. The study further explored, school administrators' feelings and thoughts about teen pregnancy in relation to the impact of interventions and pregnancy education programs for students. Researchers examined available theoretical frameworks, along with conflicting research results in order to garner a better interpretation of stakeholder perceptions. Three questions frame the direction of the study: 1.) What impact does retention have on students with respects to teen pregnancy and completion? 2.) What are the experiences of school administrators with respects to interventions related to teen Pregnancy? 3.) What themes emerge from stakeholders' perceptions on teen pregnancy that can further inform policy makers and educational leaders regarding educational best practices? This study evolved as a result of the examination of certain unaddressed instructional topics (e.g. sex education, teen pregnancy, socio-economics, etc.) and alternative educational practices for serving at -risk students. In the face of changing demographics, this study attempts to understand the perceptions of secondary school administrators with respect to at -risk students and methods for identifying and addressing these difficult topics and alternative educational environments. The study found that although the majority of school administrators were aware of issues and challenges that they did not alter their practices. For many at-risk students, teen pregnancy, life skills, and difficult life issues were not addressed or were disconnected from the regular school culture.

TYPE OF PRESENTATION: Poster

409	TITLE: Reader's Theater: Interactive Reading For Grades 3-6	
AUTHOR: Vivian D Tucker	Doctoral Level	TAMU - Corpus Christi
AUTHOR(S): Vivian Tucker	MENTORS: Bryant Griffith	

ABSTRACT: Repeated reading is one of the methods for developing students' fluency in reading. Oral reading practice is required for fluency development. Fluency bridges the gap between word recognition and comprehension for readers. Reader's theater is one of the best and most authentic ways to engage students enthusiastically in repeated reading to build fluency and improve overall reading performance. With reader's theater, students use scripts to practice for a performance. The focus of the practice is to convey a meaningful interpretation of the text to an audience; reader's theater is also a natural vehicle for developing reading comprehension. Reader's theater gives students of all levels the motivation to practice fluency. They become so engaged in the process of rehearsal and performance that they may not even be aware of their repeated readings which produces gains in reading. Reader's theater provides readers with legitimate reason to reread text and to practice fluency and promotes cooperative interaction with peers and makes the reading task appealing. Reader's theater enhances listening skills, vocabulary development, decoding, comprehension, and oral speaking skills. It creates a class of eager readers by engaging students like no other reading activity. Students love it and don't realize the improvement in their reading abilities while they are having fun! Resources: Prior, Jennifer Overend. (2006) Building Fluency through Reader's Theater. Teacher Created Materials, Inc. Playbooks Reader's Theater: After School Kit for Grades K-2. (2008). Playbooks, Inc.: Ladera Ranch, CA. Playbooks Reader's Theater: After School Kit for Grades 3-5. (2008). Playbooks, Inc.: Ladera Ranch, CA.

TYPE OF PRESENTATION: Poster

410	TITLE: Reader's Theater: Interactive Reading For Grades 3-6	
AUTHOR: Alma Williams	Doctoral Level	TAMU - Corpus Christi

AUTHOR(S):	MENTORS: Bryant Griffith

ABSTRACT: Reader's Theater: Interactive Reading for Grades 3-6 Presentation Proposal Repeated reading is one of the methods for developing students' fluency in reading. Oral reading practice is required for fluency development. Fluency bridges the gap between word recognition and comprehension for readers. Reader's theater is one of the best and most authentic ways to engage students enthusiastically in repeated reading to build fluency and improve overall reading performance. With reader's theater, students use scripts to practice for a performance. The focus of the practice is to convey a meaningful interpretation of the text to an audience; reader's theater is also a natural vehicle for developing reading comprehension. Most importantly, reader's theater is fun! We enjoy seeing students perform with their voices, watch their excitement, and enjoy their growth as successful readers. Moreover, through the opportunity to perform and see themselves as successful in reading, many of the struggling readers give up on themselves as they are forced to trudge through on unsuccessful reading experience after another. The enjoyment, success, and fulfillment experienced by the students can help break the cycle of despair and failure in reading for so many students who find learning to read difficult. Reader's theater gives students of all levels the motivation to practice fluency. They become so engaged in the process of rehearsal and performance that they may not even be aware of their repeated readings which produces gains in reading. Reader's theater provides readers with legitimate reason to reread text and to practice fluency and promotes cooperative interaction with peers and makes the reading task appealing. Reader's theater enhances listening skills, vocabulary development, decoding, comprehension, and oral speaking skills. It creates a class of eager readers by engaging students like no other reading activity. Students love it and don't realize the improvement in their reading abilities while they are having fun!

TYPE OF PRESENTATION: Poster

411	TITLE: Chinese Students' Ajdjustment at a Texas Regional University	
AUTHOR: Jiashi Zhao	Doctoral Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Dr. Jon Travis	

ABSTRACT: This paper discusses Chinese Students' Adjustment academically and culturally at a Texas University. Chinese Students may experience difficulty in adjusting to a more relaxed classroom environment, in accepting American social values, in interacting with American teachers and classmates, and in adjusting to American culture and lifestyles. This study seeks to identify activities and opportunities that can be provided by American faculty members and International programs at the university to help them in their acculturation. Therefore, their transition to the American education system and culture may be expedited and enhanced.

TYPE OF PRESENTATION: Poster

412	TITLE: Fluency	
AUTHOR: Maria I Aguilera	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. C. Guerra	

ABSTRACT: How the lack of fluency affects the student's level of reading.

TYPE OF PRESENTATION: Poster

413	TITLE: Texas Border Health Risk Assessment	
AUTHOR: Karla Alamilla	Master's Level	Texas A&M International University
AUTHOR(S): Cristina Gutierrez Patricia Gutierrez Lisa Martinez Sarah Salinas	MENTORS: Trace Pirtle	
ABSTRACT: Our group developed a 20 question testing instrument to evaluate the general health risk of the population residing on the Texas Border, particularly the Laredo, Texas Border area. We developed the "Texas Border Health Risk Assessment" to evaluate the general health risk of the participants of this survey which will be conducted on an off - campus field research observation study. Our findings will establish whether a certain population, children, adolescents or adults have higher health risks than others, and if they will require certain interventions such as counseling, educational materials, referrals to doctors or other health professionals and follow-up as needed to remain in good health.		
TYPE OF PRESENTATION: Poster		

414	TITLE: Bilingual	
AUTHOR: Adriana Alcaraz	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS:	
ABSTRACT: Is bilingual classes successful to the educational success of each child.		
TYPE OF PRESENTATION: Poster		

415	TITLE: Web Based Programs and Technology Standards	
AUTHOR: Carla R Alvarado	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS:	
ABSTRACT: The use of technology in our schools has become more evident. Specifically, there are many web based assessment programs available to districts that can identify to students strength or weakness in the areas of reading or math. I will concentrate my research on the STAR reading program currently being implemented by Laredo ISD. STAR reading program is approved by TEA. In addition to this, I will give a brief overview of how TEA expects for technology to be used in our schools.		
TYPE OF PRESENTATION: Poster		

416	TITLE: No Title Submitted	
AUTHOR: Kay S Ascencio	Master's Level	Texas A&M International University

AUTHOR(S):	MENTORS:
ABSTRACT: No Abstract Submitted	
TYPE OF PRESENTATION: Poster	

417	TITLE: Improving height of dancer's leaps through a strength training program	
AUTHOR: Soundrea R Beck	Master's Level	Tarleton State University
AUTHOR(S):	MENTORS: Kayla Peak	
ABSTRACT: Dance is an art form that has continually been increasing popularity in colleges. It is something that has turned from just enjoyed pass time to a more competitive sport. Along with this competitive action comes more advanced technical ability, this includes leap height. This study will observe the results of a strength training program on collegiate level dancer's leap height. The dancers will be measured before and after the strength training program and any growth will be recorded.		
TYPE OF PRESENTATION: Poster		

418	TITLE: Swim Requirement at TSU as it Relates to Lifelong Health and Safety	
AUTHOR: Craig A Bettis	Master's Level	Tarleton State University
AUTHOR(S): Thomas Feild	MENTORS: Dr. Kayla Peak	
ABSTRACT: Should colleges and universities take responsibility in requiring mandatory swim test requirements in order for students to complete their education? Each yeah in the Unites States alone there are around five thousand drowning and or near drowning accidents are reported. Many of these incidents could have been prevented with the proper training in swimming and water safety. Many victims of drowning are non swimmers with intention of being in the water. Accidents happen and many non swimmers are put in situations that they cannot overcome. With the majority of universities no longer requiring physical education in their curriculum's, identifying non swimmers and helping them gain the basic knowledge of water safety skills can still be accomplished and have a major impact on peoples lives. An educational institution can provide the best opportunity for the educational experience in a safe environment and can promote success (Ormond, Roberts & Dewitt, 1997). Ultimately, there is certainly a need for this training for any non swimmer and the impact of education in these safety skills can have a major impact on the lives of many. Overall, most universities are in great positions to help with the goal of the American Red Cross to reduce the number of drowning deaths in the United States by identifying non swimmers and teaching them the needed water safety skills. Since these skills save lives how can colleges and universities not want to implement this testing into the curriculum?		
TYPE OF PRESENTATION: Poster		

419	TITLE: No Title Submitted	
AUTHOR: Bertha A Borrego-Gonzalez	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS:	

ABSTRACT: The Elementary and Secondary Education Act (ESEA) is the main federal law affecting education from kindergarten through high school. The ESEA was reauthorized as the No Child Left Behind Act (NCLB) in 2002. This act has four principles: stronger accountability, more freedom for states and communities, proven education methods, and more choices for parents. The emphasis on the education methods is improving students learning and achievement. In reading, it's supported by a scientifically based instruction with an effective reading program. The Reading First program is a scientifically based instruction program for the early grades. There are so many speculations on the Reading First Program and its contribution to NCLB. Does the Reading First program work? What positive effect on the quality of reading instruction and achievement? In order to answer those questions let's look at the Reading First program. Reading First program focuses on reading instruction in classrooms. There are five components to the Reading First Program: phonemic awareness, phonics, fluency, vocabulary, and comprehension. In phonemic awareness students need to have knowledge and manipulation of sounds in spoken words. In phonics, the students learn the relationship between written and spoken letters and sounds. In fluency, this includes oral reading skills, students are on the ability to read with accuracy, and with appropriate rate, expression, and phrasing. In vocabulary, students learn the knowledge of words, their definitions and context. In the last component comprehension, including comprehension strategies, students will have the understanding of meaning in text. Not only is targeting those five components, this program include classroom-based screening and instructional and diagnostic reading assessments. There should be an ongoing, high quality profession development focusing on the essential elements of reading.	
TYPE OF PRESENTATION: Poster	

420	TITLE: High School Sports and Long Term Camaraderie of Students		
AUTHOR: Chris N Brewster		Master's Level	Tarleton State University
AUTHOR(S):		MENTORS: Dr. Peak	
ABSTRACT: There is much dispute over the rewards and shortcomings of high school sport in the United States. This research investigates how the successes or failures of Texas high school football teams can affect the overall camaraderie of the student body. To measure the camaraderie, or lack thereof, several methods were used including personal interview, a questionnaire, and comparing team records with class reunion attendance at the ten, fifteen, and twenty year intervals. Though there appears to be a possible strong positive correlation among team success and overall cohesion, results are still pending in this research proposal.			
TYPE OF PRESENTATION: Poster			

421	TITLE: Meta-Analysis of Interventions to Facilitate Student Engagement for Migrant		
AUTHOR: Veronica E Burgoa		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Lynn M. Hemmer, Ph.D.	
ABSTRACT: Migrant students have one the highest dropout rate of any subgroup in our public school systems (Educational Resources Information Center, 1991). Texas alone had 4.3% of its' migrant students drop out of school in 2008 (TEA, 2008). Furthermore, it is recognized migrant students are among the most educational disadvantaged (Gibson & Bejinez, 2002) with multiple factors contributing to their			

educational experience. High mobility (Lennon & Markatos, 2002), language barriers (Lennon & Markatod, 2002), self esteem issues (Leon, 1996), lack of uniform interstate curriculum (Leon, 1996),and lack of access to technology (Leon,1996) are but a few factors that impact a migrant students' success in school. Numerous federal programs exist to identify and fund services (Tile 1A, Title 1 Part B, Title 1 Part C, Title III Part A) for the migrant student. There is little evidence of how these programs improve student achievement (Gibson & Bejinez, 2002), and even less research of school districts with an exceptionally high number of migrant students due to their proximity to Mexico . This study examines how one border school district in Texas considers three intervention strategies that were implemented to minimize the effects of risk experienced by migrant students. Evaluation of these strategies will eventually include students' achievement on state assessments and dropout statistics over the course of a three year study. As the number of migrant students enrolled in the public school system increases, there is a significant need to address their educational needs with research based best practices and strategies.
TYPE OF PRESENTATION: Poster

422	TITLE: Are Professional Development Points Beneficial Towards A Career?	
AUTHOR: Kelsie W Burks	Master's Level	Tarleton State University
AUTHOR(S): Michael Huxen	MENTORS: Dr. Kayla Peak	
ABSTRACT: At Tarleton State University, the Kinesiology department requires students (that are in that major) to attain 15 PD points to graduate. There are many different ways for a student to receive points (e.g. playing intramurals, being a NCAA athlete, joining professional organizations, and so on) during their undergraduate work. The purpose of this study was to investigate if PD points (Professional Development Points) are beneficial towards a career. We wanted to look into many of the situations that students are put in with having to participate in organizations and activities to be able to receive these points. Looking into the fact if it is fair for different types of students (e.g. traditional students, transfer students, commuters, students with families, etc.) is another part of the study that is very important. Overall in the study it was found that PD points are very beneficial to students that go through the Kinesiology department. It was found in many different studies that students that are involved in professional organizations and have to attain PD points are more prepared for their career, as it makes them much more "professional".		
TYPE OF PRESENTATION: Poster		

423	TITLE: Parents Developing Literacy: From Birth to 5 years old	
AUTHOR: Martina M Campos	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Guerra	
ABSTRACT: It is widely known that parents are a child's first teacher. The first five years of life are crucial to a child's literacy development. Parents can provide numerous opportunities for their children to listen, speak, read and write. There are many government programs that help assist parents with this issue. Although this may seem something very obvious, some parents still have a difficult time recognizing such opportunities. This project will help parents find numerous ideas, activities and information to facilitate their search in developing literacy for their young children.		
TYPE OF PRESENTATION: Poster		

424	TITLE: Attitudes of Physical Education Teachers Towards Teaching Physical Ed		
AUTHOR: Samantha Canfield		Master's Level	Tarleton State University
AUTHOR(S):		MENTORS: Dr. Kayla Peak	
ABSTRACT: Teaching physical education, like or dislike? Bad experience or forced to teach it? These questions are vital when teaching a physical education class. In order for a coach to be able to coach, some schools require them to teach physical education. If the coach has no experience or adequate knowledge on physical education, the class will be as such one that is not beneficial to the student. This type of scenario causes bad attitudes in the physical education field from teachers as well as students. One other scenario that may cause a bad attitude is that the teacher may have had a bad experience in physical education as a younger child. It is recommended that schools hire physical education teachers in the school system that are professionals and understand the importance of a curriculum that is beneficial to the student. If the students are not participating in the activities, the physical education class serves no purpose and bad attitudes arise out of the teacher and the student. This study contemplates the attitudes of physical education teachers and the reasons that cause bad attitudes.			
TYPE OF PRESENTATION: Poster			

425	TITLE: Heart Rate Variability of Offensive Lineman vs. Sedentary Non P.E. Majors		
AUTHOR: Jordan R Clark		Master's Level	Tarleton State University
AUTHOR(S):		MENTORS: Kayla Peak	
ABSTRACT: Heart rate variability has been used to assess the discovery of heart disease and many different types of heart problems. Evaluating heart rate variability in athletes who are chronic exercisers compared to sedentary people who do not exercise frequently will help us evaluate if chronic exercising will better the heart. In this study we are taking ten Tarleton Texas football players and ten sedentary non physical education majors. Measuring the difference of their physical capabilities and the shape that the heart is in. The athletes have vagal training compared to the controlled subjects from assumption the offensive linemen's hearts should be in relatively better shape than the controlled subjects due to all of the physical conditioning they take part in. The sedentary subjects do not exercise frequently, therefore, we are looking to see if body mass index also plays a factor in the results of heart rate variability.			
TYPE OF PRESENTATION: Poster			

426	TITLE: The Effects of Heart Rate While Playing Nintendo Wii Sport in Three Differe		
AUTHOR: Kimberly A Coffman		Master's Level	Tarleton State University
AUTHOR(S):		MENTORS: Dr. Kayla Peak	
ABSTRACT: The purpose of this study is to investigate the heart rate responses of three different categories of people while playing the game of boxing on the Nintendo Wii Sport. The three categories of people involved in the study are sedentary, average, and athletes. The study includes 30 full time college students ranging in age from 18 to 23. Little research has been reported on addressing heart rate of general populations of different fitness categories while playing the Nintendo Wii Sport. The predicted outcome of the study is that the study will reveal that the game of boxing on the Nintendo Wii Sport will			

satisfy for an alternative physical activity on days that the weather is questionable for outdoor activities, while meeting the American College of Sports Medicine (ACSM) recommendations of participation in 30 minutes of moderate intensity physical activity on most days if not every day of the week (Williams & Wilkins, 2005).
TYPE OF PRESENTATION: Poster

427	TITLE: Dual Language Program	
AUTHOR: Elvia A Contreras	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. C. Guerra	
ABSTRACT: The Dual Language Enrichment Program has been a very successful program at several schools throughout Laredo. I am presenting the information and opinions of parents that have their children in the dual language pilot progam at col. santos benavides.		
TYPE OF PRESENTATION: Poster		

428	TITLE: Suicidal Rates in The School Setting	
AUTHOR: Stella Cortez	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. P Hoang	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

429	TITLE: Motivation Through Technology	
AUTHOR: Amanda Cruz	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Ron Anderson	
ABSTRACT: Motivation plays a key part in our student's academic careers. However, what exactly is motivation and what role does it play in today's classroom? How can incorporating technology into the classroom help motivate students to participate? These are the two main questions being explored through this study.		
TYPE OF PRESENTATION: Poster		

430	TITLE: Teaching techiniques in the general setting for children with aspergers	
AUTHOR: Alexandra Cuello	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Brown	

ABSTRACT: Children with Asperger syndrome are known to have severe problems in communication, behavior and social skills. Even though children with AS are considered to have normal or above normal IQ, they struggle to become part of our society. Many children with AS are included in the general setting. The objective is to provide general education teachers with different tools for teaching children with AS. When a child with AS enters a general education classroom, the general education teacher has a life-size challenge to overcome. General education teachers need to be aware of the child's needs and most important they need to have a positive attitude towards teaching the child with AS. Special education teachers need to collaborate with general education teachers to ensure that children with AS are successful. Using evidence that demonstrates the importance of visual schedules and social stories as teaching techniques that will help the general education teacher reach the child's full potential. In conclusion general education teachers will benefit by understanding the child's areas of need and at the same time find information that will make learning and teaching a wonderful experience for both the child and you.
TYPE OF PRESENTATION: Poster

431	TITLE: Counselors approach to Multiculturalism	
AUTHOR: Carlos Delao	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Phu Ding Hoang	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

432	TITLE: Do summer school programs for TAKS preparation work?	
AUTHOR: Dante A Delgado	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. H. Gonzalez	
ABSTRACT: Are summer school programs for TAKS preparation effective? What constitutes a successful summer school TAKS preparation program? This research looks at school(s) summer TAKS preparation program efforts in recent years. Relevant staff interviews and program data will be presented.		
TYPE OF PRESENTATION: Poster		

433	TITLE: Teacher Burnout Rating	
AUTHOR: Anna Diaz	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Trace Pirtle	
ABSTRACT: This project will present the results of a study conducted on teacher burnout. This rating includes levels of teacher depression, anxiety and stress. The project will include the findings of individual survey items as well as a hollistic rating of teacher burnout.		
TYPE OF PRESENTATION: Poster		

434	TITLE: Are Our Schools Preparing Students with Disabilities for Post Secondary Education and Employment?		
AUTHOR: Christine Dickey		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS:	
ABSTRACT: With the increase of students with disabilities in our public schools, teachers are not only focusing on life skills, but also transition to post secondary education and employment. The number of autistic students is growing in our schools, and many of these students do not have the skills needed to go to college or for employment. Whether the student is learning disabled or has a cognitive disability, they must have the required skills to be productive citizens upon graduating from high school. There are agencies that help some students, but what if the parents cannot afford to pay some of these agencies, what will happen to these students. In the state of Texas, transition serves should start at the age of sixteen. All students that participate in the special education program should have a transition plan that helps them prepare for their future. What are the extra steps that teachers need to do to help these student s succeed in the future? How can we better educate our special needs students for the same opportunities of those that do not have special needs? There are programs in other cities around Texas that have dedicated a vocational school to better prepare students, but what about the rest of the students that do not live near those schools, how are they getting prepared? Special needs school throughout the United States have dedicated themselves to preparing students for the future. These schools inform other special needs teachers on the best strategies and curriculum for their students. The curriculum has proven to be effective and effective to the students. South Texas has started to implement a curriculum that should help our students be effective and productive citizens. This program will open many doors in the future.			
TYPE OF PRESENTATION: Poster			

435	TITLE: How stressed are you?		
AUTHOR: Norma Y Flores		Master's Level	Texas A&M International University
AUTHOR(S): Carla Alvarado Veronica Ibarra Patricia Soto		MENTORS: Dr. Trace Pirtle	
ABSTRACT: This project will demonstrate the outcome of a stress test given to undergraduate and graduate students at Texas A&M International University. The stress test offers participants suggestions as to what they can do to improve their stress level.			
TYPE OF PRESENTATION: Poster			

436	TITLE: Human Sexuality for People with Cognitive and Physical Handicaps		
AUTHOR: Elizabeth M Frecsko		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Randel Brown	

ABSTRACT: Human beings are sexual creatures. We all have the need and the free will to express these needs in both the emotional and physical spectrum. “People with disabilities often face obstacles to maximize their potential as fully sexual beings” and they begin to “internalize negative societal assumptions and attitudes regarding their sexuality” (Giulio, 2003). As educators, we need to come to some determination on how to allow these individuals to express themselves as citizens. Students with disabilities are at a disadvantage when dealing with their healthy sexual orientation and expression. Because they may be considered special and somewhat of a lesser person, they may be expected to release very personal information about themselves when talking about their sexual needs. These types of conversations or intense situation would not be expected of someone without disabilities. In caring for people with disabilities, one might look into outlets to meet an individuals’ need, like an IEP, on goals for sex education. The requirement is to teach our students different ways of expression. Our society basis its sexual knowledge on Erickson, Piaget and the Masters and Johnson models. Therefore, if an individual does not meet these “standards” for sexual well being they are deemed asexual people. Teaching students with disabilities about their sexuality is an overly sensitive issue. But, as studies have been progressing and families and individuals living with these disabilities become more aware, there is much more information on the topic. This paper will delve into the topics of (1) Where do children with disabilities fall into the human development models of philosophers? (2)Are individuals with disabilities more likely to contract a Sexually Transmitted Disease (STD) or Human immunodeficiency virus (HIV)? (3) What preventative steps can be taken to avert sexual crimes against the handicapped? (4) What are some resources that parents/educators can provide to loved ones when developing a plan for sexual education?

TYPE OF PRESENTATION: Poster

437	TITLE: Possibilities: Educating Biliterate and Even Multi-literate Children	
AUTHOR: Hilda M Garcia	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Guerra	

ABSTRACT: The intent of this research is to look for the feasibility of educating children at least as bilingual/bi-literate people but to also explore possibly of educating them to be multilingual/multi-literate. In this day in age, a monolingual, mono-literate person can almost considered limited. With the arrival of the Internet, the world has become a much smaller place and since global communication is virtually now at our fingertips, it is imperative that our children be educated not only to become literate, but also to be bi-literate or maybe even mono-literate. The question to be answered here is “Can it be done? How feasible is it to educate masses of children in other languages other than English and make sure that they are successful in their academics holistically.

TYPE OF PRESENTATION: Poster

438	TITLE: A Lost Tradition: El dia de los muertos	
AUTHOR: Laura E Garcia	Master's Level	Texas A&M International University
AUTHOR(S): Gloria Sanchez	MENTORS: Dr. Sergio Garza	

ABSTRACT: Traditions from our different cultures are very imporatant to keep one's cultural identity. El dia de los muertos is a Mexican tradition that has slowly been disappearing as Mexican-Americans are being assimilated into the American culture. Instead of losing the tradition to celebrate and honor our past loved ones, Mexican-Americans should preserve this tradition through aculturation. As Hispanics, we

must keep this and other traditions alive in order to keep our cultural identity.
TYPE OF PRESENTATION: Poster

439	TITLE: Preferred Music vs Unfavorable Music on Beta Endorphin Levels	
AUTHOR: Lindy M Garmon	Master's Level	Tarleton State University
AUTHOR(S):	MENTORS: Dr. Kayla Peak	
ABSTRACT: Music is prevalent in many aspects of today's society. One can't walk through a busy college campus without seeing numerous individuals with earphones in or walk in a restaurant without hearing music playing in the background. Music has many distracting effects on unfavorable stimuli, such as pain. Exercise can be a source of pain for an individual, which is said to result in the release of an endogenous opiate known as endorphin. In this study, ten individuals will be tested for endorphin levels before and after running while listening to different forms of music: unfavorable music, preferred music, and no music. If a difference is noted in plasma endorphin levels, that may suggest music is indeed a physiological distracting stimulus affecting endorphin levels. If no differences are detected, that may be suggestive evidence that endorphin release is a purely physical action and is not influenced by external stimuli.		
TYPE OF PRESENTATION: Poster		

440	TITLE: Effective Reading Intervention	
AUTHOR: Rosa E Garza	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS:	
ABSTRACT: Effective Reading Intervention Through this research the following questions will be answered. What is reading intervention? What is effective reading intervention? What are some programs being used? How are they proven effective? Which programs are effective for ELL's?		
TYPE OF PRESENTATION: Poster		

441	TITLE: The Mind String and How to Pull It	
AUTHOR: Angelique M Geyer	Master's Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Castro Dr. Bashir	
ABSTRACT: The relationship between gender, ethnicity and number of written homework assignments attempted to final course grade was evaluated for approximately thirteen hundred students in a freshmen level introductory chemistry course presented during a 1980-1985 time period. Research performed during a 2006-2007 time period has shown that students who completed their homework electronically indicated their final course grade was strongly dependent upon the number of homework assignments completed, and to a lesser degree, correlated to gender and ethnicity. We will look to see if the number of written homework assignments correlates to the final course grade as it did with the electronic homework. In continuing research we will compare both modes of homework assignments to determine if one method is better than the other.		

TYPE OF PRESENTATION: Poster

442	TITLE: The Identification of Success Factors of Texas College Students in History	
AUTHOR: Sarah M Gockley	Master's Level	Tarleton State University
AUTHOR(S):	MENTORS: Dr. Laurie Hawke	
ABSTRACT: This study will identify the contributing factors of success of Texas college students taking history core requirement classes. The participants in this study were all classifications of college students who have enrolled in the core required History 201-U.S. History Through 1877. The research model and method of this study was correlational as the researcher used three types of instrumentation: a questionnaire, a validated Texas state test, and the final grades in the course. The researcher was able to then make a correlation between the types of social studies classes—Dual-Credit, Advanced Placement, and Regular classes—and the overall preparedness of those graduates into college. The researcher obtained permission from the professors and the participating students, whose identities were kept strictly confidential. The findings will show that the original perceptions of college preparedness and the reality of college success will differ substantially.		
TYPE OF PRESENTATION: Poster		

443	TITLE: Reading Comprehension Stategies for children with Autism	
AUTHOR: Edith Gonzalez	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. C. Guerra	
ABSTRACT: As a parent, teacher , and reading advocate, I hold a special interest in reading and students with disabilities . My research poster will be on Reading Comprehension Strategies for students with Autism . It is the intent of this project to explore and identify Reading Comprehension Stategies that can effectively be used with Autism Spectrum Disorder students in order to provide an enhanced learning environment and experience for them.		
TYPE OF PRESENTATION: Poster		

444	TITLE: A Study of Reading Comprehension Instruction in Science and Social Studies	
AUTHOR: Lydia G Gonzalez	Master's Level	Texas A&M International University
AUTHOR(S): Lydia G. Gonzalez	MENTORS: Lynn Hemmer	
ABSTRACT: The present study examines the extent of the implementation of reading comprehension instruction in science and social studies classrooms at a middle school in a South Texas school district. Two science and two social studies teachers were observed, and their behaviors were documented and categorized using an observation scheme developed by Durkin (1978). The field notes were examined closely and the researcher tallied the time spent by each teacher on reading comprehension instruction and other activities. Upon completion of the observations, each participant was asked to complete a questionnaire that provided demographic information and data about the reading comprehension instruction training each participant had received. The results of the study indicate that although the participants spent more than 50% of the total observation time on reading comprehension related		

activities, less than 20%of that time was devoted to reading comprehension instruction. The responses to the questionnaire provided evidence that the teachers had received training on reading comprehension instruction. Based on the results, the researcher concluded that too little time was being devoted to helping reader's learn how to comprehend texts in the science and social studies classrooms. However, the reasons for this phenomenon remain to be explored.

TYPE OF PRESENTATION: Poster

445	TITLE: A comparison between Mexican and American Bulletin Boards for Instruction	
AUTHOR: Maria E Gonzalez	Master's Level	Texas A&M International University
AUTHOR(S): Isabel Rodriguez	MENTORS: Dr. Sergio Garza	

ABSTRACT: "Periodico Mural" and bulletin boards are important and useful tools for the teacher to present inform,ation of contents, themes and students' work in accesible, attractive form. Although both tools may have similar educational objectives, there are differences among them, that, if combine, they may fiorm a powerful tool for multicultural approaches. it would be helpful for Mexican students to be introduced to American cultural events through a familiar concept such as the "periodico Mural' format. Teachers may enrich their bulletin boards with cultural information adapting some aspects of the "periodico mural". In that case, bulletin boards not only decorate the classrooms or display students hand outs, but they improve or enrich knowledge of the themes or present cultural news for the school community to acknowledge. Alternatively, "perioodicos murales" may appear more appealing when using the "decorative" factor of bulletin boards.

TYPE OF PRESENTATION: Poster

446	TITLE: El amante liberal como definición del amor en dos terminos: "ero	
AUTHOR: Oholibama K Granados	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS:	

ABSTRACT: La novela El amante liberal escrita por Miguel Cervantes de Saavedra, nos relata la histora de Ricardo, un caballero cautivo por los turcos y perdidamente enamorado de una hermosa doncella llamada Leonisa quien no corresponde a sus sentimientos. Leonisa también es capturada por los turcos y Ricardo a pesar de estar consiente el desinterés de esta, lucha vehementemente por liberarla. Ali y Hazán dos personajes turcos , igualmente embelesados por los extraordinarios dotes de belleza de Leonisa se proponen adquirirla para el Gran Turco. Sin embargo tanto Ali como Hazán embriagados por la hermosura de la doncella abrigan en sus corazones el ardiente deseo de poseerla para ellos mismos. De acuerdo con una de las definiciones de la Real Academia Española la palabra amor es un "sentimiento hacia otra persona que naturalmente nos atrae y que, procurando reciprocidad en el deseo de unión, nos completa, alegra y da energía para convivir, comunicarnos y crear". No cabe duda que todo aquel que observaba la hechizante hermosura de Leonisa despertaba en su interior algo parecido a lo antes mencionado. Aun así, es evidente la diferencia que existe hacia el significado o punto de vista del amor de estos. En mi investigación intentaré demostrar como la novela proveé la definición de la palabra amor por medio de los personajes en dos diferentes vocablos: el griego y el turco. Ricardo como el significado de la palabra eros; Ali y Hazan como la definición de la palabra ask. Tomando en cuenta que tanto el credo como la cultura de los mismos forman parte del contenido semántico de ambos terminos.

TYPE OF PRESENTATION: Poster

447	TITLE: Parental Literacy: How does it affect their children		
AUTHOR: Marie G Gutierrez		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Dr. C. Guerra	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

448	TITLE: Review of Laredo Area Guidance Curriculum		
AUTHOR: Damaris I Juarez		Master's Level	Texas A&M University
AUTHOR(S): Elena Castaneda Celina Castillo Nereida Pizano		MENTORS: Dr. Hoang	
ABSTRACT: Pending, a working progress!			
TYPE OF PRESENTATION: Poster			

449	TITLE: Advantage Difference Between Steroids and Nutritional Supplementation		
AUTHOR: Will Kaing		Master's Level	Tarleton State University
AUTHOR(S):		MENTORS: Dr. Peak	
ABSTRACT: The advatanges between steroids and sports supplementation will be examined in order to determine what differences exist between the two products. Sports supplementation includes anything that improves sports enhancement such as protein substitutes or creatine monohydrates. Steroids include anything that will improve sports enhancement in an illegal form such as human growth hormones. The two substances will be examined in an lterature review form and experimented in a controlled environment to determine how the advantages in resistance training environments affects the weight trainer. This study is presented so that future research may be conducted to improve sports enhancement and possibly disprove certain myths and previous reasoning.			
TYPE OF PRESENTATION: Poster			

450	TITLE: Exercise reduces sarcopenia by decreasing pro-apoptotic signals and increas		
AUTHOR: Yang Lee		Master's Level	Texas A&M International University
AUTHOR(S): Kwangseok Hong		MENTORS: Sukho Lee	

ABSTRACT: INTRODUCTION: Sarcopenia is the age-related loss of muscle mass and strength. Loss of muscle mass and strength influences immobility, disability, and mortality in elderly population. Recently, it has been reported that excessive apoptosis, especially in mitochondrial-mediated pathway, induces sarcopenia. Disrupted apoptosis is directly related to dysfunction and pathology with aging. The mitochondrial- mediated apoptosis pathway well indicates regulating apoptosis with aging. Through the aging process, mitochondrial function is impaired, and it has been linked with apoptosis. PURPOSE: To indicate how exercise inhibits sarcopenia. METHODS: Review 30 research papers and collect data from previous studies. RESULTS: Total pro-apoptotic proteins such as Bax, Bad, and Bid have been reported in aged sedentary rodents muscle, while anti-apoptotic proteins, Bcl-2 and Bcl-X1, have diminished. In contrast, exercise training significantly reduces Bax, Bad, and Bid expression and elevates Bcl-2 levels in senescent animals. Furthermore, decreased levels of anti-apoptotic proteins, apoptosis repressors, and X-linked Inhibitor of apoptosis protein (XIAP) have been reported after both aerobic and resistance exercise. These indicate that exercise can prevent muscle loss through an attenuation of the pro-apoptotic signal and trigger anti-apoptotic signals. CONCLUSION: Exercise provides significant protection mechanisms against loss of muscle mass and strength through decreasing pro-apoptotic and increasing anti-apoptotic expression.

TYPE OF PRESENTATION: Poster

451	TITLE: The Role of Phonemic Awareness in Learning to Read	
AUTHOR: Helen Leyendecker	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Cathy Guerra	

ABSTRACT: The importance of phonemic awarness in learniang to read will be explored. Research on phonemic awareness and its effectiveness on diverse student populations will be highlighted.

TYPE OF PRESENTATION: Poster

452	TITLE: Negative Effects by Standardized Tests	
AUTHOR: Karla Linero	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Randel Brown	

ABSTRACT: The government continues to try to improve the education system. However, every year, it seems like more responsibility and work falls on the teacher. With new laws such as No Child Left Behind, it also seems like more stress and disappointment arises. For example, testing is a controversial idea that affects districts, schools, administrators, parents, educators, as well as students. Although test results can be an indicator of what's happening in the classroom, they don't tell you everything about the quality of a school, teacher, or even student. Using standardized testing to evaluate performance on students is unfair and biased. The idea of using them to evaluate teachers and school is insane. Evaluating teachers is one of most difficult things to do. In fact, “the most accurate assessment of a teacher’s performance requires input from multiple sources” (Danielson & McGreal, 2000; McMillan, 2001; Peterson, 2000). Linking teacher and school evaluation to student achievement seems to have strong public and political appeal. Inferences regarding the quality of teachers, schools, and administrators are often based on how well students perform on tests. As a result, teachers and administrators are under greater pressure to improve student standardized test scores (Archer, 2000; Popham, 2000). Th?? ?ur????? ?f th?? research ?? t?

d??m?n?tr??t?? th??t using standardized tests has a negative effects on students' learning as well as teachers' performance. A new form of evaluation needs to be researched and studied in order to keep a productive and effective environment in the schools. Providing students with good teachers must be a high priority for all schools and administrators.
TYPE OF PRESENTATION: Poster

453	TITLE: Effects of Aquatic Exercise on Elderly People with Arthritis	
AUTHOR: Claudia M Lopez	Master's Level	Texas A&M International University
AUTHOR(S): Armando Perez Jorge Vasquez Eduardo Inocencio	MENTORS: Dr. Sukho Lee	
ABSTRACT: Arthritis is a chronic and debilitating disease caused by inflammation of one or more of your joints, such as one or both knees or wrists, or a part of your spinal column. The two most common types of arthritis are osteoarthritis (OA) and rheumatoid arthritis (RA). Joint pain and stiffness are the main symptoms of arthritis. Some joint symptoms may include: pain, stiffness, swelling, and decreased range of motion. As reported, there is no cure for arthritis, but research presents sufficient data recommending exercise as management for this disease. There are differences in terms of effects of exercise response and exercise training depending on the individual's type of arthritis. Management is an option for people with arthritis for joint protection, maintaining and restoring function. Exercise testing is recommended in order to provide correct exercise programs for people with arthritis. There are certain lifestyle changes that may help ease arthritic pain including weight loss to maintain body weight and exercise. Aquatic exercise can help people with arthritis improve their health and fitness without hurting their joints. Aquatic exercise can also improve range of motion and strengthen the muscles surrounding joints as well as help maintain bone strength. For obese people, losing weight will reduce the stress on your weight-bearing joints. This may increase their mobility and limit future joint injury. Regular exercise can help keep the joints flexible. Swimming or water aerobics is often a good choice because the buoyancy of the water reduces stress on weight-bearing joints.		
TYPE OF PRESENTATION: Poster		

454	TITLE: Approaches to helping families with autistic children	
AUTHOR: Sylvia Lopez	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. R. Brown	
ABSTRACT: Raising children in today's economy can be challenging. The intensity of this challenge is multiplied when the family includes a child with autism. According to some reports, the divorce rate in families with an autistic child is in the 80% range. Some mothers report that they stopped working to take care of their autistic child and become an "autistic expert." The double income family now has to make ends meet with one income which is usually brought in by the father. The question then becomes, what types of resources are available for families with autistic children? My research found that there are a slew of resources and services available on the Internet, books, and journals. Services include financial aid, counseling services, and support systems.		
TYPE OF PRESENTATION: Poster		

455	TITLE: The Differences in Reading Scores among Different Etnicities		
AUTHOR: Zelma Lopez		Master's Level	Texas A&M International University
AUTHOR(S): Patricia Soto		MENTORS: Dr. S. Garza	
ABSTRACT: The objective of this research is to determine the differences in Reading scores between different ethnicities in a large urban district. Results from the Academic Excellence Indicator Systems 2007-2008 indicate that there is an ethnic group that did not farewell in the Reading Third Grade TAKS scores. This research will focus on the possible causes for the low scores for this particular ethnic group.			
TYPE OF PRESENTATION: Poster			

456	TITLE: Handling Peer Pressure		
AUTHOR: Araceli Magana		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Dr. Phu Hoang	
ABSTRACT: This poster seeks to provide information to middle school students on how to handle peer pressure under different circumstances. It will help students explore the options available to them through their school counseling program, as well as outside services.			
TYPE OF PRESENTATION: Poster			

457	TITLE: Bullying		
AUTHOR: Melissa Martinez		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Dr. P. Hoang	
ABSTRACT: Student will present research conducted on the topic of bullying. More specifically, I am looking at the interventions that today's school counselors are using and assessing their effectiveness for servicing students facing this problem.			
TYPE OF PRESENTATION: Poster			

458	TITLE: Response To Intervention		
AUTHOR: Veronica Martinez		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Dr. Ronald Anderson	
ABSTRACT: Response to Intervention, or RTI is focused on increasing the number of students who are successful in the classroom and reduce the amount of students who exhibit behavior problems. In order for RTI to be effective, there must be essential components in place. There must be scientific based instruction taking place in the classroom, frequent assessment, tiered instruction which provides differentiated instruction for the struggling student, and parent involvement. There are many advantages and disadvantages to RTI.			
TYPE OF PRESENTATION: Poster			

459	TITLE: The Effects of Pitch Counts on Injury Rates		
AUTHOR: Charity McCright		Master's Level	Tarleton State University
AUTHOR(S):		MENTORS: Dr Kayla Peak	
ABSTRACT: The windmill softball pitching motion has been shown to place enormous amounts of force and torque on the shoulder and elbow. Barrentine (2007) showed that similar forces and torques were applied to the shoulder during the windmill and overhand pitching motions. Popular belief, though, is that windmill pitching is less stressful on the shoulder. At current time little league softball is the only governing body that limits the number of pitches a pitcher is allowed to pitch during a game situation while baseball is limited at all levels. In a recent injury surveillance of collegiate softball players 33% of all injuries affected the upper extremities (Marshall, 2007). Pitchers account for 10.8% of all game injuries with 6.3% occurring from the pitching motion (Marshall, 2007). Seventy percent of reported pitching injuries are chronic or overuse injuries (Marshall, 2007). It is thought that there is a strong correlation between injury rates and high pitch counts.			
TYPE OF PRESENTATION: Poster			

460	TITLE: The Importance of Technology Support and Staff Development Training, and Wh		
AUTHOR: Ana L Medina		Master's Level	Texas A&M International University
AUTHOR(S): Ana Medina		MENTORS: Ronald Anderson	
ABSTRACT: As we are living in the twenty first century, technology is being used more in our daily lives. Students now a day are being born into the age of technology. It is very important to ensure that technology is used effectively to create new opportunities for learning and most of all to promote student achievement. Using technology in the classroom has many benefits and opportunities as improving teacher lectures, providing visuals in a variety of formats, sharing resources, and enhancing the curriculum. How effective teachers use technology and adapt and integrate technology into their classrooms and lessons is a question of concern. It is impossible to be able to teach students using technology when the teacher lacks instructional technology practice.			
TYPE OF PRESENTATION: Poster			

461	TITLE: The reading and writing connection impact on the curriculum		
AUTHOR: Sandra Moncivais		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Dr. Ronald Anderson	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

462	TITLE: Social-Emotional support throughout the classroom instruction

AUTHOR: Mayra E Montes	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. R. Brown	
ABSTRACT: In a majority of schools, a significant number of students are not ready or are perceived as not being able to be successful in the classroom. The concern becomes greater as the student continues to fail through the school years; eventually, the child ends up in the special education system. However, a major factor for being able to succeed in the classroom depends on the student's emotional and behavioral support prior to and during the school years. The research encompasses ideas and strategies that promote social and emotional competencies and skills for the student.		
TYPE OF PRESENTATION: Poster		

463	TITLE: emotional and mental disorders	
AUTHOR: Magdalena Montoya	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: DR. P.Hoang	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

464	TITLE: Preschool teaching and the connection to the history of curriculum	
AUTHOR: Marisa L Morales	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Ron Anderson	
ABSTRACT: My research is on the approaches of an educator in a local preschool classroom in regards to the affective domain and its connection to the history of curriculum. I will present information on how the educator decides the greatest methods to use working with students on the affective domain and what sort of curriculum they follow to better make a judgment on how to teach to this domain. This project will discuss the experience of this educator in connection to the way her teaching style, work expectations, and curriculum expectations have morphed with the changing views on education throughout her career.		
TYPE OF PRESENTATION: Poster		

465	TITLE: Improving ROM On Individuals W Limited Upper Body Mobility Using Cup Stacki	
AUTHOR: Lindsey Neumann	Master's Level	Tarleton State University
AUTHOR(S):	MENTORS: Kayla Peak	
ABSTRACT: Cup Stacking has become the latest craze in the majority of physical education classes found around the country, but there hasn't been much thought put in to how much this activity could really help individuals with a physical disorder. An individual with a disability goes through strenuous exercise trying to gain an ounce of muscle, reach a little further than before and even take that next step. Physically disabled individuals should have the same opportunity to learn the basic steps to cup stacking, but instead		

of competing against others they can compete against themselves.
TYPE OF PRESENTATION: Poster

466	TITLE: TROVP ADHD Symptom Checklist- Assessment Tool	
AUTHOR: Claudia Ortiz	Master's Level	Texas A&M International University
AUTHOR(S): Cynthia Pina Andrea Ramirez Teodora Hernandez	MENTORS: Dr. Trace Pirtle	
ABSTRACT: The TROVP ADHD Symptom Checklist is an assessment tool created in order to screen any child from the upper elementary to secondary population level for common ADHD symptoms. In this tool, students are asked to rate the symptoms listed in a scale from never present, sometimes present, often present, and very often present. This in turn will give a total score for the assessment tool. The range of this test goes from 0-60, 60 being the most reflective and indicative of the child displaying ADHD symptoms. The score can in turn aid in the screening process for ADHD. A number of selected children within this population were selected in order to check for the validity of the test. Included within this sample were students already diagnosed with ADHD. The data obtained from this sample was then analyzed and desegregated. Data obtained helped us determine if there was a strong correlation between the test and children already diagnosed with ADHD in order to check for the validity of the construct. It also helped us determine how prevalent ADHD is amongst our population.		
TYPE OF PRESENTATION: Poster		

467	TITLE: H1N1 Awareness Survey	
AUTHOR: Norma Osoria-Gaytan	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Trace Pirtle	
ABSTRACT: H1N1 The importants of becoming knowledgeable of the world wide pandemic virus H1N1 within our schools should be a priority. As eductors we are trainined to be productive and cohernt in the classrooms. But when it comes to situations unprepared like H1N1, where do we start as eductors? The significants of H1N1 is not completly understood, because of its flu like symptons. Therefore, we can easily mistaken it for the common flu. However transmition of H1N1 is clear and specific. We all need to be more cautious about transmiting of H1N1 Viruses. Training programs about this specific virus should be implemented to anyone working in the schools. If a training program was in place, it would allow employees to be aware of the different types of methods of transmission. The awareness program should include preventive measurements like using tissues when they sneeze and to wash hands frequently with soap and water. When washing hands it is important to wash hands for 15 to 20 seconds in warm, soapy water. One important method is keeping alcohol-based, gel sanitizers or hand wipes around the schools for easy access. Educators need to stress the importance to students if they should feel signs of flu and informing the necessary personnel as soon as possible. Parents need to be aware of what to look for in their child if they become ill, so they can determine if the child is well enough to attend school. Anyone that is ill should see a medical doctor to receive proper medical treatment and should not be taken lightly. Tell students not to touch their eyes, nose, or mouth, as germs spread this way. It is very easy to pick up		

germs from other people or surfaces because our hands are always touching things. Another factor is getting to get plenty of sleep, be physically active, managing stress, drinking plenty of fluids, and eat nutritious foods.
TYPE OF PRESENTATION: Poster

468	TITLE: The Effects of Poverty in Schools		
AUTHOR: Marcela K Palapa		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Dr. Hoang	
ABSTRACT: I will examen the effects of poverty in children ages 5-12. I will see how it affects their emotions, self esteem and academic performance. I plan to review related literature of the topics mentioned. For example, perhaps studies conducted as to how exactly is the self esteem affected, if impacted at all. I also plan to resarch articles dealing with the emotions of students. Does poverty affect their emotions? If so, how does it play a role? I also plan to research statistics comparing academic performance on standarized exams and class grades. I plan to find out if poverty has an effect at all.			
TYPE OF PRESENTATION: Poster			

469	TITLE: Special Education: Serving Students with Special Needs: Focus: LD		
AUTHOR: Noemi Y Pena		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Dr. Randal Brown	
ABSTRACT: Throughout the years, special education seems to be more and more of a concern for students, parents, educators, and administrators. Special education students continue to struggle academically and keep falling between the gaps, yet assumptions have been drawn that such could be due to the following reason: Is it fair to say that educators are failing to implement the documented accommodations stated in the Individualized Education Plan. The IEP sets the foundation of special education students (Brookshire & Klotz, 2002). Modifications are developed by the IEP committee along with the accommodations that may be implemented to assist the students to master goals and objectives. Therefore, if accommodations are implemented, assistance to accomplish academic achievement will be noted. Therefore, why aren't the accommodations, documented in the IEP, evident in the classroom? Therefore, such wonderings lead us to research which reveals that implementation of accommodations may not be occuring due to several factors; lack of training, lack of knowledge behind the laws, and lack of practice to name a few; thus, leading special education students to academic failure. The IEP is a document that outlines instructional goals, objectives, specifically designed to instruction, and provide the related services that a student with a disability needs to achieve academic success. Therefore, such data cannot be left inside a binder without being referred to. There are many laws that come into play in support of special education students. For instance, the No Child Left Behind Act is a strong, positive advocate of special education students. According to the article, No Child Left Behind in California? The Impact of the Federal NCLB Act so Far, states that NCLB is a law that serves "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments." Therefore, advocates of NCLB, including U.S. Secretary of Education Margaret Spelling's statement in the article, Raising the Achievement of Students with Disabilities: New Ideas for IDEA, supports the notion that "NCLB and IDEA have put the needs of students with disabilities front and center." Thus, the			

continuing process of malservicing students with disabilities can lead to severe consequences. Therefore, students with learning disabilities are not progressing academically; rather, they are falling between the gaps! Intervening to provide the accommodations documented on the IEP for students should be the goal of desire on the educator's behalf. Thus, why is such necessity not occurring? The solution to the problem would be full implementation and integration of accommodations documented in the IEP to assist students with disabilities to achieve the modifications stated to master the goals and objectives of target. Therefore, this research is directed discover why such process is not being implemented and how one can assist students towards achieving academic success at their own pace!

TYPE OF PRESENTATION: Poster

470	TITLE: An Analysis of Select Factors on Agricultural Safety Exam Scores	
AUTHOR: Dustin K Perry	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Dr. Bob Williams	

ABSTRACT: The use of online learning in university agricultural courses is expanding, but little has been done to determine its effectiveness. Two main assumptions guided this study. The first assumption was that test scores would be related to previous experiences associated course content. The second assumption was that test scores would be directly related to the time engaged in the review of online learning resources. Data were obtained from each student through an online questionnaire and online learning activities. Data included each student's self-reported experience associated with farm work and the operation of various types of machinery, the student's major, and the time engaged in the utilization of online learning resources. The mid-semester exam score for each student was also included. The information for the study was obtained from a senior/graduate level course with a combination of face to face lab experiences and online learning in lieu of lecture. In order to analyze the select factors' potential influence, a variety of statistical techniques were used. Techniques included correlation and Mann-Whitney U. Key findings included no significant relationship between the level of previous farm machinery experience and exam scores. No significant relationship was identified between time spent using online learning resources and exam score. Further findings will be reported in the poster.

TYPE OF PRESENTATION: Poster

471	TITLE: No Title Submitted	
AUTHOR: Velma Quintana	Master's Level	Texas A&M International University
AUTHOR(S): Veronica Vidal	MENTORS:	

ABSTRACT: No Abstract Submitted

TYPE OF PRESENTATION: Poster

472	TITLE: Making rti work	
AUTHOR: Elda G Quintero-Grajeda	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS:	

ABSTRACT: How can you really help a child with disabilities with out wasting precious time in identifying them? Right now a lot of schools are using response to intervention better known as rti to identify students who need interventions at different levels. Every student has to go thru rti's three tiers before they can be refer for special education services. There has been a great difference on the numbers of children that are being referred after rti appeared. Nonetheless we can see the problem with the children that are really in need of special education and are getting it too late. RTI is a long process full of requirements that teachers and students have to go thru, this has to be followed in order to be able to referred and then qualify a student for special education services. It is during this process that children loose precious time needed for their advancement. Only when teachers get properly train on how to use rti, regular and special ed. children will be able to get the full benefits of this program.	
TYPE OF PRESENTATION: Poster	

473	TITLE: No Title Submitted		
AUTHOR: Flor E Ramirez-Contreras		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS:	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

474	TITLE: How will an Immigration Reform Impact Undocumented Students		
AUTHOR: Nannette Ramos		Master's Level	Texas A&M International University
AUTHOR(S): Gretha H. Fuentes		MENTORS: Dr. Sergio Garza	
ABSTRACT: Plyer vs. Doe opened the door of opportunity to the children who reside illegally in the United States as it provided the same rights for public education as a United States Citizen or legal resident without the fear of deportation . This has been the beginning of a long journey towards equality for all children in our public education system defying the opposition of groups that are against assistance for undocumented children and their family. In the state of Texas, students are able to continue their elementary, middle, and high school education free of charge, but once they are ready to begin their college career, many are faced with the reality of lack of federal funds provided to them as they do not meet the citizenship or legal residency requirements. A few are fortunate to receive assistance for local or state scholarships or private sponsors, but the vast majority of the students are faced with the high costs of college tuition as out-of-area , state, and even considered foreign students without being able to afford tuition and books and other school-related expenses.			
TYPE OF PRESENTATION: Poster			

475	TITLE: Differentied Instruction for Reading		
AUTHOR: Alma R Rangel		Master's Level	Texas A&M International University

AUTHOR(S):	MENTORS: Dr. C. Guerra
ABSTRACT: Differentiated Instruction for Reading Differentiated Instruction does not change what is taught. But it changes how it is taught. Teachers' positive attitudes toward students can increase academic achievement successful. Research shows that when teachers increase their expectations of student success, academic gains are made (Good, 1987). What Makes Differentiated Instruction Successful? Teacher should provide a nurtured place where students feel appreciated and with high expectation. A good teacher must learn about his/her students to identify their strengths and weaknesses. Every student has a different way to learn. Teacher must facilitate learning to students. Choose different reading books depending on students reading levels. Differentiated instruction is an important concept for students depending on the individual needs. Students have different background knowledge and different learning styles.	
TYPE OF PRESENTATION: Poster	

476	TITLE: Should Tarleton Kinesiology Majors be Required to Pass a Fitness Test?	
AUTHOR: Erica L Roberson	Master's Level	Tarleton State University
AUTHOR(S): Tara Lisle Shay Gracy	MENTORS: Dr. Kayla Peak	
ABSTRACT: Among Kinesiology professions there are certain standards that are "known" to follow. Being a role model and true advocate of living a healthy lifestyle is what the degree holders should pride themselves on. With these standards set in place, is it reasonable that there are un-fit physical educators. Is this habit promoting more bad habits in the school systems letting the reflection show through our overweight children? The question could be asked where the change needs to begin. Change can begin with Universities enforcing the passing of a health-related fitness test into Kinesiology programs as a condition of graduation. At Tarleton State University, Kinesiology majors are required to pass a fitness test before receiving a degree. When conducting the research, a delimitation was female Kinesiology majors compared to male Kinesiology majors. Is there a difference in the pass/fail rate between the two student bodies?		
TYPE OF PRESENTATION: Poster		

477	TITLE: Comparison between of Mexican and American Bulletin Boards for Instruction	
AUTHOR: Isabel Rodriguez	Master's Level	Texas A&M International University
AUTHOR(S): Maria Elena Gonzalez	MENTORS: Dr. Sergio Garza	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

478	TITLE: The Probability of Lower Extremity Football Injuries	
AUTHOR: Pedro J Rodriguez	Master's Level	Tarleton State University

AUTHOR(S):	MENTORS: Dr. Kayla Peak
ABSTRACT: Great advances have been made in the creation of new synthetic fields since the creation of Astroturf. These advances have been made in order to create safer, more realistically grass-like playing surfaces, specifically football fields. How much more truly safe are they compared to natural grass fields is the question. By narrowing the selection down to four university football fields in the Lone Star Conference, two synthetic and two natural grass, data compiled by the sports medicine teams from each respective school, will contain rate of incident of injuries on both. The data will be studied and analyzed in hopes of finding a pattern.	
TYPE OF PRESENTATION: Poster	

479	TITLE: No Title Submitted	
AUTHOR: Teresita M Rodriguez	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS:	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

480	TITLE: The Impact of Symbolic Cultural Annihilation in Multicultural America	
AUTHOR: Virginia Rodriguez	Master's Level	Texas A&M International University
AUTHOR(S): Maricella Salinas	MENTORS: Dr. Sergio Garza	
ABSTRACT: Certain social groups have traditionally been absent from our lives, albeit symbolically. This absence has to some degree had an effect on the ways certain groups are perceived, as this treatment is deeply ingrained in the socialization process of even the youngest members of our society. This paper will examine the ways in which various groups have been symbolically absent from our lives as well as the impact of such treatment that favors some groups, while it simultaneously invalidates others.		
TYPE OF PRESENTATION: Poster		

481	TITLE: Effective Reading Strategies for ELL Learners	
AUTHOR: Jennifer Romo	Master's Level	Texas A&M International University
AUTHOR(S): Aide Martinez	MENTORS:	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

482	TITLE: Educational Technology & Gifted and Talented High School Student	
AUTHOR: Carol L Rosales	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Lynn Hemmer	
ABSTRACT: Technology has been shown to be overly and inappropriately used throughout the school systems and the cost to the educational system has not always been paying off (Ringstaff and Kelly, 2002). An important area of technology integration research involves the impact of educational technology on the critical thinking skills of the high school gifted and talented student. Scholars have linked ineffective use of technology with a decline in critical thinking skills for gifted and talented students in high school (Burg, 2001); (Ringstaff and Kelly, 2002). This study seeks to analyze educational technology policies of schools and the link to critical thinking skills of high school gifted and talented students. Four important questions that have emerged as a result of this study: What pedagogical strategies do educators of gifted and talented students use to integrate technology in the curriculum in order to learn "with" the technology versus learning "from" the technology? Under what conditions does technology have the most benefit for gifted and talented high school students (Ringstaff and Kelly, 2002)? How are the critical thinking skills of gifted and talented high school students assessed with and without the use of technology in the schools? What are the most effective technology programs used to improve higher-order thinking skills, problem-solving ability, or capacity to locate, evaluate and use information? The findings of this study reveal complex answers to these questions. Domestic and Foreign schools technology integration policies have been included in this study to best assess the answers to these questions. It is the conclusion of this researcher that more tools and methods need to be developed in order to implement technology effectively in the schools so that it may benefit the crucial reflective thinking skills of the high school gifted and talented student.		
TYPE OF PRESENTATION: Poster		

483	TITLE: Student Teams Achievement Divison and Teams Games Tournament	
AUTHOR: Rosa Clara Salazar	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Sergio Garza	
ABSTRACT: Reading in content areas is difficult because of the highly specific and technical vocabulary involved in these subjects thus making comprehension more difficult. Many secondary classroom students struggle with content area reading. In an effort to improve reading comprehension through vocabulary instruction in the social studies classroom, this study will describe the effects of two cooperative learning strategies Student Teams Achievement Division and Teams Games Tournament in a secondary social studies classrooms with 9th grade World Geography students.		
TYPE OF PRESENTATION: Poster		

484	TITLE: Effectiveness of Bilingual Instruction	
AUTHOR: Alfonso Salinas	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Cathy Guerra	

ABSTRACT: Literacy, as suggested by Norman Unrau, is a means or ability by which one thinks and acts in a particular context (Unrau, 2008). Broadening this definition beyond the more traditional concept of one's ability to read and write introduces a new challenge for educators who seek a linear path for achieving reading comprehension and writing mastery. The situation only grows in complexity when teachers work with students who live in communities rich in diverse cultures and languages. In these settings, English tends to dominate the spectrum of classroom instruction. More often than not, other languages are set aside or heavily restricted in order to best serve the students in one particular language. Throughout the country, states, districts, and schools seek novel ideas and approaches to teaching that can improve upon the effectiveness of a student's education. In some instances, strategies may borderline on the extreme by proposing zero-tolerance rules that exclude all other languages from the classroom. Other strategies do the exact opposite and limit the instruction to a student's native tongue. A more moderate approach involves a gradual transition from their first language (L1) to an English-only classroom or second language (L2). However, contrary to the notion that successful education can only come at the hands of removing languages from the classroom, modern research seems to indicate that bilingual and multilingual instruction, if incorporated appropriately, can lead to literacy development. Not only can reading comprehension and writing application be achieved, but, when demonstrated by an educator who is aware of the varying cultures within the community, students have the potential to develop an appreciation for language and to develop a tolerance and eventual acceptance of the multiple methods of communication available to them.

TYPE OF PRESENTATION: Poster

485	TITLE: Autism and Sensory Processing Disorders	
AUTHOR: Cindy Santos	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Randel Brown	

ABSTRACT: It is known that Autism is a developmental disorder that occurs in approximately 1 out of every 91 children. Although there is no known cause of Autism, research is ongoing to address these areas. At the moments, it is known that there are several major areas that are affected by autism including communication, social interactions, behavior and their response to sensory stimulation. This review of literature will examine what sensory processing disorders are and how it affects the lives of students with autism. Treatment options and other ways to help the child overcome these aversions will also be discussed.

TYPE OF PRESENTATION: Poster

486	TITLE: Best Counseling Practices	
AUTHOR: Michelle Sauceda	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Hoang	

ABSTRACT: No Abstract Submitted

TYPE OF PRESENTATION: Poster

487	TITLE: Graphical User Interfaces for Microchemical Systems Modeling	
AUTHOR: Srivenu Seelam	Master's Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Patrick L. Mills	

ABSTRACT: The National Science Foundation (NSF) has supported an undergraduate curriculum reform project in chemical engineering at Texas A&M with an overall objective of developing a web-based educational resource for teaching and learning. As a part of this project, Graphical User Interfaces (GUIs) were created to teach microchemical systems principles to chemical engineering undergraduate students. These interfaces allow students to readily modify key system parameters and obtain graphical results. One advantage of GUI's is they reduce the complication of model set-up so emphasis can be placed on understanding model responses to the model input parameters. COMSOL Multiphysics was used as the numerical engine to simulate various microprocess system components involving fluid flow, heat transfer, and species transport, such as micro-scale fluidics and fluid micro-mixers, micro heat exchangers, and micro reactors. The calculated scalar or vector field model output variables, or various quantities derived from them, are linked to a user interface that provides either a 2-D and 3-D visualization of the model simulations. This work discusses the creation of GUIs using "COMSOL with MATLAB". Previously, COMSOL Script was used to create GUIs which was replaced by "COMSOL with MATLAB" in COMSOL 3.5a. MATLAB is accessible by a larger cross section of users and also provides a platform for imbedding MATLAB commands into the code. In COMSOL with MATLAB, GUI's are created using the 'MATLAB Guide' which generates two files, a '.fig' file and '.m' file. The '.fig' file stores the pictorial view of the GUI while the '.m' file has the actual coding required to solve the problem. The user is allowed to change selected input parameters which are then passed, along with the COMSOL modeling equation commands and parameters, to the COMSOL engine. COMSOL then operates as the numerical engine while MATLAB performs as the front end of the code.

TYPE OF PRESENTATION: Poster

488	TITLE: Pre Literacy Skill Developments Amongst English Language Learners	
AUTHOR: Diana Smith	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS:	

ABSTRACT: The intention of this study was to analyze and compare two methods of instruction for the pre-literacy development of four-year old preschool children. The two approaches to instruction included dual language (English & Spanish) and English immersion. Children were assessed in the beginning of the year and again at the conclusion of the school year. It was hypothesized that four year-old English Language Learners, ELL, instructed using an English immersion approach, would make more gains in pre-literacy skills than four year-olds instructed using a dual language approach. Results of the study did not support the hypothesis. There was no significance difference in the literacy gains of the two groups. All children gained knowledge and increased their scores in pre-literacy development.

TYPE OF PRESENTATION: Poster

489	TITLE: Best Practices in School Counseling	
AUTHOR: Alexander Soler	Master's Level	Texas A&M International University

AUTHOR(S): Alexander Soler Velma Quintana	MENTORS: Dr. Hoang
ABSTRACT: The poster board will focus on two best practices of school couneling when working with a diciplinary based population, and its implications on the local school school districts.	
TYPE OF PRESENTATION: Poster	

490	TITLE: The Differences in Reading Scores Among Different Ethnicities	
AUTHOR: Patricia Soto	Master's Level	Texas A&M International University
AUTHOR(S): Zelma Lopez	MENTORS: Dr. S. Garza	
ABSTRACT: The objective of this research is to determine the differences in reading scores between different ethnicities in a large urban district. Results from the Academics Excellence Indicator Systems 2007-2008 indicate that there is an Ethnic group that did not farewell in Reading Third Grade TAKS scores. This research will focus on the possible causes for the low scores for this particular ethnic group.		
TYPE OF PRESENTATION: Poster		

491	TITLE: Promoting Career Planning	
AUTHOR: Rosa Vasquez	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Phu Hoang	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

492	TITLE: Evaluation of Counseling Programs	
AUTHOR: Xochitl A Vasquez	Master's Level	Texas A&M International University
AUTHOR(S): Jessic Mendoza Leslie Ferreyro Marissa Rodriguez	MENTORS: Dr. P.Hoang	
ABSTRACT: The purpose of this study is to evaluate the effectiveness of a variety of counseling programs already in existence in the two local school districts. Our group selected a particular program in each one of our corresponding campuses or at the district level.Data collection will be in the form of surveys, district wide released data and/or interviews as necessary according to the program being evaluated. This is a work in progress and data will be desegregated and presented in a poster form.		
TYPE OF PRESENTATION: Poster		

493	TITLE: Early Childhood Behavioral Assessments with Pediatric Visits	
AUTHOR: Virginia D Watkins	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Randel Brown	
ABSTRACT: The aim of the research is to reveal the importance of early Childhood Behavioral Assessments in conjunction with regularly scheduled Pediatric visits from birth to kindergarten to help diagnose and treat behavior disabilities. The reviewed literature demonstrates the prevalence of children's behavioral health disorders, and also shows the significant costs to society if these problems remain untreated. It also highlights the importance of early childhood behavioral assessment. Furthermore, the pediatricians' historical role as "de facto" behavioral health provider is evaluated with respect to the successful identification and treatment of children with these disorders (Regier, Goldberg, & Taube, 1979). The behavioral health system's inability to adequately address the current demands is explored. Initiatives at the national and state level are presented that address the problem of un met behavioral health needs of children. Benefits and challenges of integrated behavioral health care are presented and available evaluative literature is critiqued to identify voids in the existing literature. In summary, the long-term goal of early behavioral assessment services in integration with regular medical treatment is the development of a healthy member of society. Intervening as early as possible in a child's life seems to predict a more successful outcome and long-lasting effect. While there is still much research to be done, current measures show that carefully targeted early childhood assessment and early diagnosis with the help of pediatric care can yield measurable benefits in the long run which can benefit children in many ways.		
TYPE OF PRESENTATION: Poster		

494	TITLE: Developing Intermediate Readers Into Successful Expository Readers	
AUTHOR: Debra Weikel	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Cathy Guerra	
ABSTRACT: This poster will provide instructional guidelines for reading expository text, provide strategies to reduce the intermediate reader's frustration levels, and incljude strategies to motivate reluctant readers into confident successful expository readers. In addition, it will help close the gap of failure for elementary school students including English Language Learners (ELLs) before they reach the middle and high school level. These short term instructional strategies will help to build long term success for expository reading.		
TYPE OF PRESENTATION: Poster		

495	TITLE: Fixing the Pipeline, Identifying the Gaps: Examining Teacher Expectations	
AUTHOR: Taylor Flowers	Undergraduate Level	TAMU - Corpus Christi
AUTHOR(S):	MENTORS: Dr. Isabel Araiza	
ABSTRACT: The purpose of this study was to identify the differences of expectations for high school and university faculty. This research addresses the disconnect between student preparedness from high school to higher education. Through the qualitative analysis of interviews done with high school faculty and university faculty, the research showed that students are not prepared for college level courses and		

are ultimately lacking skill sets needed to succeed in post secondary education.
TYPE OF PRESENTATION: Poster

496	TITLE: Leyendo a Frida: Los códices contemporáneos de la vida de Frida Kahlo	
AUTHOR: Monica M Garcia	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS:	
ABSTRACT:		
TYPE OF PRESENTATION: Poster		

497	TITLE: Doing Mathematics	
AUTHOR: Reynaldo Guerrero	Undergraduate Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Firooz Khosraviyani	
ABSTRACT: What does it mean to " do mathematics"? what processes do we use as we do and learn mathematics? What abilities do we want our students to develop as they progress through middle school and high school? In respose to these important questions, the NVTM elaborates five mathematical processes in its Priciples and Standards for School Mathematics: Problem Solving, reasoning and proof, Communication, Connections, and REpresentations. Problem solving, of course, is a key process in doing mathematics. Reasoning and proff represents another way we do and make sense of math. Being able to effectively communicate about mathematics sharing ideas, listening carefully, and comprehending information is essential to learning it. Student understanding is alo greatly enhanced when they make connections within math problems and to the world around them. Mathematical representations communicate ideas and concepts and provide a framework for justification.		
TYPE OF PRESENTATION: Poster		

498	TITLE: Student Beliefs and Attitudes Toward Mathematics	
AUTHOR: Sonia Mares	Undergraduate Level	Texas A&M International University
AUTHOR(S): Karla Gonzalez Vanessa Ramos Teresita Rangel	MENTORS: Firooz Khosraviyani	
ABSTRACT: Even though it is imperitive for mathematics teachers to keep up with the changes in mathematics education as it changes over the years, it is also important to understand what beliefs students have of mathematics as well as their attitudes toward this subject. Therefore, by conducting a survey on student beliefs and attitudes toward mathematics, focused on students in Laredo, teachers will be able to better understand the influences of these beliefs/attitudes toward student achievement and begin to make changes that will improve the mathematics classroom for all students.		

TYPE OF PRESENTATION: Poster

499	TITLE: Mathematics in today's classroom	
AUTHOR: Susana Suarez	Undergraduate Level	Texas A&M International University
AUTHOR(S): Susana Suarez Joyce Rico Michel Ochoa	MENTORS: Dr. Khosraviyani	
ABSTRACT: We will be presenting some of the different strategies that have been used to teach mathematics in the classroom as well as what is being used today. we will show a comparison of the two and what shows to be more effective by research. we will show what students think it's better and what teachers believe to be best. Our opinions will also be included.		
TYPE OF PRESENTATION: Poster		

Engineering

500	TITLE: Networked Control System Delay Compensator Design	
AUTHOR: Augustine N Ajuzie	Doctoral Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. Cajetan Akujuobi Dr. Yongpeng Zhang	
ABSTRACT: Advancement in digital communication and computer networks has brought about the applicability of Networked Control Systems (NCS) especially in helicopter auto-piloting where control and performances of these systems are initiated and controlled remotely by users. However, these NCS experience unpredictable, uncertain and random time delays in processes execution because of data transmission dropouts, communication protocol congestion and bandwidth utilization. These delays degrade the stability performance of these NCS due to lack of data synchronization between the controller and plant. This paper proposed to utilize digital redesign technique in designing a network-delay compensator that addresses these network delays and system instability.		
TYPE OF PRESENTATION: Poster		

501	TITLE: Biorestoration of Groundwater at a Uranium Mining Site using Hydrogen	
AUTHOR: Jose Cabezas	Doctoral Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Lee Clapp	
ABSTRACT: State regulations require that groundwater at in-situ recovery (ISR) uranium mining operations be restored to pre-mining conditions. Industry-accepted groundwater restoration technologies such as reverse osmosis filtration requires treatment of large amounts of water and may take several years to achieve restoration goals, and in some cases pre-mining conditions cannot be reached. In-situ biostimulation of indigenous bacteria by injecting electron donors such as ethanol, acetate, lactate and hydrogen sulfide to promote soluble uranium reduction and immobilization has been the subject of numerous previous studies. However, use of organic substrates increases may cause aquifer bioclogging; while hydrogen sulfide is a toxic gas. A new alternative approach that may overcome these problems involves use of hydrogen as a reductant to precipitate and immobilize U(VI) in situ under anaerobic conditions. Because U(VI) and Fe(III) reduction is more exergonic than sulfate and carbon dioxide		

reduction, it was hypothesized that injecting hydrogen into subsurface will stimulate microbial reduction of U(VI) and Fe(III) with negligible reduction of sulfate and carbon dioxide. To test this approach, compressed hydrogen was injected into an unconsolidated sand zone over two months at an ISR mining site. A well monitoring program has been executed since June 2009 to evaluate the performance of this technology. Current results show that U(VI) has been reduced to below pre-mining concentrations in the area surrounding the injection well. Ongoing studies are evaluating the effective zone of influence of the hydrogen injection.

TYPE OF PRESENTATION: Poster

502	TITLE: Stream-aquifer interactions modeling using finite-differeces methods	
AUTHOR: Josue De Lara Bashulto	Doctoral Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Venkatesh Uddameri	

ABSTRACT: Increased population growth on urbanized regions translates into a steady increase in the water demand which is usually satisfied by pumping additional water from an aquifer or by using supplementary surface water. Groundwater and surface-water systems are not separate entities; understanding their inter-connection is important for effective water resources management. A system comprised of a river and an adjoining aquifer was studied. This work focuses on the effects of a passing flood wave resulting from a simulated storm on the stream-aquifer system and its bank-storage. Various explicit finite-differences numerical schemes in their linearized and non-linear form were used to model the stream-aquifer system, including: FTCS, McCormack, Dufort-Frankel, and Saulyev. Results are shown comparing the various schemes against their implicit counterparts and also against analytical solutions where available. The methods were applied to a simulated storm on the Mission River watershed in the vicinity of Refugio, Texas.

TYPE OF PRESENTATION: Poster

503	TITLE: LCA for Controlling Mercury Air Emissions	
AUTHOR: Prajay A Gor	Doctoral Level	Texas A&M University - Kingsville
AUTHOR(S): Jorge Ramos Holly Howard	MENTORS: Alvaro Martinez, Ph.D	

ABSTRACT: The United States Environmental Protection Agency (USEPA) has classified Mercury (Hg) as a hazardous air pollutant (HAP). Mercury emissions from coal-fired utility boilers are the largest source of mercury air emissions in United States. Control of mercury air emissions depends on its speciation. One of the species of mercury present in the flue gas is elemental mercury (Hg0), which is difficult to control as it insoluble in water and causes adverse health effects when it is breathed as vapor. One of the objectives of this research is to control mercury air emissions by oxidizing this insoluble elemental mercury (Hg0) to oxidized mercury species (Hg2+) using hydrogen peroxide (H2O2) so that it can be easily removed using wet scrubbers, as these oxidized mercury species (Hg2+) are highly water-soluble. The other objective of this research is to perform a life cycle analysis (LCA) for this mercury removal technology so as to study the environmental impact of it and compare it with those of the current mercury removal technologies.

TYPE OF PRESENTATION: Poster

504	TITLE: New Estimates of Extreme Wave Heights for the Gulf of Mexico	
AUTHOR: Chan K Jeong	Doctoral Level	Texas A&M University at Galveston
AUTHOR(S):	MENTORS: Vijay Panchang	
ABSTRACT: Recent hurricanes in the Gulf of Mexico (e.g., Ivan, Dennis, Katrina, Rita and Ike) were observed to develop wave conditions that were near or exceeded the predicted 100-year conditions. As a result, many offshore facilities as well as coastal infrastructure, which were designed to withstand the 100-year condition, were damaged. New estimates of extreme conditions, which incorporate recently observed maxima, are needed to provide better guidelines for design of coastal and offshore structures. Berek et al. (2007) have used modeled data to develop new criteria but these estimates are very sensitive to the data and to the statistical method used in the development. Berek's estimates also do not cover the entire Gulf of Mexico. We have developed updated estimates of the 100-year extreme wave conditions for the entire Gulf of Mexico using NCEP/NCAR Reanalysis 1 project modeled wind data for the 51-year period from 1958 to 2008. The Reanalysis 1 winds are available on a relatively coarse 2.5x2.5 degree grid. Local hurricane winds were generated using the HURDAT parameters (maximum wind, central pressure, etc.) and were merged with the coarse grid data to provide a more accurate wind field, which was then used in the SWAN wave generation model. After building the wave database, a resampling technique is used to evaluate and select the optimum statistical method (e.g., Gumbel, Weibull and/or Generalized Extreme Value distribution) to estimate a more appropriate extreme wave condition.		
TYPE OF PRESENTATION: Poster		

505	TITLE: No Phase-lagging DC/AC inverter	
AUTHOR: Chu Liu	Doctoral Level	Prairie View A&M University
AUTHOR(S): Xia Chao Jian Zhang	MENTORS: Dr. Yongpeng Zhang Dr. Akujuobi	
ABSTRACT: No phase-lagging between the referenced AC sine-wave input and AC sine-wave output in the controller can be realized by adding additional compensator. In the conventional circuit, the feedback delays from the feedback sensing, sample-and-hold and A/D conversion have cause the reduction of the phase margin and affect to the control's stability. The new proposal can minimize the phase lagging, improve the phase margin and improve the load transient capability for the power supply application.		
TYPE OF PRESENTATION: Poster		

506	TITLE: Drinage Ditch Monitoring In the Arroyo Colorado River Watershed, TX	
AUTHOR: Sreeram G Singaraju	Doctoral Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Venkatesh Uddameri	
ABSTRACT: The Arroyo Colorado River is the major source of fresh water to the lower Laguna Madre and is thus an economically and ecologically important resource to the Lower Rio Grande Valley. The flows into the Arroyo Colorado are sustained by wastewater discharges, agricultural irrigation return flows, urban runoff, and base flows from the shallow groundwater. The Arroyo Colorado has been declared impaired due to the low dissolved oxygen (DO) levels and gradually high nutrient levels have been observed. As part of implementing strategies to improve the dissolved oxygen and the environmental		

condition of the Arroyo Colorado, a local steering committee consisting of the Texas State Soil and Water Conservation Board (TSSWCB), Texas Commission on Environmental Quality (TCEQ), Texas A & M University-Kingsville (TAMUK) and other agencies identify the need to monitor dissolved oxygen and nutrient levels in the Arroyo Colorado. Four drainage ditches across the Hidalgo and the Cameron Counties were selected and are being monitored since August, 2008. A detailed summary of some of the important parameters has been presented in the current poster.

TYPE OF PRESENTATION: Poster

507	TITLE: Radiation Detector Arrays in Lunar and Martian Habitat Simulation Testbeds	
AUTHOR: Alvin J Boutte	Master's Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr Brad Gersey Dr Kelvin Kirby	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

508	TITLE: Six Sigma at Texas A & M University-Commerce	
AUTHOR: Deepthi Chadalavada	Master's Level	Texas A&M University - Commerce
AUTHOR(S): Chadalavada Deepthi	MENTORS: Mildred Golden Pryor	
ABSTRACT: Six Sigma is a discipline, data-driven approach and methodology for eliminating the defects in any process. It identifies and measures the defects of a process to improve the quality of the process. Six Sigma is a unified approach to the process excellence. It is successfully implemented in different organizations to improve the quality of the product or service delivered. It is widely used in different sectors including manufacturing, healthcare, and education. In this paper, we only discuss how six sigma methodologies can be implemented in today's educational institutions. In addition, we discuss the initial results of a Six Sigma project that we are conducting at Texas A&M University-Commerce. The project focuses on the improvement of the course and curriculum approval processes.		
TYPE OF PRESENTATION: Poster		

509	TITLE: Adsorption and Desorption of Water Vapor on Engineered Nanomaterials	
AUTHOR: Nereyda M Facundo Torres	Master's Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. David Ramirez	
ABSTRACT: Engineered nanomaterials (1-100 nm size range) have unique chemical and physical properties that make them desirable for widespread applications including environmental remediation, energy conversion, catalyst support and biomedical use. Although these enhanced properties of nanomaterials make them very useful in industry, nanomaterials may ultimately pose a threat to the human population and the environment. Therefore, it is important to research the physical and chemical characteristics of nanomaterials. This project focuses on assessing the adsorption and desorption capacities of water vapor on engineered nanomaterials including silicon dioxide, C60 fullerenes, and		

single-wall carbon nanotubes. A gravimetric technique is used to determine the equilibrium adsorption and desorption isotherms of water vapor at ambient conditions. A symmetrical gravimetric vapor sorption analyzer (SGA 100) is used to obtain the water adsorption capacities of the nanomaterial samples at relative humidities between 10 and 90%. Sample weights of 10 to 20 mg were used. The adsorption and desorption isotherms for silicon dioxide show that for relative humidities ranging from 10 to 90 % a weight percent change ranging from 5 to 28 % occurs. This research is essential because it will yield an understanding of the fate, transport, and transformations of these nanomaterials in the atmosphere. There is an urgent need for risk assessment on nanomaterials, and research in this area is receiving world wide support. It is important to research the basic characteristics of nanomaterials, such as their chemical and physical properties, in order to understand their behavior in the atmosphere.

TYPE OF PRESENTATION: Poster

510	TITLE: Survey of U and Rn in Groundwater from Private Wells in Kleberg County	
AUTHOR: Waldy Fernandez	Master's Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Lee Clapp	

ABSTRACT: The presence of uranium (U) and its daughter radon (Rn) in groundwater is a concern in South Texas. For example, two cities near TAMUK, Riviera and Ben Bolt, have U concentrations in their public water supplies that are above the EPA's drinking water standard and are planning to implement reverse osmosis in the near future. In addition, private wells in the region have also been found to have uranium concentrations above EPA's drinking water standard. This has created public controversy as to whether the uranium is present naturally, or is rather a consequence of uranium mining activity in the area. The purpose of this research project is survey U and Rn concentrations in groundwater from private wells in Kleberg County. The survey will serve three objectives: (1) to protect public health by assessing concentrations of U and Rn in drinking water; (2) to compare existing concentrations in wells that were previously surveyed during a study conducted by the USGS in the late 1970s and characterize any trends; and (3) to develop hydrogeochemical forensic methods to assess whether or not U present in well samples is a result of anthropogenic activity. Towards meeting these objectives, an ICP-MS method has been developed for U and numerous other elements and a scintillation counter method is being developed for Rn. A preliminary survey of 17 private wells in Kleberg County has shown that 14 (82%) had uranium concentrations greater than 7 ppb, and 3 (18%) had uranium concentrations above the EPA drinking water standard of 30 ppb, including one with a concentration of 161 ppb. We are currently investigating the potential for quantifying U238:Rn222 ratios to distinguish between dissolved U at near-equilibrium with mineralized U and dissolved U that could potentially have been transported away from mineralized zones as a result of mining activity.

TYPE OF PRESENTATION: Poster

511	TITLE: Lunar Regolith Particle Size Effects on Mechanical Properties	
AUTHOR: Ijette Foley	Master's Level	Prairie View A&M University
AUTHOR(S): Jullian Norman	MENTORS: Dr. Jianren Zhou	

ABSTRACT: The tensile properties of JSC-1A Lunar Regolith-Ultra High Molecular Weight Polyethylene (UHMWPE) composites will be studied. The effects of the different particle size of the lunar regolith on integral properties of the micro composite's mechanical properties (i.e. compression strength, tensile

strength, and fatigue), thermo-mechanical properties, and composites' integrity will be investigated. The different particle sizes that will be tested are the as received particle size, <150 microns, <125 microns, <90 microns, <75 microns, and <45 microns. Using an optimized pressure, curing temperature, curing time, and heating and cooling rates composites of 20/80 wt%, UHMWPE and JSC-1A, respectively, will be processed. Using the Instron 5569, the composites' mechanical properties will be tested to determine the preeminent particle size to use for the composites.

TYPE OF PRESENTATION: Poster

512	TITLE: Finite Element Simulation of a Positive Displacement Motor (PDM)	
AUTHOR: Henry K Gonzalez	Master's Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. Jianren Zhou	

ABSTRACT: A recent increase in drilling of horizontal wells using Positive Displacement Motors (PDM) has brought forth the need to understand the effects of the aggressive downhole environment on the mechanical behavior of elastomers, Nitrile Butadiene Rubbers (NBR) in particular. Elastomers used in these applications experience high temperatures and pressures, abrasion and chemical attack, swelling and hysteresis which all contribute to the degradation of the mechanical properties and the eventual power section stator failure. In order to enhance the technology and make the system more reliable, two common types of NB rubbers were characterized and a finite element model created to understand the relationship between the elastomer mechanical properties, temperature and stator rubber geometry.

TYPE OF PRESENTATION: Poster

513	TITLE: Stimulating Denitrification in Groundwater Contaminated with Uranium	
AUTHOR: Ekundayo Ogungbe	Master's Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Lee Clapp	

ABSTRACT: One of the more promising strategies for the in-situ remediation of uranium-contaminated groundwater involves "biostimulation" of dissimilatory metal-reducing bacteria (DMRB). Previous researchers have used ethanol as an electron donor substrate to promote microbial denitrification and uranium reduction. However, the high nitrate concentrations resulted in excessive microbial growth and associated aquifer bioclogging. The purpose of this research project is to evaluate the feasibility of using membrane-delivered hydrogen as an alternative electron donor to stimulate microbial denitrification in the acidic uranium-contaminated sediments from Oak Ridge National Lab (ORNL). This research uses three parallel columns that have been packed with contaminated ORNL aquifer sediments and continuously fed with uranium- and nitrate-contaminated groundwater. Two columns are supplied with hydrogen and ethanol, respectively, and the third is supplied with no exogenous electron donor substrate as a negative control. Throughout the experiment inorganic anions are being analyzed. The results indicate that both hydrogen and ethanol are effective electron donor substrates for stimulating denitrification in the ORNL sediments. Significant nitrate removal has been achieved in both the hydrogen- and ethanol-fed columns, whereas negligible denitrification has been observed in the control column. Nitrate reduction in the hydrogen-fed column was occurred more rapidly than in the ethanol-fed column. Greater than 88% nitrate reduction has been consistently achieved in both columns. Finally, higher nitrite (NO_2^-) production has been observed in the hydrogen-fed column than in the ethanol-fed column.

TYPE OF PRESENTATION: Poster

514	TITLE: Biochemical and Thermo-chemical Processes for Generating Biofuels: A Review		
AUTHOR: Olufunmilayo Ogunjobi		Master's Level	Prairie View A&M University
AUTHOR(S):		MENTORS: Dr. Raghava Kommalapati Dr. Ziaul Huque	
ABSTRACT: Biofuels are the best renewable alternative fuels to fossil fuels because they are clean, their resources (Biomass) are cheap and they help reduce the emissions of greenhouse gases to the atmosphere causing global warming. They are produced by converting biomass using three different processes; 1) bio-chemical, 2) thermo-chemical and 3) physico-chemical, but the first two are the most commonly used. The bio-chemical processes which involve anaerobic digestion and fermentation are mostly used for the production of ethanol and biogas from biomass. The thermo-chemical processes consist of combustion, gasification and pyrolysis and are best suited for conversion of biomass to liquid fuel. Gasification is the most convenient thermo-chemical process where, biomass is converted into combustible gas mixture by the partial oxidation of biomass at high temperature in the presence of air. Here methane, carbon monoxide, steam nitrogen, hydrogen and light hydrocarbons are been produced. Pyrolysis is a decomposition process through which biomass or other organic matter is converted to a mixture of oil gases(bio-oil or bio-crude) and carbon residues(charcoal) in the complete absence of oxygen. These oils are then refined to produce bio-fuels. Anaerobic digestion is a process in which micro-organisms break down biodegradable material in the absence of oxygen, in relation to biofuels it is used to produce rich biogas for use as energy. Fermentation is mostly used for the production of ethanol, by yeast fermentation and the purification process of the ethanol is done by distillation. The different conversion technologies used to convert biomass to ethanol using 3 of the processes mentioned above (fermentation, gasification and pyrolysis), and the different biomass wastes such as switch grass, sugar beet, sugar cane, microalgae etc will be analyzed. This paper will present the advantages and limitations of each process and the cost analysis and specific issues with the commercialization of the technique.			
TYPE OF PRESENTATION: Poster			

515	TITLE: Remediation of a Contaminant Site Using In Situ Chemical Oxidation		
AUTHOR: Kenneth Onwodi		Master's Level	Prairie View A&M University
AUTHOR(S): Charles Onwachi		MENTORS: Dr. Raghava Kommalapati	
ABSTRACT: An environmental site assessment (ESA)/ Limited site Investigation (LSI) was carried out on an 11.5 acre relief site in Harris County, Houston. Certain chemicals of concern (COC) were detected after the investigation, and as a result an additional groundwater delineation investigation was necessary to further evaluate the presence of chemicals of concern and/or volatile organic compounds in the soil and groundwater. At the end of the delineation investigation, it was observed that a portion of the sampling point had more chemicals of concern in the soil and others had volatile organic compounds in the groundwater that exceeded the TCEQ action level. After careful review of various treatment methods it is recommended that an in situ chemical oxidation technique is more suitable to treat this site. Current policies and law stress “permanent” remedies over containment and as such this technique was considered more favorable. The process involves the delivery of oxidants like hydrogen peroxide (H2O2) or potassium permanganate (KMnO4) to the contaminated media to destroy the contaminants by converting them to harmless compounds commonly found in nature. The most commonly used (Fenton reagents) is hydrogen peroxide with an iron catalyst which creates a hydroxyl free radical. The radical is			

capable of oxidizing complex organic compounds where residual hydrogen peroxide decomposes into water and oxygen in the subsurface and any remaining iron precipitates out. In situ chemical oxidation is an innovative technology that shows promises in destroying or degrading an extensive variety of hazardous waste in ground water, sediment, and soil. The oxidants used are readily available, and treatment is usually measured in months rather than in years making the process economically feasible. Its benefits include its cost effectiveness, shorter duration of treatment and lasting solution to the problem.

TYPE OF PRESENTATION: Poster

516	TITLE: Biodiesel Production from Algae		
AUTHOR: Charles C Onwuachi		Master's Level	Prairie View A&M University
AUTHOR(S):		MENTORS: Dr Raghava Kommalapati Dr Ziaul Huque	

ABSTRACT: Biodiesel Production From Algae Feedstock Onwuachi Charles (Department of Civil & Environmental Engineering Prairie View A & M University, Prairie View Tx) Email :conwuachi@pvamu.edu Advisors: Kommalapati .R Phd PE & Huque. Z Phd Abstract: Microalgae are one-celled, photosynthetic microorganisms that are used as feedstock for the production of biodiesel (a renewable, biodegradable, and nontoxic fuel). Today biodiesel has come to mean a very specific chemical modification of natural oils. Given the right conditions, algae can double its volume overnight. Put quite simply, microalgae are remarkable and efficient biological factories capable of taking a waste (zero-energy) form of carbon (CO2) and converting it into a high density liquid form of energy (natural oil). The basic requirements for the algal systems are water, sunlight and CO2. A look at the production process and the production systems within suggest that the possibilities of producing algal biodiesel at costs cheaper than what is currently obtainable in the industry does exist and would constitute the main objective of this project. Production methods for algae systems include open ponds systems, closed pond systems and photo bioreactors. Current works and researches geared towards strain improvement are also vital so as to have the desired qualities in the strains of algae to be used for commercial production. Currently there are available a number of harvesting and oil extraction methods which are classified as either mechanical or chemical. A choice of algae production system, harvesting method and biodiesel production process for a low cost commercial production of biodiesel would be identified after comparison of the various methods and costs presently available.

TYPE OF PRESENTATION: Poster

517	TITLE: An Adsorption-Desorption Model to Control Organic Vapors to the Atmosphere		
AUTHOR: Robert Salinas		Master's Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS: Dr. David Ramirez	

ABSTRACT: Industrial facilities produce large quantities of contaminated gaseous streams which require remediation. An efficient and environmentally friendly manner of degrading contaminants in these gaseous streams is through biofiltration. Limitations for achieving maximum efficiency on biofiltration processes include a constant flow rate and steady concentrations of contaminants. Since these boundaries are not typical in industrial processes, an additional mechanism is implemented prior to biofiltration. This project addresses the use of a bench-scale thermal-swing adsorption system that uses coal-based activated carbon in order to attain these goals. Activated carbon is recognized for having unique physical

properties of significant surface area and microporosity. These parameters allow activated carbon to adsorb contaminants at fluctuating flow rates and concentrations. In turn, the intent of the desorption process is to deliver the contaminants to a biofilter at the appropriate criteria. In this bench scale model, the injected liquid contaminant is heated to the vapor phase and allowed to thoroughly mix with dry compressed air. The contaminated stream then enters a bed of granular activated carbon to begin the adsorption process. When the activated carbon is fully saturated, the adsorption process is complete and the desorption process begins. The objective of this model is to completely adsorb methyl ethyl ketone present in a gas stream on the activated carbon and desorb at an unchanging concentration and flow rate. This area of research is important to achieving lower quantities of emitted contaminants into the atmosphere.

TYPE OF PRESENTATION: Poster

518	TITLE: Simulation of an Adiabatic Fixed-Bed Catalytic Reactor for the Oxidation of SO2 to SO3 in Sulfuric Acid Manufacture	
AUTHOR: Ajay Yelamanchi	Master's Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Patrick L.Mills	

ABSTRACT: Sulfuric acid (H2SO4) is a very important commodity chemical since a nation's sulfuric acid production is a good indicator of its industrial strength. The major use for sulfuric acid is in the production of phosphoric acid, which is used for manufacture of phosphate fertilizers as well as trisodium phosphate for detergents. A key reaction used to manufacture H2SO4 involves the gas phase oxidation of SO2 to SO3 over solid catalysts. Catalysts for SO2 oxidation to SO3 are unique in heterogeneous catalysis chemistry since the active vanadium components exist as melt-phase inorganic complexes that are distributed throughout the porous catalyst as partially-filled and totally filled pores. Development of improved catalysts with higher activities at lower temperatures that can convert future industrial process gas streams containing SO2 to SO3 at higher efficiencies is a challenge of increasing importance from both an environmental and practical process perspective. This presentation will describe the development of an adiabatic fixed-bed reactor model for the selective oxidation of SO2 to SO3 that can be used as part of engineering design and optimization tools for new sulfuric acid manufacturing plants. The reactor model consists of differential mass and energy balances for the bulk gas phase that are coupled to a model for non-isothermal diffusion and reaction in the porous vanadium catalyst particle. The particle models includes simple 1-D models for spherical catalysts to more realistic 2-D and 3-D models that describe real catalyst geometries. Optimization of pellet size, inlet feed temperatures and catalyst loadings are analyzed using finite element mathematical modeling tools.

TYPE OF PRESENTATION: Poster

519	TITLE: DSP-based space vector pwm controlled DC-AC inverter	
AUTHOR: Jian Zhang	Master's Level	Prairie View A&M University
AUTHOR(S): Jian Zhang	MENTORS: Yongpeng Zhang	

ABSTRACT: Nowadays, with the increasing demand for high quality and highly reliable power supply, more and more electric power must be regulated by power electronics before being used in civil and industry applications. The inverter is a key component that alternates the electric power from DC (Direct Current) to AC (Alternative Current), and then exports high quality voltage waveforms for customers. With

the availability of real-time digital controllers like DSP (Digital signal processor), embedded controlled digital switching inverters are becoming more and more popular. This project introduces the design procedure of three-phase inverter, whose controller is realized with TI (Texas Instruments) TMS320F2812 DSP, and the designed inverter will be used for UPS (Uninterrupted Power Supply). SVPWM (Space Vector Pulse-Width-Modulation) is first utilized in system modeling and control algorithm development, and then software is integrated with hardware to achieve the desired performance. Except for the voltage amplitude regulation, the frequency tracking is also important to ensure a smooth transition between UPS and utility power supply, therefore a phase-locked loop is needed. To accommodate this requirement, the accurate model of the full digital phase-locked loop based on DSP is proposed. To cope with jump-period error which may occur in the phase detection, some limitations on the parameters are applied. The designed prototype will then be extended to some commercial products to verify its effectiveness.

TYPE OF PRESENTATION: Poster

520	TITLE: Advance Bidirectional I/O Buffer for Wireless Chip	
AUTHOR: Thomas A Allotey	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Olusegun Odejide	

ABSTRACT: A bidirectional buffer performs input and output functions to a signal through same node, such as a single IC package pin, is referred to as an input/output (I/O) buffer, or simply, an I/O. In other words, an input buffer is used to transfer a signal generated by an external device and received at one of the IC chip's package pins inside the IC chip to be used internally where as an output buffer is used to transfer signals that are generated internally in the IC chip to one of the IC chip's package pins so that the signal can be transferred to an external device. The goal of this research effort is to design a bidirectional buffer that is that the design must 0.6um technology product with 5 volts supply. The output circuit must source and sink between 45mA to 55mA. The circuitry must be enabled by an I/O clock with a period of 60nS, half the period in low and half in high states will be generated by the customer design and it will interface with your design. The input signal of the design will be from the customer with a design input of a triangular wave with a slope of ½ and a period of 30nS. Time within which the design should be completed. There must be operating temperature of 25°C to 80°C for the design. The design must also have wireless communications device functionalities. MOSFET's was clear, for best power conservation. Amplification capability is a desirable feature for buffers. The can be modeled using National Instrument circuit design suite however the speed and accuracy of the software is not adequate. The accuracy is a very important factor in the design of this circuit because of the size and application. The application is for an input/output buffer for an integrated circuit chip. ICs can run and a very high speed and require little delay and very high reliability rate. Hence Cadence virtuoso which is an industry standard and has good accuracy and speed was chosen to model our design.

TYPE OF PRESENTATION: Poster

521	TITLE: Gamut Mapping of a printer using Neugebauer Model	
AUTHOR: Wajahat Asif	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. Danial Lau	

ABSTRACT: In this work, a target color represented in CIELAB color space is mapped to Epson R220 Inkjet printer's gamut (total range of colors reproduced by the device). The boundaries of the gamut of Epson printer are modeled by Neugebauer primaries (i.e. all possible combination of inks in the printer). The target color is reproduced by mapping the target color to the gamut of Epson printer. The percentages of each Negebauer primary, to produce a target color, are estimated with constrained least mean square algorithm. Generally, the primaries of the printer cyan (C), magenta (M), yellow (Y) and black (K) are haltoned for image reproduction. But in this work, the percentages of Neugebauer primaries are halftoned using an error diffusion based halftone technique, which guarantees the same percentages of, inks both in the Neugebauer model and in the target color reproduced by using device dependent color space of Epson R220 printer.

TYPE OF PRESENTATION: Poster

522	TITLE: Green Synthesized Silver Noble Metal and Evaluation of its Microstructure	
AUTHOR: Gilbert J Benavente	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Jingbo Louise Liu	

ABSTRACT: The analysis and fabrication of silver (Ag) particles can be examined or created in several ways. One in particular is the Sol-Gel method, which is the wet-chemical technique used primarily for fabrication. This method is the easiest and the most cost-efficient to prepare homogeneous nanoscale materials. Our main chemical ingredient, Arabic Gum, is the surfactant in the fabrication because it is used to prevent agglomeration of the ultrafine particles. As for our characterization techniques, we have many tools which include the following: 1) X-ray powder diffraction (XRD), which allows for rapid, non destructive analysis of a unknown sample; in other words a first look toward discovery of the sample. 2) Ultraviolet-visible (UV-VIS) spectroscopy, which uses light adjacent towards ultraviolet and infrared ranges. 3) Transmission electron microscopy (TEM), which is another microscopy that composes of electron beams produced by the tungsten (W) filament that interacts with the substance and pictures of measured specimen can be taken as interacts. All of these characterizations tools are used to evaluate the nanostructure of the silver. It was concluded that the green synthesized nano-metallic silver were composed of the pseudo-spherical particles which were highly crystalline from TEM and XRD analysis. The particle sizes varied from 10 - 50 nm. The silver metal was nicely corresponding to the standard cubic crystalline phase structure (JCPSD no. 04-0783).

TYPE OF PRESENTATION: Poster

523	TITLE: A 3-Dimensional Invasion Model to Study Drug-Resistant Lymphoma Metastasis	
AUTHOR: Evan M Cherry	Undergraduate Level	Texas A&M University
AUTHOR(S): Dr. Kayla Bayless Dr. Steve Maxwell	MENTORS: Dr. Kayla Bayless Dr. Steve Maxwell	

ABSTRACT: Diffuse Large B Cell Lymphoma (DLBCL) is a common form of cancer, accounting for 30% of all lymphoma diagnoses. Patient survival rates of DLBCL with the standard chemotherapeutic cocktail consisting of cyclophosphamide, doxorubicin, vincristine, and prednisone (CHOP therapy) are roughly 30-40%. Approximately 50% of patients develop chemoresistance to CHOP therapy and succumb to metastasis of vital organs. To penetrate tissues and organs, lymphoma cells must invade the extracellular matrix surrounding blood vessels. We investigated the ability of CHOP-resistant lymphoma to invade

three-dimensional collagen matrices mimicking the extracellular matrix. We evaluated the potential for cellular dyes to quantify invasion responses and tested an automated system for quantifying invasion responses. Further, because the cytoskeleton is critical for cell locomotion and morphology, we investigated the role of key cytoskeletal proteins vimentin, actin, and tubulin in lymphoma invasion. Our data indicate that microtubule stabilization, but not depolymerization, inhibits CHOP-resistant lymphoma invasion. Additionally, depolymerization of actin and vimentin completely blocked invasion responses. Altogether, this work develops a quantifiable model to study lymphoma invasion, mimic metastasis, understand cytoskeletal function, and gain further insight into molecular signals required for lymphoma invasion.

TYPE OF PRESENTATION: Poster

524	TITLE: Characterization of Satellite Breakup Fragments	
AUTHOR: Jonathan J Daniels	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Jacqueline Heard	MENTORS: Dr. Kelvin Kirby	

ABSTRACT: No Abstract Submitted

TYPE OF PRESENTATION: Poster

525	TITLE: Thermal Evaluation of Green Roofs	
AUTHOR: Christopher Dunlap	Undergraduate Level	Texas A&M University - Commerce
AUTHOR(S): Megan McGuffey Barbara Villarreal	MENTORS: Derald A. Harp, Ph.D	

ABSTRACT: This study examines the performance of a variety of several species of plants used as a thermal insulating barrier on a white bituminous coated roof. Ten species of plants were planted in forty green roof planting modules. Four plants of each species were planted per module. Each module is 60.96 cm x 60.96 cm and 10.16 cm deep. Planting media was a commercially available mix proven to perform well in Texas green roofs. Thermal measurements of plant tissue, growing media, and the roof were collected using an Omega® OSXL400 infrared thermometer and a FLIR® ThermaCAM B400 thermal camera. Thermal imagery was collected using a standard lens and a wide angle (45°) lens with an emissivity setting of 0.95. Data were collected every 20 days. Overall, there were significant temperature differences among roof surface, media surface, and plant tissues. On the roof, foot pads were the warmest with average temperatures of 51.1°C and high temperatures, recorded in July 2008, exceeding 75°C. Roof temperatures averaged 48.3°C with extreme high temperatures of 69.4°C. Growing media temperatures were warm, averaging 32.6°C, but still approximately 12°C cooler than roof temperatures. Plant leaf temperatures were by far the coolest, with average leaf temperatures of 30.7°C. The high leaf temperature of 40.6°C was recorded in July 2008, a full 29°C cooler than roof surface temperatures. This study illustrates the importance of foliage cover in green roofs, as this can reduce building surface temperatures between 15 and 20°C.

TYPE OF PRESENTATION: Poster

526	TITLE: No Title Submitted		
AUTHOR: Jordan R Fuchs		Undergraduate Level	Prairie View A&M University
AUTHOR(S):		MENTORS:	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

527	TITLE: Optimization of Wind Turbine Blade	
AUTHOR: Jenny Galvis	Undergraduate Level	Prairie View A&M University
AUTHOR(S): BEDE LEMEH	MENTORS: Ziaul Huque Raghava Kommalapati	
ABSTRACT: As environmental concerns escalate and the limits of fossil fuel are approached, wind power has gained momentum as a viable and cost effective renewable energy source for the future. This has sparked off many research areas and effort is being made to improve the output. Optimal performance is assessed in terms of coefficient of performance (cp). This factor rates the rotors ability to extract energy from the available wind stream and is calculated for each wind speed within the pre selected range. Optimization methodology is widely applied due to the rapid increase of multi-variable problems within engineering. The success of which is dependent on having a clear design objective. These objectives are usually dependent on the degree of freedom of the design variables. Blade design is critical for optimizing the aerodynamic efficiency of wind turbine during light conditions. The design, however, must also be strong enough to withstand operational loads including gust loads. In the design of wind turbine blade effort is being made by engineers to improve on an existing design. The tendency has been to simplify design models. The simplified models are aimed mainly to improve the power output, maximize power coefficient, minimize the cost of energy and improve blade aerodynamic performance. The study presents a review on the current state of optimization of Horizontal axis wind turbine blade, specifically focusing on the methodology.		
TYPE OF PRESENTATION: Poster		

528	TITLE: Microcosm Assessment of Reductants for Uranium Immobilization	
AUTHOR: Denis Guleiof	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Evelyn Lopez	MENTORS: Lee Clapp	
ABSTRACT: South Texas is a leading producer of uranium in the nation, with four in-situ recovery (ISR) mines currently operating and two proposed ISR mines currently in the permitting process. Unlike “open pit” mining, ISR involves injecting oxygen into an aquifer to oxidize and solubilize the uranium ore, which is then pumped to the surface and removed by ion exchange. After mining is complete, groundwater must be restored to baseline conditions. Currently restoration involves pumping groundwater through reverse osmosis membranes. However, this technology is costly and also does not restore the aquifer to its anaerobic state, potentially allowing for slow uranium solubilization. A complementary technology for restoring groundwater at ISR sites involves injecting chemical reductants to reverse the oxidation process		

and convert the uranium back to its mineralized form. In this study, microcosm experiments will be conducted to compare the effectiveness of ethanol and hydrogen as reductants. Although ethanol has recently been used to immobilize uranium during pilot studies, there is evidence that carbonate generation inhibits uranium reduction due to formation of highly soluble carbonate complexes. The microcosm experiments will test the hypothesis that hydrogen is a more effective reductant because it will not generate carbonate. Aquifer sediment cores were recently collected from the Kingsville Dome uranium mining site. Currently, gas chromatography (GC) methods are being developed to measure ethanol and hydrogen concentrations. Once the methods are established, the aquifer sediments will be transferred to a number of 160-mL serum bottles and mixed with site groundwater. The bottles set will be divided into three groups: Group I will be supplied with ethanol, Group II will be supplied with hydrogen gas, and Group III will be left untreated as a negative control. The relative concentrations of soluble uranium will be monitored for each group as bioremediation proceeds with time.

TYPE OF PRESENTATION: Poster

529	TITLE: Thermal Transport During Shape Memory Polymer Actuation	
AUTHOR: Edward K Hahn	Undergraduate Level	Texas A&M University
AUTHOR(S):	MENTORS: Duncan Maitland	

ABSTRACT: Thermally-actuated shape memory polymers (SMPs) have the ability to transform from a stable "secondary" shape to a predetermined "primary" shape when heated. In endovascular applications this transformation is achieved using an external, non-physiologic energy source such as fiber-delivered laser light, necessitating an evaluation of potential thermal damage to surrounding tissue. The present investigation seeks to understand thermal transport around an actuating endovascular SMP foam device. An idealized system consisting of a capped optical fiber heat source in a straight tube flow was computationally modeled using a commercially available computational fluid dynamics (CFD) package. Thermal transport around the heat-dissipating device was modeled in 4, 6, and 8 mm diameter tubes. The device was modeled in axially-centered and 0.5 mm near-wall positions for flow rates ranging from 350 to 550 mL/min in 25 mL/min increments. In axially-centered simulations, streamlines were used to predict thermal damage to blood cells using an Arrhenius damage integral. In all modeled geometries and flow rates, simulations indicated no potential for thermal damage to the wall of the tube. Application of the Arrhenius damage integral to streamline data extracted from the simulation indicates the potential for thermal damage to blood cells passing within the thermal boundary layer of the heat-dissipating device.

TYPE OF PRESENTATION: Poster

530	TITLE: No Title Submitted	
AUTHOR: Chantel T Jones	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. K Kirby	

ABSTRACT: No Abstract Submitted

TYPE OF PRESENTATION: Poster

531	TITLE: Effect of Mass Flow Rate&Cooling Tube Spacing on PBMR Spent Fuel Tanks	
AUTHOR: Manjinder Kaur	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Jenny Galvis	MENTORS: Ziaul Huque Raghava Kommalapati	
ABSTRACT: The pebble bed modular reactor (PBMR) is a new generation high temperature gas-cooled reactor, making use of spherical fuel elements. The spent fuel and partially burnt fuel, called used fuel, is stored in large storage tanks. There are both active and passive cooling designs of these reactors. One such design has twelve storage tanks, capable of storing a total of more than six million spheres. The storage tank is a large cylindrical pressure vessel, 18 m high with a 3.1 m inner diameter. It is made from thin walled carbon steel, capable of sustaining 1 MPa internal pressure. Inside the tank there are a number of cooling tubes running from the bottom to the top. The fuel needs to be below 400 oC to prevent the possible exothermal oxidation. The current work looks at the effects of mass flow rates and spacing between cooling tubes on the cooling tube temperature. The results are obtained by CFD simulations using the code CHEM. Several CFD simulations are performed with three different spacing configurations and three different cooling tube temperatures. The mass flow rates are calculated and are compared with base case design conditions.		
TYPE OF PRESENTATION: Poster		

532	TITLE: Gas Hydrates Research Programs: An International Review	
AUTHOR: Shawn K Kuriakose	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Shawn Kuriakose Johnathan Vann	MENTORS: Dr. Jorge Gabitto	
ABSTRACT: Gas hydrates are naturally occurring crystalline substances composed of water and gas, in which a solid water-lattice accommodates gas molecules in a cage-like structure, or clathrate. Gas hydrates are widespread in permafrost regions and beneath the sea in sediments of outer continental margins. While methane, propane, and other gases can be included in the clathrate structure, methane hydrates appear to be the most common. The amount of methane sequestered in gas hydrates is enormous, but estimates of the amounts are speculative and range over three orders-of-magnitude from about 100,000 to 270,000,000 trillion cubic feet. Research to develop this energy resource is conducted all over the world. The objective of this project is to produce a critical review of gas hydrates research programs throughout the world, including North America. This research includes programs in India, Russia, China, Japan, New Zealand, Canada, and parts of South America and Africa. Joint efforts among the different participants and industry have been also considered. Relevant information has been collected, classified and critically reviewed. The goals, achievements, funding, and future directions of these research programs have been determined. Careful analysis of the literature also led to preparation of a searchable, computer database on gas hydrate research programs.		
TYPE OF PRESENTATION: Poster		

533	TITLE: Nuclear Fuel Cycle - Present and Future	
AUTHOR: Akintunde Ladipo	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. Osborne - Lee	

	Dr. Sukesh Aghara
ABSTRACT: A literature search of the field of Nuclear Engineering and its future potential has been undertaken. This research entails the elaboration of the history, present situation and the way to the future of the Nuclear Industry. In addition, the research focused on issues concerning the reemergence of Nuclear Power, via the building of new power plants, the involvement of the standard aqueous nuclear separation and reprocessing methods. Consequently, like coal, oil and natural gas, spent fuel discharged from reactor which contains quantities of fissile Plutonium (Pu-239) and Uranium (U-235) is also an energy resource that needs to be processed via a series of stages, to produce an efficient fuel for generating electricity. In response to this, a detailed analysis on the extraction of uranium and plutonium through the usage of the Plutonium and Uranium recovery extraction process (PUREX) was examined. Finally, the recovered uranium and plutonium is recycled for use as nuclear fuel in what is known as the Nuclear Fuel Cycle. The economic and institutional safe operation and security proliferation were considered. AKINTUNDE R.LADIPO Nuclear Research Student Prairie View A&M University	
TYPE OF PRESENTATION: Poster	

534	TITLE: 3-D Surface Position Tracking	
AUTHOR: Salvador Mendez	Undergraduate Level	Texas A&M International University
AUTHOR(S): Sofia Maldonado	MENTORS: Dr. Rohitha Goonatilake	
ABSTRACT: This report is a continuation of the work performed in “Examining Gyroscopes for 3-D Position Tracking in a Non-Destructive Evaluation System.” Making reference to the previous phase of the project, the idea was originated in Johnson Space Center, located in Houston, Texas. NASA gave a grant to Texas A&M International University in order to create part of a device that could achieve a non-destructive evaluation of conductive surfaces such as the one from the International Space Station.The project calls for a system that consists of three components: an Eddy Probe, a Position Tracking, and a display apparatus. Our job concentrates on developing the Position Tracking and display apparatus. The Eddy Probe mounted on the device would check for cracks on the Station’s outer surface layers while the Position Tracking traces the position of the device on a three-dimensional surface. This allows to quickly pin-point the location of the detected crack or imperfection.		
TYPE OF PRESENTATION: Poster		

535	TITLE: Alkali Effect on Crude Oil Behavior in ASP Flooding for EOR	
AUTHOR: Darya Musharova	Undergraduate Level	Texas A&M University
AUTHOR(S):	MENTORS: Nasr-El-Din	
ABSTRACT: 7th Annual Pathways Student Research Symposium Abstract ASP process is a tertiary method of oil recovery, which has promising results for future development. It has already been implemented in United States, Canada and China. The success of this process depends on the proper combination of alkaline, surfactant, and polymer and their compatibility with a reservoir. Therefore, the main objective of the proposed research is to identify chemical interactions between ASP chemicals and reservoir fluids and rock. Once most effective in IFT reduction alkali is selected, the optimal concentration will be determined for each alkali, and time for viscosity buildup will be found. The ASP system will be examined for compatibility with formation brines and oil for potential emulsion problem. Next, the impact of adding		

surfactants will be identified. I hypothesize that testing different alkalis, polymers and surfactants will result not only in getting different profiles of rheological properties of ASP system, but also in a different compatibility degree with formation fluids and rock properties. In particular: rock wettability, oil mobility and sweep efficiency will be affected by the designed ASP system. When measuring Interfacial Tension of oil, the results obtained lead to the following: 1. The interfacial tension drops significantly when introducing non-ionic surfactant to crude oil sample. At a higher than optimum concentration of surfactant, crude oil can undergo phase separation. 2. The mixture of alkali-surfactant demonstrates a phenomenon of dynamic Interfacial Tension-Time behavior. 3. The success of compatibility between surfactant and crude oil depends on right concentration of surfactant/alkali what consequently depends on acidic number of crude oil. Whn measuring viscosity , the analysis of the results show: 1. The solution of water-soluble polymer shows non-Newtonian fluid behavior with power-law index varying from zero to one. 2. The shear thinning effect of polymer solution is observed meaning that with an increasing shear rate the apparent viscosity of the polymer solution decreases.

TYPE OF PRESENTATION: Poster

536	TITLE: Nanocharacterization and Green Synthesis of Polymer-Gold Particles	
AUTHOR: Kenechukwu A Onubogu	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Maribel Gonzalez-Garcia Jingbo Louise Liu	MENTORS: Dr.Jingbo Louise Liu Dr. Maribel Gonzalez-Garcia	

ABSTRACT: The fabrication and characterization of gold (Au) nanostructured materials poses significance interests because of its distinctive properties and its useful technological applications. In this study, we aim to illustrate the fabrication of gold and its composite (of polymer and metal) nanoparticles through a cost effective and environmentally-friendly synthesis. In doing so, we hypothesize that the Au3+ cation can be spontaneously converted into ultra-tiny spherical gold metal under ambient temperature and pressure. As the results, various reducing agents were employed to reduce Au3+ into metallic Au particles. It was found that ascorbic acid was the best option due to the rapid reaction rate and its non-toxics nature. In order to prevent agglomeration of the nanoparticles, the dispersing agent (Gum Arabic) was used in the synthesis procedure to obtain polymer-stabilized Au nanoparticles. The second objective of this research is to analyze this polymer-stabilized gold nanoparticles using a number of state-of-the-art instrumentation techniques and analytical approaches. The Atomic Force Microscopy (AFM), Phase Contrast Optical Microscopy (PCOM), ZetaPALS and UltraViolet - Visible (UV-VIS) Spectroscopy were applied to evaluate the green chemistry derived Au nanoparticles, such as identification of its surface topology, particle size distribution, stability, and characteristic plasmon. From our investigation, it can be concluded that the ultrafine Au nanoparticles were achieved using the green chemistry method. The ultrafine Au particles are highly stabilized due to its high zetapotential.

TYPE OF PRESENTATION: Poster

537	TITLE: Remote Control Functionality Development on Motor Platform	
AUTHOR: Romie Phelps	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Emmanuel Ekong Joshua Adebayo Jeremy Allen	MENTORS: Dr. Yongpeng Zhang	

ABSTRACT: The inception of computer and communication through the internet has brought about the idea of web-based learning and teaching. However, there is a particular challenge for online education in engineering that how to extend the traditional hands-on laboratories over internet. LabVIEW is a power graphical development environment established on a novel concept of virtual instrumentation, which utilizes computer technologies in combination with flexible software and modular hardware to create interactive computer-based instrumentation solutions. With tremendous customers worldwide, LabVIEW has been widely in industry. In Engineering Technology Dept at Prairie View A&M University, NI-Quanser QNET motor platform has been introduced in ELET 3451 Robotics Lab, proved to be very effective in improving student learning. Based on the available courseware in LabVIEW, this project is to develop the remote control functionalities for QNET motor platform, such that students can visit 7/24 through internet, avoiding complex logistics like staff, scheduling and commute. This project is based on CPET 4082 Senior Project (I), and it is supported by NSF Grant #0942807.

TYPE OF PRESENTATION: Poster

538	TITLE: Thermal-behavior Study of Chlorine Released from Composite Refuse Derived F	
AUTHOR: Edgarth A Rivera	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Jingbo Louise Liu Zhi-wei Song	

ABSTRACT: The purpose of the research is to analyze the results of the combustion and pyrolysis of the composite refuse derive fuel (CDRF). It aims to show a possible improvement to help the reduction of secondary pollution when the CDRF was subject to the thermal treatment. CDRF used in the measurements was derived from combining organic components of real municipal refuse with powdered coal using cold compression molding. To study the performance of CDRF, two methods were employed to compare the results; combustion and pyrolysis. In both processes, the inorganic chlorine (Cl2) release was absorbed by sodium hydroxide (NaOH), while the CDRF was being heated. Thermal gravimetric analysis (TGA) was used to evaluate the thermal behavior of the CDRF. It was found that chlorine release rate during pyrolysis was of 76 mass % at 450 °C; while in the combustion process the release rate was of 90 mass % at 600 °C. Using the gas chromatography-mass spectrometry (GC-MS), Cl2 gas released from combustion and pyrolysis was collected. The results obtained from this study indicated that when the organic chlorine was released above 800 °C. The concentration of those harmful and toxic chlorine compounds drastically increased during pyrolysis process in comparison with the concentration obtained during the combustion process. The TGA results indicated that three distinct phases were detected in the thermal process of CRDF. The first phase occurred at temperature between 200 and 300 ?C and its mass loss in was about 38 %. The second phase occurred at the temperature regions of 400 to 500 ?C, with a mass loss of 20 %. The third phase was observed at the temperature between 600 and 800 ?C with 22 % of mass loss.

TYPE OF PRESENTATION: Poster

539	TITLE: The Biodegradation of Nitrotoluenes	
AUTHOR: Natalie A Rocha	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Daisy N. Cantu Vanessa L. Garcia	MENTORS: Kim D. Jones, Ph.D. Alvaro Martinez, Ph.D.	

ABSTRACT: The biodegradation of nitroaromatics utilizes bacteria to decompose an abundant toxin found within the Eastern European region of the Czech Republic. Three different types of microorganisms used in this study are pseudomonas putida, pseudomonas fluorescens, and a gram positive bacillus. The objective of the experiment is to analyze the reaction between the identified bacteria and the pollutants mono-nitrotoluenes, and dinitrotoluene. The samples and toxins are tested together to measure the reaction under the influence of pH, temperature, and concentration. Experimental methodology include culturing bacteria, preserving cultured bacteria, quantification of bacteria, serial dilution of bacteria, preparation of medium and Agar solutions, centrifugation processes, calibration of concentration and volumes, submersion of specimen, and the measurement of optical density. This experiment resulted in the bacteria degrading small amounts of mono-nitrotoluene, and dinitrotoluene.

TYPE OF PRESENTATION: Poster

540	TITLE: Viability of Recoil Device in Treatment of Diastolic Dysfunction	
AUTHOR: Timothy D Snowden	Undergraduate Level	Texas A&M University
AUTHOR(S):	MENTORS: John C. Criscione, MD, PhD	

ABSTRACT: Diastolic dysfunction is the failure of the ventricles to relax completely immediately after systole, causing excess strain on the heart, eventually leading to congestive heart failure (CHF). It is the sole cause of CHF in 40-60% of the nearly 5 million Americans afflicted by the disease, and is concomitant in cases with systolic dysfunction. This study was conducted to determine the viability of addressing diastolic dysfunction using an adjustable and removable cardiac support device with diastolic recoil that stores energy during systole and returns the stored energy at the beginning of diastole. The end-diastolic pressure-volume relationship (EDPVR) was used to study the effects on diastole. A simple end-diastolic heart model was created to simulate the EDPVR of a normal human heart. Using this model, the device was tested to study its effects on the EDPVR. Increasing the volume of the device's pressurizing chamber from 50 to 200mL resulted in a beginning-diastole pressure decrease of 18mmHg. The creation of a vacuum effect during beginning-diastole demonstrates that the device is capable of strengthening diastolic recoil, thereby improving diastolic function.

TYPE OF PRESENTATION: Poster

541	TITLE: Ozonation of Produced Water	
AUTHOR: Johnathan Vann	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Joanna McFarlane Costas Tsouris	MENTORS: Jorge Gabitto	

ABSTRACT: Produced water, also known as brine or "formation water", is generated by oil and gas industrial operations. It has a high concentration of dissolved organics and minerals, as well as small particles. "Clean" water that is pumped into oil and gas reservoirs to produce oil and natural gas is converted into produced water when it interacts with these natural systems. Because of the high organic and salt concentrations, produced water must be treated before recycling or reuse. One method used to purify produced water is ozonation. Ozonation removes the organic compounds. Various types of reactors can be used for ozonation. In this study, a gas-liquid batch reactor and a centrifugal contactor were used to treat the produced water. A gas-liquid reactor, single pass operation, and a centrifugal contactor were set up to investigate the ozonation kinetics of produced water. The centrifugal contactor provides intense

mixing in a high-shear gap between the outer wall of the contactor and a rotating rotor. In both studies, a fine dispersion of gas bubbles containing ozone interacts with the organic compounds in the produced water. Samples of this interaction were periodically collected and analyzed by gas chromatography, chlorine analyses and pH analyses. The results from the centrifugal contactor can be used to determine the kinetics of the reaction in the absence of mass-transfer limitations. In conclusion, our experimental results showed that there was a significant reduction in the amount of organic compounds in the treated produced water. The kinetic rates obtained from these experiments can be used in the design of produced water ozonation reactors.

TYPE OF PRESENTATION: Poster

542	TITLE: Effect of Selected TCMs on the Air Quality of Houston Region	
AUTHOR: La Tonya Walker	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. Raghava R. Kommalapati	

ABSTRACT: Houston-Galveston-Brazoria (HGB) region is identified as one of the nonattainment areas which is a locality where the air pollution persistently exceeds National Ambient Air Quality Standards (NAAQS). The US federal government requires states with nonattainment areas to develop State Implementation Plans (SIP). Within a SIP, strategies to reduce emissions are proposed. The Texas SIP was established in May of 1972 and revisions were required for regions in Texas that did not pass the 1997 ozone standards for NAAQS which included HGB region. Various methods to reduce the emissions from mobile and non-mobile sources were initiated through the utilization of control measures. The Transportation Control Measures (TCM) are transportation projects or related activities designed to reduce on-road mobile source emissions, which influence traffic in a way to change traffic flow, reduce emission, or reduce congestion conditions. The HGB region was chosen for this study because it was classified to be at the Severe-15 level within the designation of an 8-hour Ozone Nonattainment Area. In this research Mobile Source Control Strategies focused on emission reduction on volatile organic compound (VOC) and mono-nitrogen oxides (NOx) to decrease ozone production in low atmosphere will be reviewed for the HGB region, 2 - 3 TCMs (i.e. Area-wide Steer It-Clear It Program; Expand the Emissions Testing Program to Three Countries not currently included in the program; and Congestion Pricing for Major Activity Centers) will be studied utilizing existing air quality models. Comparisons will be made among the chosen TCMs to propose suggestions for the most efficient TCM(s) to be implemented to reduce vehicular emissions in the HGB area. Common TCM practices, available air quality modeling methodologies, and input/output data for these models will be explored. The impact of each of the TCMs on the region's air quality will be reported.

TYPE OF PRESENTATION: Poster

543	TITLE: Recovery of Xenon from Spent Nuclear Fuel with Pressure Swing Adsorption	
AUTHOR: Elizabeth M Wallace	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. Sukesh Aghara	

ABSTRACT: The Nuclear Science & Technology Division of Oak Ridge National Laboratory is investigating the pressure swing adsorption (PSA) process as a way for efficient recovery of the noble gas, Xenon, from the effluent streams of nuclear fuel reprocessing plants. PSA is most commonly used in the industry along with cryogenic distillation for gas recovery. Once the Xe is recovered, it may be used in various

applications such as in light bulbs, plasma televisions, medical technology and imaging. The objective of this project is to review available techniques and data of PSA for recovery of Xe; to perform a scoping engineering analysis of the implementation of the PSA process; to summarize a literature review of adsorbents and their selectivity, operating pressure ranges and differentials; to formulate specifications pertaining to the PSA process including the number of vessels, and description of stages; to make computations according to assumed flow rates and concentrations to arrive at recovery size and pumping energy requirements and evaluate the appropriate adsorption substrates in the system, for example, the zeolite type. The results produced can be used as a foundation for future comparing PSA recovery processes with the temperature swing adsorption processes traditionally used in US designs of reprocessing plants.

TYPE OF PRESENTATION: Poster

544	TITLE: Orbiter Data Processing Systems (DPS) Support Training Flow	
AUTHOR: Kenneth J Zenon	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. Kelvin Kirby	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

Environmental Sciences

600	TITLE: Diversity Patterns in Deep-sea Macrofauna at the Sigsbee Abyssal Plain,GOM	
AUTHOR: Russell Carvalho	Doctoral Level	Texas A&M University at Galveston
AUTHOR(S): Russell G. Carvalho Dr.Anja Schulze	MENTORS: Dr.Anja Schulze	

ABSTRACT: The Sigsbee Abyssal Plain (SAP) in the Gulf of Mexico,located between 22° and 26°N and 90° and 95° W, covering an area of 98,752 km2 with an average depth of 3000m shows the presence of 6 large submarine canyons and smaller ones sloping down towards it. These slopes serve as a source of nutrients for deep benthic macrofauna. Here we try to analyze how infaunal benthic populations of invertebrates emerged in this geological setting and the mechanisms leading to their isolation and speciation. Sediment samples were taken at 9 stations along a transect on the SAP with a multicorer on board the R/V Justo Sierra. Sieving for macrofaunal invertebrates revealed 3 species of crustaceans, 7 species of polychaetes and 2 species of molluscs. Although the macrobenthos was numerically dominated by crustaceans and molluscs some of the polychaete species found have not been previously reported. In addition to morphological identifications, macrofaunal diversity and population connectivity are being currently evaluated using molecular data. The SAP being a region of commercial interest, generating pre-disturbance biodiversity data will help in the accurate evaluation of human impact on benthic communities.

TYPE OF PRESENTATION: Poster

601	TITLE: Restoration: construction design influences aquatic community composition

AUTHOR: Michael Bell	Master's Level	Texas A&M University at Galveston
AUTHOR(S): Anna R. Armitage	MENTORS: Anna R. Armitage	

ABSTRACT: Many factors contribute to marsh loss, including freshwater diversions, subsidence, and salt water intrusion, all of which increase plant mortality and convert marsh habitat into open water. Restoration provides an opportunity to mitigate for wetland losses, but efficient and effective protocols for marsh restoration are not yet fully developed. Our objective was to assess the development of aquatic plant and animal communities in brackish tidal marshes constructed using three different restoration designs near Port Arthur, Texas in the northwest Gulf of Mexico. Marshes were constructed in 2008 using three soil sources: (1) excavated adjacent sediment, formed into mounds surrounded by a water depth of approximately one meter, (2) dredge material, formed into mounds with a surrounding water depth of about 0.25 meter, and (3) excavated mounds surrounded by dredge fill, creating an aquatic habitat with a water depth of approximately 0.25 to 0.50 meters. Within one year of planting, we used throw traps to assess aquatic community composition, including vegetation, fish and invertebrate density and diversity. Total faunal abundance was positively correlated to the amount of Myriophyllum spicatum (Eurasian Watermilfoil) and negatively related to the amount of Spirogyra spp. (filamentous green algae). Algal percent cover was highest in shallow water around mounds surrounded by dredge fill (design 3). Myriophyllum appeared to grow best in the marsh areas where only adjacent excavated sediment had been used (design 1); Spirogyra proliferated seasonally around excavated mounds surrounded by dredge fill. These differences in aquatic plant composition may be due to sediment characteristics such as grain size, organic content and nutrient availability. These data reveal that marsh design may influence aquatic vegetation assemblages and subsequently dictate associated animal community composition.

TYPE OF PRESENTATION: Poster

602	TITLE: Evidence suggesting hyperpycnal flow within a low gradient river delta	
AUTHOR: Joe A Carlin	Master's Level	Texas A&M University at Galveston
AUTHOR(S): Timothy M. Dellapenna Christian Noll Joe Carlin	MENTORS: imothy M. Dellapenna	

ABSTRACT: Sediment transport from river mouths via hyperpycnal flow is a well documented process for high gradient rivers worldwide. However, many important hydrocarbon bearing deltaic systems were derived from lower gradient systems where hyperpycnal flow is not normally attributed. The Brazos River may provide a modern example of such a low gradient river. We had the unique opportunity to sample the mouth and proximal shelf of the Brazos River during the flooding of July 2007. Using a CTD equipped with a turbidity sensor, water column profiles were taken on both along and across shelf transects from the river mouth across and along the river plume. In addition, bottom water samples and shallow gravity cores were collected to determine the thickness of the flood deposit, suspended sediment concentration, porewater salinity and grain size distribution. We found both a high turbidly hypopycnal plume as well as a high turbidity bottom nephaloid layer, with low turbidity in the middle of the water column. Brazos River mud is characteristically red, while marine sediment is olive-grey. Preliminary result reveal a distinctively red, high-water content storm layer, composed of up to 30% sand that extended 5 km from the river mouth. The presence of sand within the storm layer and the high turbidity bottom layer suggests hyperpycnal flow existed during the flood. If this is the case, hyperpycnal flow may be a regular occurrence on the Brazos River and may be more common within low gradient river systems than previously believed, providing an additional mechanism for transporting both sand and mud across the

inner shelf.

TYPE OF PRESENTATION: Poster

603	TITLE: Sulfate and iron reducing bacterial reduction of Uranium (VI)	
AUTHOR: Haritha Dhanekula	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Nelson Clapp	MENTORS: Nelson Clapp	

ABSTRACT: Metal–reducing micro-organisms have been shown to precipitate or remove uranium (U) from contaminated groundwater. The presence of bacteria in-situ for the reduction of U depends on the organic composition of the sample. Sulfate reducing bacteria (SRB) and iron-reducing bacteria (IRB) are able to rapidly catalyze the reduction and immobilization of U(VI) from contaminated sub-surface sediments. The objectives of this study are to: (1) observe the trends in U(VI) reduction to U(IV) by evaluating the influence, tolerance and potential of SRB and IRB in soil columns supplied with hydrogen and ethanol, (2) compare hydrogen and ethanol consumption by the activity levels of these microbes as a function of time along the length of the column at different heights and (3) detect the presence and growth of nitrate reducers which deplete nitrates and thus determine the rate of U(VI) reduction. Samples were tested for the presence and the subsequent influence of these microbes to develop strategies for the bioremediation of the sample contaminated with uranium. Uranium contaminated soil samples were obtained from Oak Ridge Field Research Centre and contaminated effluent water samples from Uranium Research Inc., Texas (Kingsville Dome). The soil was fixed in columns and the effluent water was passed through with hydrogen and ethanol being supplied additionally to stimulate biomass and test for the decrease in U(VI). In this study, three laboratory-scale soil column reactors are being operated with hydrogen and ethanol supplied to the first and second columns, respectively. The third column served as the control. The experiment is conducted using the Biological Activity Reaction Test (BART) method to evaluate the growth and activity of SRB and IRB. Additional research involves the characterization of the microbial population using epifluorescent microscopy to image the cells stained with DAPI (4', 6-diamidino-2-phenylindole).

TYPE OF PRESENTATION: Poster

604	TITLE: Evaluation of Reductant Utilization and Bioclogging in Sediment Columns	
AUTHOR: Shailaja Narsing	Master's Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Kim Jones Lee Clapp	

ABSTRACT: Organic substrates (e.g., ethanol, methanol, and lactate) can be used as electron donors to stimulate reduction of nitrate in groundwater. However, previous studies at Oak Ridge National Lab (ORNL) found that injection of ethanol into a nitrate-contaminated aquifer led to significant aquifer bioclogging problems. In this research, it is hypothesized that supply of hydrogen to aquifer sediment columns fed with nitrate-contaminated groundwater will result in less bioclogging than will supply of ethanol. This hypothesis is based on the knowledge that microorganisms that reduce nitrate to nitrogen gas by utilizing hydrogen as energy source (i.e., hydrogenotrophic denitrifiers) are autotrophs that utilize carbon dioxide as a carbon source and consequently have significantly lower growth yields than

heterotrophic denitrifiers that use organic compounds as a carbon source. It is also hypothesized that, since autotrophic denitrifiers have maximum specific growth rates that are roughly four times lower than for heterotrophic denitrifiers, biomass growth will be less concentrated near the substrate injection point and more uniformly distributed throughout the aquifer when hydrogen is used as the electron donor substrate. Towards testing these hypotheses, three columns have been packed with ORNL aquifer sediments: one column is supplied with H2, one column is supplied with ethanol, and one column is not supplied with any electron donor substrate and thus serves a negative control. To monitor microbial utilization of H2 and ethanol, gas chromatography (GC) methods have been developed. Ethanol is being analyzed with a GC equipped with a flame ionization detector (FID) using secondary butanol as an internal standard. Hydrogen is being analyzed with a GC equipped with a thermal conductivity detector (TCD). Bioclogging in the soil columns is being characterized by measuring the headloss across the columns over time.

TYPE OF PRESENTATION: Poster

605	TITLE: Looking at dioxins in sediments of the Houson Ship Channel system	
AUTHOR: Shaya M Seward	Master's Level	Texas A&M University
AUTHOR(S): Gerard Cornelissen Kevin M. Yeager Peter H. Santschi	MENTORS: Patrick Louchouarn Robin Brinkmeyer	

ABSTRACT: Urban centers are major sources of contaminants to the surrounding air, water and soils. Above all, combustion-derived carbonaceous aerosols, especially black carbon (BC) and associated polycyclic aromatic hydrocarbons (PAHs), make significant contributions to the pollution in these systems. Here we use sedimentary records to produce a series of historical reconstructions of such contaminants to the Houston Ship Channel (HSC) system and compare these to point source inputs of hydrophobic organic contaminants (HOC). Analytical data on total organic carbon (TOC), BC, PAHs, dioxins and lignin (potentially discarded from a pulp and paper mill along the Channel) were determined. This multiproxy approach revealed that over the last several decades, HOC inputs to the system have been derived from a complex mixture of combustion processes, industrial point-sources, and oil spills. In particular, widespread dioxin contamination was observed throughout the study region with a particular site of the HSC showing total concentrations as high as 20,000 ng/kg dry weight. This site has recently been declared a Superfund site based on dioxin concentrations alone. The strong relationship between lignin biomarkers and dioxins observed in these sediments confirms that discharges of pulp and paper effluents were responsible for such high dioxin levels. Concentrations of BC and amorphous OC were then used to calculate sediment binding of dioxins in these sediments. Our study found BC to be extremely low in HSC sediments (0.04 to 0.11%) indicating minimal dioxin sorption capacity. This suggests strong potential for fluxes of dioxins from sediments to the water column both through passive diffusion and physical mixing during natural and anthropogenic sediment remobilization events in this shallow system (hurricanes, storms, and dredging). Finally, the purposeful addition of BC to these sediments might be promising as a remediation strategy.

TYPE OF PRESENTATION: Poster

606	TITLE: Chromium Reduction and Immobilization in Hydrogen-Supplied Sediment Columns	
AUTHOR: Preethi Talla	Master's Level	Texas A&M University - Kingsville

AUTHOR(S):	MENTORS: Lee Clapp David Ramirez
ABSTRACT: This study evaluated the feasibility of using membrane-delivered H2 to achieve in situ reduction of Cr(VI) in groundwater by setting three parallel lab-scale column reactors. The results demonstrated that, while Cr(VI) removal in the N2-supplied control column was negligible, over 90% Cr(VI) removal was achieved in the H2-supplied soil columns. Further studies were conducted to determine the concentrations of immobilized chromium in aquifer sediment samples collected from along the length of each of the three parallel aquifer sediment columns and mass balance calculations were performed to compare the cumulative Cr(VI) removal from the aqueous phase in each column with the chromium accumulated in the aquifer sediments. An inverse correlation between the presence of nitrate in the aqueous phase and the immobilization of chromium in the sediments was observed.	
TYPE OF PRESENTATION: Poster	

607	TITLE: Training Student in International Setting: Drinking Water Quality of Remote Villagers in Yunnan Province of China	
AUTHOR: Carin E Wunneburger	Master's Level	Tarleton State University
AUTHOR(S):	MENTORS:	
ABSTRACT: In summer 2009, Calvin Clary, a senior majoring in Hydrology and Watershed Management Program at Tarleton, was hired as an intern by International Health Resources (IHR http://ihronline.org/default.aspx to assess the drinking water quality of remote villagers in Yuanjiang County of China. IHR is a US-based, non-profit organization dedicated to the improvement of health in developing nations throughout the world. Located within the Himalayan Mountain Range, the county is isolated from the outside and mainly relies on traditional farming for revenue. The villagers in the county drink untreated rainwater stored in covered/uncovered ponds and tanks. This has raised serious health concerns. However, there was no scientific data to evaluate the potential health risk. The objectives of this project were to: Collect water samples at selected sites; Analyze the water samples to determine important water quality parameters; Examine causal factors for poor water quality. Mr. Clary is the first-ever hydrology student at Tarleton who successfully completed internship abroad. He is an exemplifier of Hydrology and Watershed Management Program, which has an education goal to train students in international and multicultural settings. Graduates from this program are expected to have a global perspective.		
TYPE OF PRESENTATION: Poster		

608	TITLE: Blue Ice Area and Snow Zonation of the Lambert Glacier – Amery Ice Shelf	
AUTHOR: Samuel Cantu	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Jaehyung Yu	MENTORS: Jaehyung Yu	
ABSTRACT: Blue-ice areas are relatively common features on the Antarctic continent. Blue-ice areas represent zero accumulation and the surface mass loss to the atmosphere by sublimation. Due to its importance in surface accumulation and mass balance of Antarctic ice sheet, it is necessary to quantify the spatial extent of Blue-ice areas and different snow characteristics. The Lambert Glacier-Amery Ice Shelf, located in the East Antarctic Ice Sheet, is one of the largest glacial systems on Earth. Because of its large size and dynamic nature, the Lambert Glacier-Amery Ice Shelf system plays a fundamental role in the		

study of mass budget of the Antarctic Ice Sheet in response to present and future climate changes. In spite of its importance in mass balance study and snow accumulation, the blue ice area and snow characteristics are not fully mapped for the entire Lambert Glacier-Amery Ice shelf system. This paper utilizes Landsat ETM+ data acquired from 1999 to 2003 to map the extent of Blue-ice area and different snow types. Band ratio technique is effective to differentiate snow and ice features using the spectral differences of snow and ice in the visible green wavelength region (ETM+2) and the MIR region (EMT+5). The mosaics of false color composite and three different types of Band Ratio analyses are constructed. Both supervised (maximum likelihood) and unsupervised (ISODATA) classification methods are carried out to map the zonation of Blue-ice and snow and to cross-validate the results.

TYPE OF PRESENTATION: Poster

609	TITLE: Microanatomy & Biomechanics of Weddell Seal Mystacial Vibrissae	
AUTHOR: Allison L Carlin	Undergraduate Level	Texas A&M University at Galveston
AUTHOR(S): Christopher D. Marshall	MENTORS: Christopher D. Marshall	

ABSTRACT: Pinnipeds, seals and sea lions, are equipped with sensory structures known as vibrissae or follicle-sinus complexes (F-SCs). Despite being the best developed among mammals, little is known about their structure, or the mechanical properties of their hairshafts. For this study, we examined the microanatomy of the follicle of Weddell seal (Leptonychotes weddellii) F-SCs and measured the flexural stiffness of the vibrissal hair shafts. It was hypothesized that (1) F-SCs would be comparable in microstructure to the few other known pinniped species, and (2) flexural stiffness can be measured using beam theory from the engineering field. Follicle-sinus complexes were sectioned at 20 ?m on an 80A Lipshaw freezing-stage microtome. Sections were stained using a Masson's trichrome stain and analyzed using a Nikon E400 microscope. Weddell seal F-SCs had a similar overall organization as reported for other seals, such as a tripartite blood sinus system, the presence of a ringwulst structure, a deep vibrissal nerve innervating the follicle base, and several types of mechanoreceptors. The base of vibrissal hair shafts of Weddell seals were potted in epoxy and placed within a material testing system (MTS) for flexural stiffness measurement. Bending tests were run with the assumption that the vibrissae represented a solid cylindrical beam. Mean overall flexural stiffness for Weddell seal whiskers was 0.168 N mm2. This value indicates greater flexural stiffness in Weddell seals than in Ring seals at 0.025 N mm2 and Ribbon seals at 0.0122 N mm2. These flexural stiffness values are in the range of other reported biological structures. Variation in flexural stiffness among seals is likely due to differences in hair shaft morphology and methods of prey detection (benthic vs. mid-water interactions).

TYPE OF PRESENTATION: Poster

610	TITLE: GIS-Based Crime Occurrence Analysis for City of Alice, TX	
AUTHOR: Noe Saenz	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Jaehyung Yu Dr. Shad Nelson	

ABSTRACT: Public safety is a critical factor to provide a better living environment for the community. Crime is a major cause of significant degradation of life. South Texas is known for having some of the least safe cities in Texas. The crime rate for the city of Alice can be ranked as high as the 3rd highest among the 180 Texas cities with populations of 10,000 or more in 1999. Geographic Information System provides the science of crime mapping to police officers, crime analysts, and other people to visualize crime data

through the medium of maps. The robust capabilities of crime mapping and analysis have been proven; about 13% of law enforcement agencies are using GIS regularly to analyze their crime problems. However, none of the cities in South Texas have yet to be introduced to this powerful method, and no cities in the region have the crime analysis system based on GIS. This paper analyzes the crime data in the GIS environment, and identifies the locations of crime hot spots, and their distribution over time by specific types of crimes. Eventually, this paper provides details of crime distribution and the optimal routes for police patrol.

TYPE OF PRESENTATION: Poster

611	TITLE: Presence of Manganese in Aquatic-Terrestrial Boundaries of Seasonal Wetland	
AUTHOR: Seifullah Schoffield	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. Richard Griffin	

ABSTRACT: Several types of soil features can be used to identify potential wetland soil areas. Manganese oxides are minerals that can produce ionic species during wet-dry conditions which can lead to alternating anaerobic-aerobic conditions. A field research study was conducted to monitor seasonal wetlands on the Prairie View A&M University Farm in the upper Texas Gulf Coast Prairie physiographic region. I monitored the soil for the presence of manganese which occurs in the aquatic-terrestrial boundaries of seasonal wetlands. This boundary is associated with concentrated zones of manganese believed to be due to the alternating wetness conditions.

TYPE OF PRESENTATION: Poster

Life Science

700	TITLE: Defining the role of Nck in tumor invasion and metastasis	
AUTHOR: Srinivasa P Pothula	Doctoral Level	Texas A&M University
AUTHOR(S): S.P.Chaki M.Limesand	MENTORS: G.M.Rivera	

ABSTRACT: Invasion and metastasis are critically involved in progression of cancer. The molecular mechanisms underlying these processes are still poorly understood. Nck adaptors have been involved in the formation of actin-rich invasive structures called invadopodia. We hypothesize that Nck is a crucial link between signals that alter tyrosine phosphorylation and cytoskeletal changes underlying invasion of tumor cells. To test this hypothesis, we will use a combination of molecular genetics, cell biology, and imaging approaches. Gene silencing of Nck by RNA interference using retroviral expression of shRNAs, and rescue with a siRNA-refractory Nck cDNAs was confirmed by western blotting in NIH 3T3 cells. Control cells or cells with altered levels of Nck (knockdown/ rescue) were infected with a retrovirus expressing constitutively active c-Src (Y530F) to induce oncogenic transformation. Images acquired by epifluorescence microscopy show the formation of invasive structures in transformed cells. Profiling of tyrosine phosphorylation using a far-western assay with SH2 domains from Nck combined with immunoprecipitation identified p62Dok as an important Nck binding partner in c-Src-transformed but not in normal cells. Future experiments will address the significance of this interaction in invasion of tumor cells and the trafficking of matrix metalloproteinases that degrade the extracellular matrix. Results from these studies will shed light into the molecular mechanisms by which signals that alter tyrosine phosphorylation modulate invasiveness of tumor cells.

TYPE OF PRESENTATION: Poster

701	TITLE: Effect of pH and temperature on the early development of the L. variegatus	
AUTHOR: April Anderson	Master's Level	TAMU - Corpus Christi
AUTHOR(S):	MENTORS: Dr. Joe Fox Dr. Marion Nipper	
ABSTRACT: With levels of CO2 increasing in the atmosphere, global temperatures are on the rise and ocean pH levels are declining. Along with this process, known as ocean acidification, comes reduced availability of carbonate ions necessary for calcification in marine species. In this study, the effects of low pH, as well as increasing temperature on the early development of the sea urchin Lytechinus variegatus were examined. Embryos were maintained in aquaria containing sea water of different pH levels (8.1, 7.7, 7.5, and 7.3) and/or temperatures (25, 27, 29, and 31°C), and allowed to develop for 24 h until they reached the echinopleuteus larval stage. Percent normality and larval length were recorded. At control temperature, results indicated that percent normality was significantly reduced ($p < 0.05$) at pH 7.3 and larval length was significantly different from the control at all pH levels. Increasing temperature alone increases larval size likely due increased metabolism. When decreasing pH was combined with increasing temperature at 29°C, percent normality was significant at both pH 7.5 and 7.3, and average length was significant at all pH levels. At 31°C, percent normality was significant at pH 7.7, and at levels below this there was < 1% normal development among replicates. It is apparent from this study that acidification alone can have negative effects on the development of L. variegatus; however, if global temperatures continue to rise, the impacts could be far more devastating.		
TYPE OF PRESENTATION: Poster		

702	TITLE: Quantitative Analysis of Serinus Canarius Vocal Repertoire	
AUTHOR: Glenda Angle	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Hasan Coskun	
ABSTRACT: This talk is devoted to a detailed quantitative analysis of the vocal repertoire of a domestic sterilized male canary (Serinus Canarius) by multivariate statistical methods and temporal and spectral feature extraction. In the first part of this presentation, combination of various powerful methods are employed to classify all canary syllables and construct a complete seasonal syllable dictionary for the canary. In the second part, synthetic syllables corresponding to all entries in the dictionary are generated providing a standardized framework for behavioral and neural studies of canaries.		
TYPE OF PRESENTATION: Poster		

703	TITLE: Native and fire ant activity in a drought season in a South Texas grassland	
AUTHOR: Rafael E Calderon	Master's Level	TAMU - Corpus Christi
AUTHOR(S): Dr. Marc Woodin	MENTORS: Dr. Graham C. Hickman	
ABSTRACT: South Texas is a drought prone area. Species that naturally occur in this area are adapted to these drought conditions. The red imported fire ant (Solenopsis invicta) is an invasive species that has spread through much of the southern United States. Grasslands with only native flora were investigated in Escondido Ranch. 100m X 3m transects were performed and baits with meat and jelly were placed to		

attract ants. 3 species of ants were observed in this study: Harvester (Pogonomyrex), Bighead (Pheidole), and Honeypot (Myrmecocystus). No fire ants were observed in this native grassland. Native ant foraging was analyzed by temperature. Only the underground temperature had a significant effect on the native ant foraging. The lack of fire ant observations may be due to the low precipitation.

TYPE OF PRESENTATION: Poster

704	TITLE: A Preliminary Flora of Hunewell Ranch, Erath County, Texas	
AUTHOR: Lauren P Cowley	Master's Level	Tarleton State University
AUTHOR(S): S. Harsley A. D. Nelson	MENTORS: A. D. Nelson	

ABSTRACT: Floristic data are critical in establishing species' ranges, management practices, documenting range extensions, and monitoring the spread of introduced and invasive species. Native, endemic, introduced, rare, and county records for Erath County, Texas are reported as part of an ongoing flora of vascular plants at Tarleton State University's Hunewell Ranch. Species are compared to those occurring on the Texas Parks and Wildlife Department's noxious weeds and threatened or endangered lists. Plant specimens were collected from September 2006 to August 2007 and from January 2009 to October 2009. Currently, 63 species represent new records for Erath County and include 61 native species, of which four are endemic and two are introduced. No plants listed on the state noxious weed or rare, threatened or endangered lists have been collected.

TYPE OF PRESENTATION: Poster

705	TITLE: Cichlids	
AUTHOR: Roxanne Garcia	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Kidd	

ABSTRACT: The cichlids are fish from the family Cichlidae in the order Perciformes. There are at least 1300 scientifically described species, making it one of the largest vertebrate families. This study covers the behavior of the male cichlids parental care. The parental behavior of the monogamous and the polygamous males are compared with the progesterone levels of the particular fish.

TYPE OF PRESENTATION: Poster

706	TITLE: Identification of a Novel Early Phase in Rapid Ethanol Sedation Tolerance	
AUTHOR: Ravi R Lala	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Mummareddi, Phani M. Mendez, Brandie	MENTORS: Massa, Enrique	

ABSTRACT: Drug addiction is a complex biological process that relies upon various plastic and dynamic changes to occur in living organisms. Tolerance to drugs is a process that is related to addiction and can play a role in acquisition of this process. We have been examining tolerance as a mechanism for drug effects in a simple invertebrate organism, Drosophila melanogaster. Previous work has demonstrated that fruit flies are a suitable model organism for the study of ethanol effects upon the nervous system. In

particular, previous studies have demonstrated that fruit flies exhibit sensitivity to ethanol as manifested by an early onset of hyperactivity followed by a delayed sedation phase. This work also demonstrated that flies acquire tolerance to the ethanol twenty four hours after a single exposure. The acquisition of tolerance was also demonstrated to be highly dependent upon the activity of the slowpoke calcium-activated potassium channel. We wished to further characterize the role of the slowpoke ion channel upon ethanol tolerance acquisition and this current study examined the hyperactivity and sedation phases of ethanol intoxication after early phases of exposure (4-6 hours post-exposure). Behavioral analysis of drug-exposed flies demonstrated there is an early phase of tolerance acquisition that occurs within 4-6 post-exposure. In addition, the slowpoke mutant, which perturbs tolerance acquisition at 24 hours post-exposure, does not seem to affect tolerance acquisition in these mutants within the 4-6 hour exposure time points. These studies suggest that ethanol tolerance is multiphasic and encompasses a slowpoke potassium channel-dependent phase at 24 hours while a novel early phase is independent of this ion channel. Future studies will be performed to identify candidate proteins that are involved in the early phase of tolerance acquisition.

TYPE OF PRESENTATION: Poster

707	TITLE: Barriers to Healthy Eating Among Rural Families in Lower Socio-economic Areas	
AUTHOR: Andrea E McDonald	Master's Level	Prairie View A&M University
AUTHOR(S):	MENTORS:	

ABSTRACT: Several studies have shown that diabetes, asthma, sleep apnea, and cardiovascular disease are associated to obesity, and the incidences of obesity have increased significantly over the past years. The population most at risk includes ethnic minority, and those individuals residing in rural areas, especially families living at or below the poverty level. These individuals are also more likely to have a high school education or less. These factors and others may lead to the consumption of less healthy foods. This project was conducted to understand how personal and contextual factors among rural, economically disadvantaged may affect their food preparation and consumption practices and to determine the barriers that exist if any. Twelve focus groups were conducted with low income parents from rural communities. Data collected cultural perspectives on nutrition knowledge and practices, barriers to healthy eating, barriers to food preparation, and meal consumption patterns. Statements were extracted and categorized from the focus group transcripts. Analysis of the data resulted in the following themes; general food purchases, food preparation practices, eating right or eating healthy, and barriers to good nutrition. Parents purchased all categories of foods including snack items and easy to fix dishes. Food preparation was based primarily on family history, example fired fish Fridays, and family member preferences. Seasonality, price, time, culture, routine, advertising, location, and children in charge were discussed as some of the main barriers to healthy eating. Surprisingly, many of the families dining out decisions were determined by the fast food restaurants daily specials particularly 'buy one get one' or 'dollar hamburger night'. Data from obtained will allow researchers to tailor existing intervention strategies to the specific needs of the community.

TYPE OF PRESENTATION: Poster

708	TITLE: Breeding Success of Great Egrets at Smith Oaks, High Island, Texas.	
AUTHOR: Andrew J McInnes	Master's Level	Texas A&M University at Galveston
AUTHOR(S):	MENTORS: Susan Knock Ph.D.	

ABSTRACT: The breeding success of Great Egrets (Ardea alba), a colonial-nesting wading bird, was investigated during the 2009 breeding season at Heron Island at Houston Audubon Society's Smith Oaks, High Island, Texas. This site and surrounding areas were heavily impacted by climatic events through 2008-2009; winds from Hurricane Ike caused a drastic loss of many of the trees (nest sites) within the rookery in September, 2008, and neighboring areas were inundated by saltwater (foraging habitat altered)as a result of the storm surge. Additionally, much of Texas was in the midst of a historically severe drought, with High Island being unique, locally, in that its ponds still had stocks of freshwater. The rookery was visited 36 times (February 28 - July 31) and 28 nests were monitored to determine (1) if the reduction in suitable nesting sites would correspond to a reduction in nesting efforts, and (2) if date of nest initiation would affect the breeding success. Breeding success is defined as the successful raising of at least one chick to fledging per nest attempt. The nest failure rate of this study was 32%, mean hatchlings per successful nest was 2.895 (± 0.072), and the mean fledglings per successful nest was 2.789 (± 0.123). The number of nests (nesting efforts) was 46% of the 2008 total, and 68% of the mean for the previous 12 years. There was no significant difference in the means of hatchlings (Student's t-Test; t= 0.603, 20 df) or fledglings (t=1.35, 20 df) between clutches initiated in April (early) vs. May (late). Of the nests monitored, 67% were ultimately successful, fledging 96% of the hatchlings. This fledgling rate raises the question: is fledging success correlated to the number of nests (population) and thence, food availability? Further data collection may elucidate whether there is correlation or causation.	
TYPE OF PRESENTATION: Poster	

709	TITLE: The Effects of Cortisol on the Pathogenicity of Nesseria Meningitidis		
AUTHOR: Amy E Meyer		Master's Level	TAMU - Corpus Christi
AUTHOR(S): Kayla Alford Amanda Whitmill		MENTORS: Dr. Lillian Waldbeser	
ABSTRACT: Neisseria meningitidis is a gram-negative diplococcus that colonizes the oro-nasopharynx, and spreads from person to person via respiratory droplets. College freshman living in dormitories have a risk that is seven times higher of developing meningococcal infections according to studies since 1998. Previous study reported by our laboratory showed correlations between lowered immunity with increased meningococcal carriage, and implicated stress as an associated factor. It has been shown that bacteria possess receptors for, and respond to mammalian stress hormones. Cortisol, a human stress hormone, is found within the cerebrospinal fluid correlating with the severity and the bacterial origin of meningitides. This project is designed to study the effect of the stress hormone, Cortisol, on the pathogenicity of N. meningitidis. Our data showed a strong correlation between the rate of growth of N. meningitidis and exposure to Cortisol. We also observed a change of appearance of the colonies, indicating that Cortisol may affect gene expression in the organism. We are studying the effect of Cortisol on the expression of the N. meningitidis pilC gene that encodes the protein necessary for the adhesion and assembly of pili. Increase in adhesiveness increases the ability of the organism to colonize the host, and may contribute to the increase carriage and subsequent infection by the bacteria.			
TYPE OF PRESENTATION: Poster			

710	TITLE: Recovery from ethanol sedation: Identification of an early tolerance phase		
AUTHOR: Phani M Mummareddi		Master's Level	Texas A&M University - Kingsville

AUTHOR(S): Lala, Ravi C. Mendez, Brandie	MENTORS: Massa, Enrique

ABSTRACT: The process of drug addiction is a complex series of steps that is dependent upon many changes within the nervous system of living organisms. One key aspect of drug addiction is the acquisition of drug tolerance. Drug tolerance can be of many types but one particularly important type is pharmacodynamic tolerance. Pharmacodynamic tolerance is often due to changes within the nervous system of an organism and thus reflects plastic changes in the brain after drug exposure. We have been characterizing ethanol tolerance using Drosophila melanogaster, a simple invertebrate. Previous work demonstrates that fruit flies are a good model for ethanol tolerance studies. A number of studies have demonstrated that fruit flies exhibit hyperactivity, sedation and recovery phases that are reminiscent of the same behaviors observed in mammals. This previous work demonstrated the requirement of the slowpoke calcium-activated potassium channel in the acquisition of tolerance to ethanol. This work also demonstrated that flies acquire tolerance to the ethanol twenty four hours after a single exposure. Current work in our laboratory has established there is an early phase of tolerance observed within 4-6 hours post-exposure to ethanol. In particular, the observed tolerance occurs during the onset of sedation such that twice-treated flies have a delayed sedation pattern. To further characterize the early phase of tolerance acquisition, we characterized the recovery from ethanol sedation as a measure of tolerance. Behavioral analysis of these treated flies suggests that the recovery component of the early phase of tolerance is also independent of the slowpoke potassium channel. These studies suggest that ethanol tolerance is a multiphasic process which encompasses a slowpoke potassium channel-dependent phase at 24 hours while a novel early phase is independent of this ion channel. Future studies will address the role of other proteins in the early phase of tolerance acquisition.

TYPE OF PRESENTATION: Poster

711	TITLE: Analysis on The Questing Behavior of Amblyomma Cajennense	
AUTHOR: Juan Pedro Orozco	Master's Level	Texas A&M International University
AUTHOR(S): Fernando Quintana	MENTORS: David Beck	

ABSTRACT: The diurnal questing behavior of Amblyomma cajennense is being monitored in the laboratory setting and field setting to determine during what time of the day the ticks could be collected with higher frequency. There are several meteorological effects that may play a major role in the questing behavior of A. cajennense the goal of this experiment is to identify those effects. Relative humidity and light are the two selected meteorological effects that are being studied in this experiment. Relative humidity is important to ticks because it prevents desiccation. In this experiment; relative humidity is being controlled by two saturated solutions. Potassium nitrate is being used to maintain a relative humidity of 95% while calcium nitrate is being used to maintain a relative humidity of 56%. Light is another important factor that affects the questing behavior of A. cajennense. Nymphal ticks are sensitive to light and respond when exposed to it. The ticks were placed on a 12hr cycle of light and dark and observed for any movement. This was conducted both in the lab and outside in the field using chambers constructed for the laboratory setting and the field setting.

TYPE OF PRESENTATION: Poster

712	TITLE: TheCardiac function in an ozone-induced ischemia reperfusion heart model

AUTHOR: Rama Surya Perepu	Master's Level	Texas A&M University - Kingsville

AUTHOR(S): Dr. Rajat Sethi Dr. Carlos Garcia Dr. David Dostal	MENTORS: Dr. Rajat Sethi Dr. Carlos Garcia

ABSTRACT: Although numerous advancements made in the field of human health have resulted in reduced deaths due to cardiovascular diseases (CVD), many patients with CVD show no previous established risk. Therefore, unknown factors may be responsible for the pathophysiology of CVD. Out of 350,000 sudden cardiac deaths each year in the United States, 60,000 deaths have been linked to air pollution, suggesting a detrimental role of environmental pollutants in the development of CVD. The present study tested the hypothesis that chronic ozone (O3) exposure enhances the sensitivity to ischemia reperfusion (I/R) injury in isolated perfused hearts. Sprague Dawley rats were continuously exposed for 8 hrs/day for 28 and 56 days to filtered air and 0.8 ppm O3. Isolated hearts were subjected to 30 minutes of global ischemia followed by 60 minutes of reperfusion. Cardiac function after I/R measured as LVDP, +dP/dt, –dP/dt and LVEDP was significantly decreased and increased respectively in O3 exposed I/R hearts compared to I/R hearts exposed to filtered air. The enhanced sensitivity to I/R injury to O3 exposure was associated with increased myocardial TNF-a levels and lipid peroxidation along with decreased myocardial activities of superoxide dismutase (SOD) and IL-10. This data suggests that O3-induced sensitivity to myocardial I/R injury may be due to promoting levels of oxidative stress as well as inflammatory mediators.

TYPE OF PRESENTATION: Poster

713	TITLE: No Title Submitted

AUTHOR: Rachel D Petrofes-Chapa	Master's Level	Prairie View A&M University

AUTHOR(S):	MENTORS:

ABSTRACT: No Abstract Submitted

TYPE OF PRESENTATION: Poster

714	TITLE: Analysis of BMRP Domains Involved in Its Binding to Anti-apoptotic Bcl-2

AUTHOR: Hannah E Romo	Master's Level	Texas A&M University - Kingsville

AUTHOR(S): Juan A. Conde Pallavi Anumula Kishore V.L. Parsa	MENTORS: Rafael P. Ballestero Maribel González-García

ABSTRACT: Apoptosis is an evolutionary conserved type of cell death that is essential for the development and normal function of metazoans. Deregulation of apoptosis contributes to the pathogenesis of diseases such as cancer, neurodegenerative disorders, and autoimmune diseases. The Bcl-2 family of proteins is a group of proteins that participates in this highly organized and tightly regulated cellular suicide program. Our laboratory has identified BMRP as a Bcl-2 binding protein with pro-apoptotic activity. We are currently characterizing this protein at the biochemical and functional levels. Several BMRP deletion mutants have been constructed in order to delimit the regions of the protein that are responsible for its

interaction with Bcl-2. Binding studies of these deletion mutants utilizing the yeast Two-Hybrid system indicate that the C-terminal domain of BMRP is dispensable for the Bcl-2/BMRP interaction. These results suggest that the domain(s) of BMRP required for its binding to Bcl-2 is (are) located in the N-terminal two thirds of the protein (amino acid residues 1-92). Future studies will delete additional segments from either end of the BMRP(1-92) mutant, which will be followed by alanine scanning mutagenesis experiments. The results of these studies with BMRP mutants will enhance our understanding of the molecular mechanisms by which BMRP induces apoptosis.

TYPE OF PRESENTATION: Poster

715	TITLE: Structure and function of M tuberculosis high temperature requirment A1	
AUTHOR: Saranya B Sivanandam	Master's Level	Texas A&M University
AUTHOR(S):	MENTORS: Dr.Satheesh Palaninathan Dr.Nilofar Mohamedmohaideen	

ABSTRACT: The high-temperature requirement A (HtrA) family of serine proteases has been shown to play a central role in extracytoplasmic protein quality control system in E coli. Mycobacterium tuberculosis (Mtb) is equipped with three membranes associated HtrA-like proteases (HtrA1, HtrA2, and HtrA3). Previous studies have demonstrated that htrA1 is essential for the growth and survival of the bacteria, htrA2 is required for full virulence of the bacteria while htrA3 is non-essential. The essential Mtb-HtrA1, consists of a cytoplasmic domain, transmembrane region, and a periplasmic protease-PDZ domains. Our previous crystal structure studies have suggested that the truncated tHtrA1 (195-528) form homo trimers composed of subunits containing a serine protease domain and a single PDZ domain, in R3 space group. However, the activation mechanism is only known for HtrA2 while tHtrA1 structure points towards a pH dependent activation. In order to understand the function of HtrA1 further, we have cloned, over expressed and crystallized the inactive tHtrA1-SA mutant protein at pH 9.5. The crystal diffracted up to 2.9 Å resolution with the unit cell parameters of a = b = c =131.97 Å and a = ß = ? = 90°. The poster will present the structure analysis and supporting biochemical data, to provide important clues about the activation mechanism of MtbHtrA protein.

TYPE OF PRESENTATION: Poster

716	TITLE: Blood Chemistry Levels of Free-Ranging and Captive White-Tailed Deer	
AUTHOR: Melanie Smith	Master's Level	Texas A&M University
AUTHOR(S):	MENTORS: Dr. Donald S. Davis Dr. Charles Long	

ABSTRACT: Blood samples were collected from 384 white-tailed deer (WTD) (Odocoileus virginianus) taken between October 2008 – August 2009 from 13 different counties throughout Texas. White-tailed deer were evaluated for biochemical parameters (total serum protein, albumin, calcium serum, phosphorus serum, glucose, blood urea nitrogen, creatinine, total bilirubin, creatine kinase (CK), aspartate aminotransferase (AST), glutamic-oxaloacetic transaminase (SGOT), globulins, albumins to globulins ratio (A/G ratio), gamma-glutamyl transferase (GGT), and magnesium serum and the following variables were recorded (age, gender, county of collection, season, capture method, and status based on captive or free-ranging). These biochemical parameters were compared among WTD among age groups fawns (<12 months), yearlings (=12 months - <24 months) and adults (=24 months), gender, location based on region (North, South, East, West), season (Spring, Summer, Fall and Winter), status (captive or free-ranging) and capture method (physical restraint, anesthetized using physical restraint method of drug administration,

anesthetized using dart gun method of drug administration, drop-netted, net-gunned, or hunter harvested). These parameters are being used to establish a normal range for the comprehensive metabolic panel (blood chemistry panel) for WTD in Texas.

TYPE OF PRESENTATION: Poster

717	TITLE: Chronic Pathology of the Upper Extremity in the Overhead Athlete	
AUTHOR: Mike Swoboda	Master's Level	Texas A&M International University
AUTHOR(S): Mike Swoboda Ryan Flynn	MENTORS: Dr. Sukho Lee	

ABSTRACT: Injuries of the overhead athlete have presented a broad spectrum of pathological changes in the shoulder girdle and cause long term and chronic distress to the shoulder. the shoulder capsule is commonly compromised in overhead use and is subjected to exponentially increased wear over prolonged use. Research suggests that exercises low in weight and high in repetition using small dumbbells, tubing, and other resistance training can prolong the overall longevity of the overhead athlete and sustain shoulder health. Chronic injury and pathology has been linked to poor mechanics, overuse, and improper training and maintenance of the upper extremity. Overuse of the shoulder girdle in the overhead athlete has indicated long term consequences along with decreased performance over sustained periods of time. Rehabilitation, maintenance, and use of proper modalities whiles training have been key factors in maintaining stability to the shoulder capsule for maximum performance and the lowest risks of chronic injury. Chronic pathology is deeply rooted in the effects of poor arm care and overuse from childhood and adolescence. The long term prognosis for shoulder injuries has improved drastically over the last twenty years, however acute pathology remains as a prominent burden for the overhead athlete. Maintaining a balance of stability and flexibility to the shoulder girdle has proven to be a major challenge to athletes and researches alike. Overall care and exercise of the upper extremity and a balanced total body flexibility program is still the mainstay of experts to combat the vast pathological changes that presents itself in the overhead athlete.

TYPE OF PRESENTATION: Poster

718	TITLE: Population assessment of Siren i. texana from the Rio Grande watershed	
AUTHOR: Raul Uribe	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Michael R. Kidd	

ABSTRACT: The Rio Grande Siren (Siren intermedia texana) is listed as a threatened species within the state of Texas, even though almost nothing is known about the distribution and population size of this species. We propose to examine the distribution and population structure of S. i. texana along the Rio Grande Watershed, from just above the Amistad Reservoir to Brownsville (below the Falcon Reservoir). We will use sequence data from the Cytochrome b (mtDNA) and Rag-1 genes (nuclear genome) in order to reconstruct the evolutionary history of this species as well as assess levels of gene flow across natural (distance between water sources) and anthropomorphic barriers (reservoir). In addition to our own fine scale collections along the Rio Grande, we will also acquire gene sequences from Genbank for S. intermedia intermedia, S. intermedia nettingi and S. lacertina in order to confirm the phylogenetic hypotheses generated by morphological character analysis. The results of this study will further our understanding of the distribution and population sizes of this threatened species, as well as help identify

appropriate units of conservation.
TYPE OF PRESENTATION: Poster

719	TITLE: Ozone Alters Mammalian Cardiovascualr Physiological Parameters		
AUTHOR: Laura a Alexander		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Rejeana Stephens		MENTORS:	
ABSTRACT: OZONE IMPACTS CARDIAC FUNCTION IN A RAT INDUCED ISCHEMIA REPERFUSION HEART MODEL R. Perepu1, C. Garcia1 and R. Sethi2 Texas A&M University – Kingsville1 and Texas A&M Health Science Center2 Although numerous advancements made in the field of human health have resulted in reduced deaths due to cardiovascular diseases (CVD), many patients with CVD show no previous established risk. Therefore, unknown factors may be responsible for the pathophysiology of CVD. Out of 350,000 sudden cardiac deaths each year in the United States, 60,000 deaths have been linked to air pollution, suggesting a detrimental role of environmental pollutants in the development of CVD. The present study tested the hypothesis that chronic ozone (O3) exposure enhances the sensitivity to ischemia reperfusion (I/R) injury in isolated perfused hearts. Sprague Dawley rats were continuously exposed for 8 hrs/day for 28 and 56 days to filtered air and 0.8 ppm O3. Isolated hearts were subjected to 30 minutes of global ischemia followed by 60 minutes of reperfusion. Cardiac function after I/R measured as LVDP, +dP/dt, –dP/dt and LVEDP was significantly decreased and increased respectively in O3 exposed I/R hearts compared to I/R hearts exposed to filtered air. The enhanced sensitivity to I/R injury to O3 exposure was associated with increased myocardial TNF-a levels and lipid peroxidation along with decreased myocardial activities of superoxide dismutase (SOD) and IL-10. This data suggests that O3-induced sensitivity to myocardial I/R injury may be due to promoting levels of oxidative stress as well as inflammatory mediators.			
TYPE OF PRESENTATION: Poster			

720	TITLE: Comparison of Cortisol Concentration between RIA and LC-MS/MS		
AUTHOR: Brian C Anyanwu		Undergraduate Level	Prairie View A&M University
AUTHOR(S):		MENTORS: Dr. Harriette Block	
ABSTRACT: Cortisol is a corticosteroid hormone produced by the adrenal cortex that is released in times of stress and anxiety. Excessive production of cortisol (Cushing syndrome) can lead to high blood pressure, hyperglycemia, osteoporosis, and other morbidities. Cortisol production is also a reflection of physical or mental stress as occurs in chronic illness and anxiety disorders. Measurement of cortisol in saliva specimens avoids the stress of venopuncture and permits frequent sampling at any time of day. Radioimmunoassay (RIA) is traditionally used to assay cortisol in serum, but with saliva samples, cortisol concentrations are 10 times lower, at the edge of the dynamic range for RIA (~100 ng/dL) where error is highest. In contrast, Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS) provides linear measurements down to 1 ng/dL. We hypothesized that LC-MS/MS will yield more accurate data than RIA for saliva cortisol measurements. This study presents a comparison of two methods, RIA and LC-MS/MS, on 144 saliva cortisol specimens. We found that the correlation of the two methods was fair, but technical difficulties limited the reliability of the first LC-MS/MS data set. We conclude that LC-MS/MS is a			

promising method for cortisol determination in saliva, but it is technically demanding and requires further validation.

TYPE OF PRESENTATION: Poster

721	TITLE: Molecular Dynamics Simulation of Peptides Binding to Silica	
AUTHOR: Stephen Bacon	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Lin Shield Hua-Jun Fan	MENTORS: Lin Shield Hua-Jun Fan	

ABSTRACT: The demand for specific silica is rapidly increasing resulting in a search for new and improved or alternative silica particles. Silica base materials have become increasingly important and, most recently, utilize in the immobilization techniques that preserve the activity of biomolecules for various applications. Molecular Dynamics simulations have been applied to investigate the binding of peptides to amorphous and crystalline silica surfaces. We will study the effect of concentration, surface coverage, pH and peptide structure in the means of the binding constants free energy. We will focus on mimicking the biosilification process by using model peptide fragments to study the nature and strength of binding to silica surfaces. The fragments were chosen from a database of peptides from a experimental investigation. Both materials studio and CAChe programs are used in this investigation.

TYPE OF PRESENTATION: Poster

722	TITLE: ACABP Study	
AUTHOR: Courtney R Brooks	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. Shawna Nesbitt, MD, MS	

ABSTRACT: The Association of Albuminuria with Central Aortic Pressure and Brachial Blood Pressure (ACABP Study) Brachial blood pressure is associated with heart disease, stroke, and kidney disease. Although the relationships are strong, there are inconsistencies in the prediction of cardiovascular events. Invasive studies of arterial blood pressure have shown that a central aortic pressure is more closely related to these events than noninvasive brachial blood pressure. New technology has been developed to estimate the central aortic pressure by a noninvasive technique. However, the utility of this new technology needs further study to assess treatment algorithms and logistic feasibility. Our objective is to assess the feasibility and utility of a new noninvasive measure of central aorta blood pressure in the management of hypertension in a pilot population. We hypothesize that the central aortic pressure may improve clinical management compared to peripheral blood pressure alone through a more precise assessment of target organ damage such as kidney disease and heart disease. We recruited 29 hypertensive patients in the Parkland Hypertension Clinic and UT Southwestern Hypertension Clinic to have their central aortic pressure measured during a normal clinic visit in addition to the standard blood pressure measurement. The central aortic pressure was measured by Sphygmocor CPV System. The Sphygmocor CPV System is a noninvasive tool used to measure central aortic blood pressure. Using a tonometer to capture the radial pulse wave, the pulse wave speed and amplitude are used in a mathematical function to give the corresponding central pressure waveform. This estimated central aortic pressure and assessment of aortic stiffness can be useful in understanding vascular function. Family history and medications were collected from the patients. We also used historical lab results of serum

creatinine, microalbumin, protienuria, albumin/creatinine ratio, and LV mass to assess target organ damage from hypertension. We found that there was no clear relationship between central aortic pressure or aortic stiffness, and albuminuria or kidney dysfunction in our patient group. In assessment to central aortic blood pressure and aortic stiffness by gender, we found that women have higher aortic blood pressure and higher aortic stiffness than men at the same level of brachial blood pressure. Based on our small pilot study, we conclude that there is no association of central aortic blood pressure and aortic stiffness to target organ damage such as albuminuria. However, it is possible that our sample size limits the ability to detect a relationship. Furthermore, our data suggests that aortic pressure and stiffness differ greatly for men and women. This may partially explain epidemiologic differences in CVD by gender.

TYPE OF PRESENTATION: Poster

723	TITLE: Activity of crude Daboia russellii siamensis venom and purified coagulation	
AUTHOR: Danielle Calhoun	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. John Perez & Dr. Elda Sanchez	

ABSTRACT: Activity of crude Daboia russellii siamensis venom and purified coagulation factor X activator (RVV-X) with metalloproteinase inhibitors in the Virginia opossum (Didelphis virginiana) Daiboia russellii siamensis is a subspecies of Russell's viper snake found in Thailand. This snake venom contains the mixture of proteins, which affect the haemostatic system. A major lethal protein is coagulation factor X activator (RVV-X). RVV-X was purified from crude Russell's viper venom (cRVV) by two-step procedure. cRVV was fractionated with Waters PROTEIN-PAKTM 300SW (7.5 X 300 mm) size exclusion high pressure liquid chromatography (HPLC) column in the first step. Fractions containing RVV-X activity was further purified with Waters PROTEIN-PAKTM 5PW (7.5 X 75 mm) anion exchange HPLC column. RVV-X is a protein with molecular weight of 90 kDa. It contains a heavy chain (58 kDa) and two light chains (19, 21 kDa). The Virginia opossum (Didelphis virginiana) serum has many metalloproteinase inhibitors that bind to metalloproteinases, which cause hemorrhagic effect and lethality of various snake venoms. Neutralizing ability of metalloproteinase inhibitors in opossum serum will be tested against proteolytic activity of cRVV and purified RVV-X.

TYPE OF PRESENTATION: Poster

724	TITLE: Study of fibrinolytic serine proteases isolated from two species of the Wes	
AUTHOR: Esteban Cantu	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. John C. Perez Dr. Elda Sanchez	

ABSTRACT: Snake venoms contain many molecules that affect hemostasis by degrading clotting factors and extracellular matrix proteins necessary for coagulation. Many of these molecules have potential therapeutic usage in the treatment and prevention of thrombotic disorders associated with cardiovascular diseases. The objective of this project was to locate, isolate, and characterize venom derived serine proteases demonstrating the ability to degrade human fibrin(ogen). Crude venom was obtained from two snakes belonging to the Western Rattlesnake partition, Crotalus viridis viridis (prairie rattlesnake), Crotalus oreganus helleri (southern pacific rattlesnake, formerly Crotalus viridis helleri). The crude venoms were separated using anion exchange chromatography, and the obtained fractions were assayed for their various biological activities. Serine proteases were isolated from crude venom utilizing benzamidine affinity chromatography and tested for their ability to degrade fibrin clots in vitro. Fibrinolytic molecules

were then screened for hemorrhagic and proteolytic activities, as well as their effects on coagulation and platelet aggregation. The ability of a molecule to act directly on fibrin without causing hemorrhage is an attractive feature in treating strokes and heart attacks. The amino acid sequence of this molecule will be determined by LC-MS/MS and the information will be used to clone this important molecule. Because there are not enough snakes in the world to continue isolating these molecules, cloning is an essential step that will provide a continuous supply of molecules that may be used to treat various diseases.

TYPE OF PRESENTATION: Poster

725	TITLE: Epidemiological Assessment of Long-Term Radiation Effects – Hiroshima, Naga	
AUTHOR: Tasheika Y Christie	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Premkumar B. Saganti (2)	

ABSTRACT: Most investigation in radiation epidemiology addresses questions about the association between radiation exposure and dose to certain tissues with a resultant outcome of long-term effects. Therefore radiation epidemiology of known consequences such as Hiroshima, Nagasaki, and Chernobyl incidences provides us the opportunity of living laboratories of radiation biological studies that span several decades of time and multiple generations of data among huge population databases. Ionizing radiation from the outer space can cause several biological damages in analogous to the observed phenomena of the epidemiological consequences in the above mentioned three incidences. While the data from the space environment is minute, ground based epidemiological studies of the cellular level are being explored by several NASA and DOE research groups to understand the intricate radiation damage and long-term consequences to the human cellular systems. Several long-term epidemiological studies such as - the atomic bomb survivors in Hiroshima and Nagasaki of Japan along with Chernobyl nuclear reactor explosion who received significant doses (from 5 mSv to 3 Sv with an average of 200 mSv) at a high dose rate (1 Sv/second), provided huge data for understanding the radiation exposure and the corresponding consequences. We present the correlations of the cancer risks from the available epidemiological data for the anticipated space radiation exposure to human explorers. This research is being supported in part by NASA Grant- NNX07AL91G and NASA Co-op Agreement – NNX07AT25A (PI: Dr. Saganti)

TYPE OF PRESENTATION: Poster

726	TITLE: Long-Term Space Radiation: An Epidemiological Perspective	
AUTHOR: Destiney Davis	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS:	

ABSTRACT: Radiation epidemiological studies such as atomic bomb survivors of Japan and nuclear reactor accident of Russia, provide some of the essential data to understand space radiation health risk factors associated with radiation environment in the outer space. Ionizing radiation from the outer space can cause several biological damages and result in cancer and or other health concerns. Ionizing radiation can also cause biological responses such as bystander effects, induction of genomic instability, and radio-adaptive response which cause cell damage that can ultimately lead to cell death. The data from the space environment is very much limited and the human exposures data beyond the low earth orbit (LEO) is minute. Ground based experimental studies to analyze cellular level radiation damage are currently in progress from several institutions mostly supported by several NASA, NIH, and DOE research groups to

understand the intricate radiation damage. Several long-term epidemiological studies such as - the atomic bomb survivors in Hiroshima and Nagasaki of Japan along with Chernobyl nuclear reactor explosion of Russia, provide huge data for understanding the radiation exposure and the corresponding consequences. We present the correlations of the cancer risks from the available epidemiological data for the anticipated space radiation exposure to human explorers.
TYPE OF PRESENTATION: Poster

727	TITLE: Distribution of ß-Defensin 1 and ß-Defensin 14 in the Mouse Brain		
AUTHOR: Daniel Diaz		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS: Dr. Sajid Bashir	
ABSTRACT: Hydrogen is the simplest and smallest of all chemical elements only containing a single proton and electron. With the constant increasing need of fossil fuel consumption, the amounting green house gases that have been damaging our surrounding environment, and with a major amount, can be said is due to the internal combustion engine. From then to now, hydrogen fuel has been looked upon as an alternate energy resource since 1838 when William Grove creates his “wet cell” battery using platinum, nitric acid, zinc, and sulfur. This is a tremendous step towards the eventual creation of the fuel cell. The Hydrogen fuel cell is an electrochemical conversion device. An important characteristic of hydrogen is that of all of the elements it has, contains the highest energy content per unit of weight. Proton exchange membrane (PEM) fuel cells is the where all the magic happens. A fuel cell consists of two electrodes the positive (+) cathode and the anode negative (-) charged electrolyte. Between the two lies the catalyst platinum (Pt), which is attached to the (PEM). The hydrogen atom splits into a proton and an electron, which each take different paths to the cathode. The perflorinated sulfonic acid polymer electrolyte membrane allows the proton to pass through. The electrons, on the other hand are channeled through a circuit, which creates a current of electricity that can be utilized before they return to the cathode. Upon returning to the cathode, the electrons and protons of hydrogen and oxygen combine to form molecules of water, which is one of the byproducts of the fuel cell along with heat up to 85°C.			
TYPE OF PRESENTATION: Poster			

728	TITLE: Vitamin D Signaling Pathway in VCaP Prostate Cancer Cell Line		
AUTHOR: Clarissa Durand-Rougely		Undergraduate Level	Prairie View A&M University
AUTHOR(S): Jung Sun Kim		MENTORS:	
ABSTRACT: Prostate cancer is the third leading cause of cancer related death among American men. Risk factors include age, race and geography suggesting a role for reduced levels of vitamin D in development of prostate cancer. Previous studies have shown that 1,25D-dihydroxyvitamin D3 (1,25D), the active form of Vitamin D, significantly inhibits the growth of several prostate cancer cell lines; however the mechanism is not fully understood. Studies also show a decrease in c-Myc expression which is overexpressed in prostate cancer. The 1,25D analogue EB1089 also inhibits growth, reduces c-Myc expression and increases TGFß expression in VCaP cells. We hypothesize that Vitamin D signaling could inhibit cell growth and c-Myc expression through the TGFß pathway. The objective was to determine whether the induction of TGFß signaling is responsible for the down-regulation of c-Myc in VCaP cells. Cells were treated with EtOH, EB1089, Vehicle and TGFß for nine days and a series of cell growth studies were conducted. c-Myc and P-smad 2 protein expression were determined using western blot analysis and			

c-Myc RNA expression by qRT-PCR. Results showed significant growth inhibition in VCaP cells, and growth inhibition in the presence of a TGFß receptor inhibitor and TGFß receptor neutralizing antibody, which should have inhibited the TGFß pathway. Western blot analysis confirmed a significant decrease in c-Myc protein expression in EB1089 treated cells; but no reduction in TGFß treated VCaP cells. Western blot analysis showed an increase in P-smad 2, which is phosphorylated by TGFß, after one hour treatments; long term treatments showed no observable change. qRT-PCR showed a decrease in c-Myc expression and an increase in TGFß expression in EB1089 treated samples but not in TGFß treated samples. Thus, if TGFß induction plays a role in EB1089 growth inhibition in VCaP cells, it does not act by reducing c-Myc expression.

TYPE OF PRESENTATION: Poster

729	TITLE: Incidence and Characterization of Staphylococcus among University athletes	
AUTHOR: Judith Garza	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Jean Escudero	

ABSTRACT: In this study university athletes were tested for different species of coagulase negative staphylococcus (CoNS, excludes S. aureus). Two hundred and thirty eight athletes were tested by nasal and pharyngeal swabs which were then inoculated on the selective and differential medium mannitol salts agar. This medium inhibits the growth of most Gram negative organisms and many Gram positive organisms but allows for the growth of staphylococcal species due to the high salt content. Additionally, the medium differentiates between the species based on the ability of the organism to ferment mannitol. Mannitol positive Staphylococcus aureus turns the medium yellow where as the other species do not. The mannitol-negative species were then characterized on the basis of antibiotic resistance, the presence of known virulence factors and metabolic capabilities. Based on these characteristics, the bacteria were placed in 11 groups. Five of these groups include methicillin resistant bacteria. Overall, 8 resistant bacteria were isolated from 41 potential staphylococcal species from the 238 athletes tested. Athletes were also tested by another student for the presence of MRSA. A comparison is necessary to determine if MRSA carrying athletes also carry the mecA CoNS species. However, this study does indicate that the athletes carry mecA positive species that may act as reservoirs for the cassette responsible for transforming S. aureus into MRSA which is common among athletes and leads to serious infections and possibly death.

TYPE OF PRESENTATION: Poster

730	TITLE: The Role of WFDC1 in the inflammatory Response to Influenza Virus Infection	
AUTHOR: Adenuga I Gbadebo	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Dr. Steven Ressler Dr. David Rowley	MENTORS: Dr. Gloria Re	

ABSTRACT: Wfdc1 gene is a member of the WAP family and expresses the ps20 protein. The WAP family of proteins includes secreted proteins with most members having serine protease inhibitory, anti-inflammatory and anti-microbial activity. To characterize the function of the Wfdc1 gene, a knockout mouse was made that included a knock-in of the ß-gal gene into the Wfdc1 locus. It was later determined that Wfdc1 plays a role in viral resistance, because the influenza virus was found to replicate 3 logs less in the Wfdc1 null mice compared to the wild-type, when these mice were infected with the influenza virus. Therefore, the purpose of this project was to determine the mechanism of induced viral resistance

in Wfdc1 null mice. We believed that the reduced influenza viral infectivity in the Wfdc1 null mouse was due to alterations in inflammatory cell infiltration. Immunohistochemical studies were performed on 84 different lung tissues from Wfdc-1 null (n=5), heterozygous (n=5) and wild-type Wfdc-1(n=5) mice, using macrophage and neutrophil specific antibodies. The procedure was based on an indirect method of staining tissues with an antibody to the ß-gal protein that in the Wfdc1 mice, is expressed as a marker for Wfdc1 expression. Our results indicated that there were more macrophages in the infected Wfdc-1 null mice, compared to the heterozygous and wild-type Wfdc-1 mice. Furthermore, ß-gal, a surrogate marker for Wfdc-1, was expressed in the smooth muscle layers around both bronchioles and vessels in the mouse lung. Therefore, decreased influenza viral infectivity was due to an increase in inflammatory cell infiltration in the Wfdc1 null mouse.

TYPE OF PRESENTATION: Poster

731	TITLE: E-Coli and Ag-TiO2	
AUTHOR: Dillon T Holt	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Jingbo Louise Liu Daniel Clancy	MENTORS: Jingbo Louise Liu	

ABSTRACT: Colloidal silver's ability to fight microorganisms, such as Escherichia coli, have given scientists plenty of reasons to experiment with this alloy and bring forth its greatest potential in advancing modern medicine. Throughout history silver has been used as a treatment for infections to avoid sepsis, a condition where a patient has infected blood filled with microorganisms and/or their toxins. E. coli is considered gram-negative bacteria which means that when the bacteria is neutralized or killed, the cell wall ruptures (lysis) and releases an endotoxin which is harmful to the human body. This is why you get a fever when your body fights gram-negative infections. Colloidal silver is believed to neutralize microorganisms by cutting off the energy supply needed to sustain life. Silver prevents microorganisms from metabolizing oxygen enzymes which results in the destruction of the organism's cell membranes by stopping the replication of the organism's DNA. The excellent news behind this reaction is that this is a natural reaction and silver does not need to be chemically altered by man. Researchers are still looking for methods for disabling this defense mechanism that gram-negative bacteria have utilized for their protection. Part of our research will include how silver reacts with this bacteria and see if the endotoxins are released as a normal response. If silver can neutralize this problem, silver will be essential for many antibacterial procedures. In earlier research, it was found that nano-structured silver particles could be prepared inexpensively and in a straightforward method such as Sol-gel synthesis. Developing economical and high yield producedures will ensure that silver will one day be more accessible than Tylenol. Key Words: Endotoxin, Gram-negative, lysis, enzymes

TYPE OF PRESENTATION: Poster

732	TITLE: Developing a Cancer Registry in St. Vincent and The Grenadines	
AUTHOR: Rabiu O Ibraheem	Undergraduate Level	Prairie View A&M University
AUTHOR(S): E.G. C. Regisford PhD Jennifer George, MD	MENTORS: G.C. Regisford, PhD	

Life Science

ABSTRACT: Cancer is a complex disease that affects people worldwide. The etiology of this disease can be further complicated by external environmental factors. Cancer registries have been developed in many countries in order to manage the incidence of the disease. In developing countries, like Saint Vincent and the Grenadines, cancer registries are nonexistent. However, incidences of certain types of cancers have been reported and documented at Kingstown General Hospital and other clinics. Our objective is to create a cancer registry where data can be collected, managed and analyzed on patients diagnosed with any form of cancer. We hypothesized that a cancer registry will indicate that (1) lack of cancer education and (2) spiritual and cultural beliefs are the major reasons for people not performing early screenings and hence are diagnosed with cancer at late stages. Data on cancer clinically documented between 2005 and September 2007 was collected and statistically analyzed according to: cancer type and age groups of individuals affected. Results indicate the most prevalent cancer was prostate cancer, followed by cancers of the breast, skin, cervix uteri and colon. People aged 27 to 82 were affected, with cancer incidence being highest among 41-60 year olds. Cancer incidence was highest among the 41-50 year old group, and was significantly highest in the year 2007. Therefore, we advocate the need for establishing a cancer registry and the involvement of local groups in educating the population on the importance of cancer screening in management and treatment of the disease.

TYPE OF PRESENTATION: Poster

733	TITLE: The Effects of Carbon Nanotubes and Chitosan on Cell Proliferation and Osteopontin Protein Expression in hFOB 1.19 Cells	
AUTHOR: Whitney G Jones	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Julia Stone Clarissa Durand-Rougely Pasakorn Traisawatwong	MENTORS: Dr. Aderemi Oki Dr. E. Gloria Regisford	

ABSTRACT: There is a pertinent need for an efficient method of bone repair, as the number of patients diagnosed with bone degenerative diseases continues to rise. Researchers are currently investigating methods of bone regeneration by using viable and effective scaffolds. Biomaterials such as carbon nanotubes (CNT) and chitosan (CTS) exhibit the characteristics necessary for successful bone regeneration. Osteopontin (OPN), a cell adhesion protein in bone, is usually expressed during the process of bone formation. Therefore, our objective was to determine the effect of CNT and CTS on the proliferation of human fetal osteoblastic cells (hFOB 1.19) and the expression of OPN protein by these cells (hFOB 1.19). We hypothesized that CNT and CTS will increase cell proliferation and the expression of OPN in hFOB 1.19 cells. To test this hypothesis, hFOB 1.19 cells were treated with CNT or CTS (0, 250, 500 and 1000ng/mL) for 24, 48, and 72 hours. An MTT assay was performed for each treatment to determine the rate of cell proliferation. To evaluate the effect on OPN protein expression, cells were harvested and protein isolated for use in western blot analysis. Our results showed that there was a significant increase in proliferation by cells treated with 500ng/mL CNT at 48 h. The expression of OPN protein tended to increase in a dose-dependent manner in cells that were grown in the presence of CTS. Alternatively, OPN protein expression tended to decrease in a dose-dependent manner in CNT-treated cells. These data indicate that the use of CTS and CNT as biodegradable, non-toxic bone regeneration materials may be feasible in the near future.

TYPE OF PRESENTATION: Poster

Life Science

734	TITLE: Structure based drug designing: Novel transthyretin amyloid fibril formatio	
AUTHOR: Binny K Kothari	Undergraduate Level	Texas A&M University
AUTHOR(S):	MENTORS:	
ABSTRACT: Transthyretin (TTR) is one of many non-homologous proteins whose misfolding, dissociation, aggregation, and deposition is linked to human amyloid diseases. Four types of TTR amyloidosis have been observed: senile systemic amyloidogenesis (SSA), familial amyloid cardiomyopathy (FAC), familial amyloid polyneuropathy (FAP), and central nervous system-selective amyloidosis (CNSA). Previous studies have identified that TTR amyloidogenesis can be inhibited through stabilization of the native tetramer state by small molecule (mostly biaryl scaffold) binding to the thyroid hormone sites of TTR. In order to diversify from the typical biaryl scaffold, based on a structure-based drug design and molecular docking approach, we have designed and synthesized a new series of compounds with novel scaffolds. Based on an in vitro fibril formation assay, five of these compounds showed significant inhibition of TTR amyloidogenesis, with three compounds displaying inhibitor efficacy (more than 90 % inhibition), comparable to the well-known TTR inhibitor diflunisal. Currently we are evaluating the binding mode and mechanism of action of these new TTR amyloid inhibitor scaffolds.		
TYPE OF PRESENTATION: Poster		

735	TITLE: No Title Submitted	
AUTHOR: Ralston Lockett	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS:	
ABSTRACT: No Abstract Submitted		
TYPE OF PRESENTATION: Poster		

736	TITLE: Healthcare: Who Really has the Best System?	
AUTHOR: Jennifer Matulich	Undergraduate Level	West Texas A&M University
AUTHOR(S):	MENTORS: Dr. Carolyn Bouma, Ph.D.	
ABSTRACT: Healthcare is a daily topic in the news today. Most Americans believe that our healthcare system is the best in the world. It is very controversial and people often compare the U.S. healthcare system with others around the world. This research compares the healthcare systems throughout the world, in particular the systems of the United States, Canada, France, Cuba and Costa Rica. Methods used to collect data included traveling to another country to learn about their system, and interviews with people from different countries, including a Canadian citizen recently relocated to the United States and a Cuban surgeon who fled to the United States from Cuba. In addition, the research is derived from a personal interview with a private practice physician as well as recent publications pertaining to the issue. These interviews provided different perspectives from these countries on their healthcare systems. Chronicling the research will consist of evaluating each system and explaining how the system is managed, as well as describing the characteristics of the system that makes it unique. The advantages and		

disadvantages of the different systems will be emphasized in order to suggest what can be expected by the users of the system. The different countries are compared based on broad demographics such as population, infant mortality rate, life expectancy and number of physicians in the country. The summarized data will present factors that will enable the determination of which country, if any, has the best system. The author's opinion suggests that the U.S., although the most expensive, provides the best healthcare for its citizens.

TYPE OF PRESENTATION: Poster

737	TITLE: Survey of the Presence of Lectin Activity	
AUTHOR: Paul E Miranda	Undergraduate Level	Texas A&M International University
AUTHOR(S): Erik Perez Melinda Portillo	MENTORS: Dr. Ruby A. Ynalvez	

ABSTRACT: Lectins are sugar-binding proteins. They serve many different biological functions but the most recognized one is their role in plant defenses. Plant lectins have many interesting properties which include ability to inhibit HIV-1 reverse transcriptase, anti-bacterial and anti-fungal activities. In biotechnology, lectin genes can be expressed in transgenic plants to confer resistance against insects. There is an increasing interest in lectins for medical therapeutic effects and potential in crop protection. Plant lectins have been isolated and characterized from many plant sources but very few studies on lectins from South Texas plants have been conducted. The objective of this study is to identify new sources of plant lectins specifically from plants found in the South Texas region. This work will then be extended to the isolation and characterization of the specific plant lectins. In this study we will present evidence that some South Texas plants have lectin activity.

TYPE OF PRESENTATION: Poster

738	TITLE: Role of AR in Cyp24 Regulations in Prostate Cancer Cell Lines	
AUTHOR: Yetunde Olusanya	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Sarmistha Mukherjee Dolores Lamb	MENTORS: Gloria Regisford	

ABSTRACT: Prostate cancer is a form of cancer that develops in the prostate, a gland in the male reproductive system and is the second leading cause of cancer death in American men. Our objective is to study the role of androgen receptor in Cyp24 regulation of prostate cancer cell lines. The main function of the androgen receptor is as a DNA binding transcription factor which regulates gene expression however, the androgen receptor has other functions as well. Earlier studies have shown that vitamin D has an antiproliferative role in the growth of prostate cancer cells but the mechanism underlying this action has been unclear. A central protein involved in the degradation of turnover of 1a25(OH)2D3 is the regulatory multi-catalytic CYP24 enzyme that directs the introduction of C-24R group onto targeted 25-hydroxy substrates. Similar to the androgen-independence that develops, studies in Dr. Lamb's laboratory have shown that over expression of CYP24 in advanced prostate cancer leads to Vitamin D resistance inhibiting the antiproliferative actions of Vitamin D. CYP24A, which is considered to be an oncogene, controls the intracellular levels of Vitamin D. When this enzyme is over expressed, there is an increased vitamin D resistance, therefore inhibiting the antiproliferative actions of vitamin D. Results showed that the relative expression of cyp24 in R1881 treated LnCap cells were so minimal it ranged in the negative. When

analyzing the results obtained from the qPCR, relative expression of cyp24 in R1881 treated cells, the Hela and PC3 cell lines were significantly higher than the expression in the LnCap and PC3-AR. The expression in the PC3-AR cell line was non-existent proving that the PC3-AR cell line mimicks that of the LnCap cell line, both of which are androgen dependent. Results proved that Vitamin D induces Cyp24 expression in prostate cancer cell lines.

TYPE OF PRESENTATION: Poster

739	TITLE: Effect of humidity on relative caterpillar abundance on two acacia species	
AUTHOR: Rogelio Olvera	Undergraduate Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Rohitha Goonatilake STEM-RRG	

ABSTRACT: Effect of humidity on relative caterpillar abundance on two acacia species and possible effect of relative caterpillar abundance on scorpion predation Abstract: This research project was to observe the effect humidity had on the relative abundance of caterpillars on two acacia species blackbrush, Acacia rigidula, and guajillo, Acacia berlandieri, and possible effect of relative caterpillar abundance on scorpion predation. The caterpillars were collected from each tree by beating the tree for two minutes into a beating sheet. Each acacia was sampled two times a night on approximately three nights a week from February 9, 2009 to August 6, 2009. Data included the count of caterpillars for each tree sampled and temperature and humidity collected using a Kestrel 3000 each night. The scorpion activity was observed using an ultraviolet light. There was a significant positive correlation between humidity and caterpillar numbers for both acacia species with the number of caterpillars per tree increasing with higher humidity. The correlation between humidity and caterpillar numbers are not due to a direct effect. Humidity can increase after precipitation, and precipitation can increase vegetation growth and this can increase caterpillar activity. The indirect effect of humidity on foraging by scorpions will also be considered.

TYPE OF PRESENTATION: Poster

740	TITLE: Hormones and Sexual Behavior in Astatotilapia burtoni, a cichlid fish	
AUTHOR: Javier O Parra	Undergraduate Level	Texas A&M International University
AUTHOR(S): Javier O. Parra David Gomez Jr.	MENTORS: Dr. Michael Kidd	

ABSTRACT: Hormones influence behavior in many ways. The cichlid fishes of East Africa have become a model system for understanding the role of mate choice in promoting and maintaining population divergence. Yet the proximate mechanisms regulating mate choice in these fishes are poorly understood. This study attempts to correlate changes in female sexual behavior with circulating hormone levels within a mate choice context. We have found that even though female preference changes dramatically on the day of spawning, endogenous levels of estradiol, testosterone, progesterone and prostaglandin F2alpha do not explain these changes. However, female aggression towards males does seem to be tightly linked to the female's endogenous levels of testosterone.

TYPE OF PRESENTATION: Poster

741	TITLE: Tick Activity during 2005-2009 on the Texas A&M International Campus

Life Science

AUTHOR: Jessica Perez	Undergraduate Level	Texas A&M International University
AUTHOR(S): Fernando Quintana	MENTORS: David Beck	

ABSTRACT: We conducted a one year study of tick activity on the Texas A&M International University Campus beginning March 2005. During this time we collected and identified over 53,000 ticks. 98% of the ticks were Amblyomma cajennense, 2.1% were Amblyomma inornatum. We also detected low levels of Amblyomma maculatum (<0.1%), Dermacentor variabalis (0.4%), Dermacentor albipictus (0.22%), Dermacentor halli (<0.01%) and Haemaphysalis leporispalustris (0.24%). In spite of abundant deer activity on campus we did not detect any Ixodes scapularis. Our preliminary study of the natural life cycle of A. cajennense indicates that the larva only emerge after rain events. Nymph activity showed a negative correlation with higher temperature (3 week mean temperature of 75-84°F - median of 7.9 ticks per trap, 3 week mean temperature of 85-94°F - median of 1.75 ticks per trap). Adult ticks showed a positive correlation ($p < .05$) with increased temperature (3 week mean temperature of 75-84°F - median of 0.2 ticks per trap, 3 week mean temperature of 85-94°F - median of 0.34 ticks per trap). We are now determining the prevalence of tickborne diseases in these ticks.

TYPE OF PRESENTATION: Poster

742	TITLE: The Effects of Ozone Air Pollution On The Development of Diabetic Retinopat	
AUTHOR: Victoria Perez	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Carlos Garcia	

ABSTRACT: The photochemical oxidant ozone (O3) is a major gas component of urban air pollution. Even though progress has been made in the improvement of US air quality, approximately 50% of the US population lives in areas where O3 levels exceed the National Ambient Air Quality Standard (NAAQS). According to Environmental Protection Agency (EPA), of the six NAAQS pollutants, O3 has been the most problematic. The effects of environmental pollutants, including O3 exposure on differential brain and retina gene expression, have not been systematically examined, and the mechanism responsible for O3 - induce injury are still not fully understood. Of particular interest is the role of O3-mediated oxidative stress in the development of diabetic retinopathy and macular degeneration. Diabetic retinopathy is the most common diabetic eye disease and a leading cause of blindness in American Adults. Our laboratory has recently reported on the enhance sensitivity to ischemia/reperfusion injury in O3 exposed hearts linked to increases in pro-inflammatory cytokines. The current work proposed to use animal models of Type I and Type II diabetes to elucidate a concomitant effect of O3 on the development of diabetic retinopathy. Six Long Evans hooded rats will be injected intraperitoneally with a single dose of streptozotocin. (STZ: 60 mg/kg dissolved in 0.5ml 0.05M citrate buffer, Ph 4.2). Ozone exposure will consist of 1, 7, 14 and 28 day increments. Each day of ozone exposure will consist of a 4 hour period with an ozone concentration of 0.4ppm (parts per million). After initial exposure, rats will be sacrificed and retinal tissue collected for both genetic and biochemical analysis. All group data will be analyzed using the appropriate analysis of variance (ANOVA) and post-hoc multiple comparisons using Tukey's Honestly Significant Difference Test according to procedures provided by the SAS statistical Package (SAS Institute Inc., Cary, NC). In comparisons involving only two means, Student's t-test will be used. Each data point in the plotted data will represent the mean +/- SEM obtained from experiments with different retinas from different animals. Differences between groups for all data will be regarded as significant if $p < 0.05$.

TYPE OF PRESENTATION: Poster

743	TITLE: Incidence and Characteerization of Staphylococcus aureus and Methicillin-re		
AUTHOR: Mary Rangel		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS: Dr. Jean Escudero Thomas Perkins, M.S.,P.A.-C	
ABSTRACT: Incidence and Characterization of Staphylococcus aureus and Methicillin-resistant Staphylococcus aureus among University athletes Mary V. Rangel Texas A&M University-Kingsville Ronald E. McNair Scholars Program Department of Kingsville, Texas 78363 Faculty Mentor/Supervisor: Dr. Jean Escudero Thomas Perkins, M.S., P.A.-C Abstract Staphylococcus aureus is a Gram positive bacterium, also known as, the golden cluster seed. S. aureus can cause an infection in a person by entering their bodies through cuts, abrasions, lacerations or any opening in the body, such as eyes. Infections caused by S. aureus can be treated with antibiotics. However, methicillin-resistant Staphylococcus aureus (MRSA) is the antibiotic resistant strain of S. aureus. Infections caused by MRSA are difficult to treat due to its resistance to ß-lactam antibiotics. MRSA typically acquires its resistance from a mecA gene located in the Staphylococcal cassette chromosome (SCCmec). The mecA gene encodes for a penicillin binding protein (PBP)2a that binds to the ß-lactam antibiotic with a lower affinity than S. aureus. In S. aureus, the penicillin binding protein is located on the S. aureus cell wall, which binds to the ß-lactam antibiotic when present. The ß-lactam antibiotic interferes with the peptidoglycan cell wall, causing the bacterium to die. However, MRSA has a mecA gene that encodes for the altered PBP2' that is unable to bind to the ß-lactam antibiotic due to its structural change. Thus, MRSA is able to resist the ß-lactam antibiotic and survive. There are seven Staphylococcal cassette chromosome (SCCmec) types which classify MRSA into two categories, community-associated MRSA and hospital-associated MRSA. Community-associated MRSA is caused by SCCmec type IV, V, or VII. Hospital-associated MRSA is caused by SCCmec type I, II, or III. This study focuses on community-associated MRSA because staph-infections among athletes typically are spread by direct contact in a community, not from a hospital. The purpose of this study is to decrease the incidence of staph-infections by pre-screening athletes for S. aureus and MRSA. The prescreening procedure involves a nose and throat swab because prescreening the throat is a better indicator of the presence of S. aureus. The athletes that are positive carriers for S. aureus and MRSA are treated to prevent to transmission of the bacterium. As of 2008, there were 102 patients seen for staph-like infections, which 5 were positive for S. aureus and 10 were positive for MRSA. Three bacterial samples were also characterized as US 300, which is community-associated MRSA. The incidence of staph-infections on campus caused by S. aureus or community-associated MRSA can be reduced by pre-screening University athletes and treating them.			
TYPE OF PRESENTATION: Poster			

744	TITLE: Fractors Influencing Students' Aspirations to Attend College		
AUTHOR: Kimberly Rodriguez		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS: Dr. Laura Garza	
ABSTRACT: This research study examined the influence of social context on late adolescents' decision to pursue further education and attend college. Although numerous researchers are investigating diverse variables influencing the aspirations of students to attend college, this study focuses significantly more on the environmental factors instead. Utilizing the Factors Influencing the Participation of Higher Education (FIPHE) questionnaire and the Rosenberg Self-Esteem Scale, the impact of social factors including parental			

support, family support, peer influence and financial aid concerns (PsycINFO Database) were several of the variables studied. The sample size consisted of 100 incoming freshmen attending Texas A&M University-Kingsville that each completed the two surveys. The results indicated that environmental factors and self-efficacy both considerably influenced a student's decision to participate in a higher level of education (PsycINFO Database). Research supported the theory that a student's decision to attend college was significantly based upon a combination of compelling factors and findings suggests that parental involvement and the level of peer attachment were statistically more influential. The purpose of this study was to determine which distinct factors affected a student's choice to acquire a higher level of education. The outcome of this study demonstrated that since we now understand and recognize the most influential factors, we could determine solutions to encourage students' pursuit of further education and respond effectively to any concerns they have influencing their decision not to attend college.

TYPE OF PRESENTATION: Poster

745	TITLE: Chitosan Treatment Affects Proliferation and Morphology in SKOV3 Cancer Cel	
AUTHOR: Charity A Smith	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Tamala Taylor Clarissa Durand-Rougely Julia Stone	MENTORS: E. Gloria C. Regisford, PhD Laura Carson,PhD	

ABSTRACT: Novel treatments of ovarian cancer, the deadliest gynecological disease, are currently being aggressively investigated. Previous studies have also shown that a biodegradable, non-toxic and tissue compatible derivative of chitin, chitosan, significantly lowers the proliferation of cells. Therefore, the objective of this project was to evaluate the effect of chitosan on the proliferation and morphology of SKOV-3 cells. We hypothesized that chitosan will decrease SKOV-3 cell proliferation and change the morphology of these cells in a dose dependent manner. To test this hypothesis, SKOV-3 cells were cultured and treated with 0, 100, and 500ng/ml of chitosan for a period of four days. A significant decrease in cell proliferation was observed in all chitosan treated wells in a dose dependent manner. Chitosan-treated cells exhibited major differences in morphology compared to control SKOV-3 cells. These data suggest that treatment with chitosan decreases cell proliferation and may be an alternative, non-toxic treatment for ovarian cancer, which may lead to improved survival rates.

TYPE OF PRESENTATION: Poster

746	TITLE: Ozone Alters Mammalian Cardiovascualr Physiological Parameters	
AUTHOR: Rejeana M Stephens	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Laura Alexander	MENTORS: Dr. Carlos Garcia	

ABSTRACT: OZONE ALTERS MAMMALIAN CARDIOVASCUALR PHYSIOLOGICAL PARAMETERS R. Stephens, L. Alexander, and C. Garcia Texas A&M University - Kingsville Purpose. To examine physiological acute and chronic time-dependent ozone (O3) exposure effects in the heart rate, respiratory rate and arterial oxygen saturation of Long Evans Hooded rats. Methods. Cardiovascular parameters were measured using a Rodent Ox apparatus (StarrLife Sciences) in age and sex-matched controls and rats exposed to 0.4 ppm O3 for 4 hours/day for 7-28 days. Results. The heart rate increased by 30% after the first exposure day, while the respiratory rate increased by 79% with subsequent decreases toward the control values. The arterial oxygen saturation dropped from 98% on day one to 92% on day 28. Conclusions. These data reveal that:

1) acute and chronic ozone air pollution alters the cardiovascular system of mammals, 2) the acute impact of ozone is larger as compared to the chronic effect, 3) data suggests the mammalian cardiovascular system temporally compensates to 0.4 ppm ozone exposure, and 4) populations living in air polluted environments are at risk of developing negative cardiovascular changes that may result in heart disease or ischemic cerebral accidents particularly in individuals with cardiovascular disease risk factors.
TYPE OF PRESENTATION: Poster

747	TITLE: Starving Cichlids: The Proximate Regulation of Appetite in Cichlid Fishes	
AUTHOR: Daniel R Vera	Undergraduate Level	Texas A&M International University
AUTHOR(S): Victor Almanza	MENTORS: Michael Kidd	
ABSTRACT: The factors that regulate appetite in vertebrate animals are poorly understood. Mouthbrooding cichlid species face an unusual challenge in suppressing their normal pattern of foraging during the 2-week gestation period. In order to identify the proximate mechanisms regulating female foraging behavior, we examined changes in foraging patterns across the reproductive cycle in the East African cichlid species Astalotilapia burtoni. We have found that female foraging changes significantly over the course of the reproductive cycle with a peak in foraging occurring 8 days prior to spawning as well as a sudden cessation of foraging on the day of spawning. We further attempt to correlate these changes in foraging pattern with circulating levels of endogenous estradiol, testosterone, progesterone and prostaglandin F2alpha.		
TYPE OF PRESENTATION: Poster		

Physical Science

800	TITLE: New Organic Semiconductors for Next Generation Electronic Devices	
AUTHOR: Santhikala Akkisetty	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Sajid Bashir	MENTORS: Xiaoliu Chi	
ABSTRACT: The thin film silicon technology makes televisions and monitors thinner and thinner. With organic semiconductors, the displays can not only be even thinner, but also flexible. For organic molecules to be successfully used as semiconductors for electronic device, the molecules need to interact with each other, so that the electrons can pass through the solid easily. We recently designed and synthesized a new organic semiconductor-5,6,11,12-tetrachlorotetracene. This compound was crystallized in gas phase, and our measurement indicates that it is a high performance organic semiconductor (with mobility over 2 cm/V.s). In this poster, we will show why we designed this molecule and how it was synthesized. The crystal structure will be presented, and the physical measurement will be discussed.		
TYPE OF PRESENTATION: Poster		

801	TITLE: Structures of Rhenium(V) Polyhydride Compounds	
AUTHOR: Geetha Birudala	Master's Level	Texas A&M University - Kingsville
AUTHOR(S): Siva Edgupanti Sudeepa Gorre	MENTORS: Gregory A. Moehring	

Physical Science

ABSTRACT: Previous work in our group has identified the presence of rotational isomers for a small series of rhenium(V) polyhydride compounds stabilized by an aromatic amine ligand. We believe that the rotational isomers arise from p-donation of the rhenium(V) lone pair of electrons to the p* system of the aromatic amine system. The observation of these rotational isomers, by low temperature 1H and 31P NMR spectra was the first indication of the importance of the rhenium(V) lone electrons for the stability of such compounds. The observation of rotational isomers suggested further work on the characterization of related rhenium(V) compounds might be productive. Our efforts, in this work, focused on the preparation of rhenium(V) polyhydride compounds stabilized by a chiral aromatic amine and the preparation of a series of other, related, rhenium(V) polyhydride compounds. Such compounds were prepared and then characterized by variable temperature NMR spectroscopy in order to better determine the structural behavior of such eight coordinate, pseudododecahedral compounds. Variable temperature NMR results indicated that, among other things, a chiral compound was prepared through the reaction of rhenium(VII) heptahydridobis(triphenylphosphine) with a chiral aromatic amine, an iodide ligand adopts an A site, favored by anionic ligands, rather than a B site, favored by sterically demanding ligands, in such eight coordinate compounds, and observation of the presence of rotational isomers through resonances associated with a substituent on the aromatic amine ligand. Subsequent acidolysis reactions were also examined for such rhenium(V) polyhydride compounds.
TYPE OF PRESENTATION: Poster

802	TITLE: No Title Submitted		
AUTHOR: Siva Edpuganti		Master's Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS:	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

803	TITLE: Synthesis of Rubrene Derivatives for making Organic Electronics		
AUTHOR: Satyanarayana Ghanta		Master's Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS: Dr. Xiaoliu Chi Dr. Greg Moehring	
ABSTRACT: Organic semiconductors are promising towards making low cost, thin and flexible displays. The key parameter for organic molecules, to be a successful material for electronics is charge mobility. It has been suggested that molecules packing in a stacking pattern is important in realizing a high mobility. Rubrene is one of the few organic molecules that stack in the solids, and at present,which gives the highest electron mobility among all organic semiconductors. We have designed a series of rubrene derivatives whose molecules may stack in the solids, and therefore they have the potential to give similar or even higher mobilities than rubrene. Recently we have synthesized some of the proposed molecules, and their molecular structures were characterized by various techniques, including NMR and MS, etc. In this poster, I will show the synthetic procedures for making these molecules, together with the chemical characterizations. A few crystal structures will also be shown.			

TYPE OF PRESENTATION: Poster

804	TITLE: No Title Submitted		
AUTHOR: Sudeepa Gorre		Master's Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS:	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

805	TITLE: Cleaving Proteins in Zwitterionic Detergents Using Palladium (II) Complexes	
AUTHOR: Porntip Leeprapaiwong	Master's Level	Texas A&M University - Commerce
AUTHOR(S): Amy Davis Tam T. Phan Charlotte MacInnes	MENTORS: Nenad M. Kostic Laurence A. Angel and Frank Miskevich	
ABSTRACT: The study of protein structure and folding can be accomplished by analysis of fragmentation products. While there are several known proteases that can digest proteins by hydrolytically cleaving the peptide bonds that link individual amino acids together, a synthetic protease - palladium ethylenediamine di-aqua complex: [Pd(en)(H2O)2]2+, has particularly useful application as a proteolytic enzyme because it is able to selectively cleave one amino acid upstream from its anchoring sites: methionine and histidine residues. Membrane bound proteins tend to pose a problem for common proteases because detergents, which are used to isolate these proteins, tend to denature proteolytic enzymes. However, this is not the case with the palladium (II) complexes. Another distinctive feature of this cleaving reagent is its ability to cleave partially soluble proteins, such as ß-Casein, in the presence of detergents. This hydrolytic cleavage study with palladium (II) complexes was done with a molar ratio of 2:1 palladium (II) reagent to bovine protein concentrations at a pH of 2 in the presence of fairly low CHAPS or Zwittergent 3-14 detergent concentrations and an incubation temperature of 55° C. The binding efficiency and digested protein solutions were analyzed using ESI-Q/TOF tandem mass spectrometry. The spectral data gathered from recovered fragmented pieces were identified by denovo sequencing and comparison of peptide fragments was done on Uni-Prot database searching using PEAKS - a proteomic database software. At the moment, the aim of the study is to optimize protocols which we hope to use to effectively cleave and recover fragmented pieces for identification using mass spectrometry and a proteomic database software known as PEAKS.		
TYPE OF PRESENTATION: Poster		

806	TITLE: No Title Submitted	
AUTHOR: Feyisayo O Akindoju	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS:	

ABSTRACT: No Abstract Submitted
TYPE OF PRESENTATION: Poster

807	TITLE: Double Diastereoselective Nucleophile-Catalyzed Aldol-Lactonizations		
AUTHOR: Kevin M Arendt		Undergraduate Level	Texas A&M University
AUTHOR(S):		MENTORS: Daniel Romo Kay Morris	
ABSTRACT: Natural products have historically been excellent leads for novel drug discovery. However, the quantities that can be obtained from natural sources are rarely, if ever, sufficient for further biological studies. Thus chemists are constantly searching for new synthetic strategies which are more selective for the desired product. My current research involves developing a synthetic strategy that involves setting not only one but two stereocenters with high stereoselectivity, utilizing a process called double diastereoselectivty. Chemists have often used this strategy with certain chiral catalysts that override the inherent stereochemical bias of the chiral substrate to yield the desired stereoisomer. Previous work in our group has demonstrated that cinchona alkaloids act as catalysts and drive the reaction to preferentially form one enantiomer over another when employing achiral substrates. Our group is currently in the process of applying this strategy to the Nucleophile-Catalyzed Aldol-Lactonization (NCAL) reaction, developed in the Romo group, to produce a class of organic molecules known as ß-lactones. The ß-lactone moiety has been shown quite successfully to be a useful intermediate in natural product total synthesis as it can easily be transformed into a number of different functionalities. We seek to use these strategies to develop a synthetic scheme which would proceed in fewer steps and override the inherent facial selectivity of the substrates to afford effective and efficient total syntheses of various natural products.			
TYPE OF PRESENTATION: Poster			

808	TITLE: Using Hydrogeologic Models as a Learning Tool for Sedimentology Students		
AUTHOR: Ruben Cano		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS:	
ABSTRACT: The ability to think in 3-dimensions is useful in the study of sedimentary geology. Students struggle with this concept, especially when trying to visualize the lateral correlation of lithologic units in the subsurface. This research is based on a previous project, in which 3-dimensional hydrogeologic models were created based on 13 ideal fluvial architectures. These fluvial architectures were presented in a textbook by Dr. Andrew D. Miall titled, The Geology of Fluvial Deposits: sedimentary facies, basin analysis, and petroleum geology. These models were created in the Groundwater Modeling System (GMS) to improve on current methods of model creation but mostly to serve as a learning tool for sedimentology students. These 3-dimensional models allow a student to look at sedimentary facies layer by layer, isolate sedimentary units, make cross sections, and create fence diagrams. As a supplement to the models reports have been written identifying and describing characteristic features and structures. In addition, boreholes have been created from the models and the ideal stratigraphic sequences have been identified.			
TYPE OF PRESENTATION: Poster			

809	TITLE: Synthesis and Characterization of Bismuth Selenide Nanowires		
AUTHOR: Janie De Santos		Undergraduate Level	TAMU - Corpus Christi
AUTHOR(S): Meenakshi Singh		MENTORS: Dr. Mingliang Tian Dr. Moses Chan	
ABSTRACT: Bi2Se3 is one of the binary end members of the (Bi,Sb)2(Te,Se)3 family of thermoelectric materials. Decades of work in the chemistry, physics, and processing of these materials have led to complex formulations of compounds and microstructures optimized for use as thermoelectrics (such as cooling and power generation) under various conditions. Recent study is motivated by the theoretical prediction that p-type Bi2Se3-based material is one of the prime candidates for the study of topological surface states. The character and stability of the surface states in Bi2Se3 at room temperature has motivated the suggestion that they may be useful for not only thermoelectronics but quantum-computing applications. The purpose of this project is to produce high quality single-crystal Bi2Se3 nanowires and study their electrical transport properties in low temperatures. An existing method for crystal bismuth selenide nanowires growth involves a complicated protocol therefore this research attempts to develop a method to grow single crystal bismuth selenide nanowires using the simple and inexpensive template-based electro deposition method. For the growth of semiconducting materials a number of aqueous solutions were reported. In this research we use DMSO organic solvents with various Bi/Se ratios and grew the nanowires under different deposition potentials. Characterization of the wire structure using XRD and imaging of the wire morphology using SEM/TEM are underway. Further study will include studying the physics of the nanowires by measuring their electronic transport properties at low temperatures.			
TYPE OF PRESENTATION: Poster			

810	TITLE: Characterization of Age-related teeth Structural Changes		
AUTHOR: Jose E Garza		Undergraduate Level	Texas A&M International University
AUTHOR(S): Alissa Garza		MENTORS: Dr. Qingwen Ni	
ABSTRACT: A technique of low-field pulsed proton nuclear magnetic resonance (NMR) spin relaxation is described for assessment of age-related structural changes (dentin and pulp) of human teeth in vitro. The technique involves spin-spin relaxation measurement and inversion spin-spin spectral analysis methods. The spin-spin relaxation decay curve is converted into a T2 distribution spectrum by a sum of single exponential decays. The NMR spectra of the extracted dentin portion and dental pulp cells from the teeth were compared with the whole extracted teeth, respectively, for the dentin and pulp peak assignments. While dentin and pulp are highly significant parameters in determining tooth quality, variations in these parameters with ages can be used as an effective tool for estimating tooth quality. Here we propose an NMR calibration method – the ratio of the amount of dentin to the amount of pulp obtained from NMR T2 distribution spectra can be used for measuring the age-related structural changes in teeth and eliminating any variations in size of teeth. Eight teeth (third molar) extracted from human, ages among 17 – 79 years were tested in this study. It is demonstrated that the intensity ratios of dentin to pulp are sensitive changes from 0.48 to 9.8 approaching an exponential growth with ages. This indicates that the age-related structural changes in human teeth can be detected using the low-field NMR technique.			
TYPE OF PRESENTATION: Poster			

811	TITLE: Preparation and partial reconstruction of Polyptychodon hudsoni skull		
AUTHOR: Melissa A Hidalgo		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS: Dr. John Buckley	
ABSTRACT: Polyptychodon hudsoni, a member of the Plesiosauria order, lived during the upper Cretaceous period (89.3-93.5). The shale matrix in which this specimen was found is of the Turonion stage. The process of preparing the skull of Polyptychodon hudsoni involves the meticulous task of removing the matrix of shale surrounding the fossil. This was conducted by the use of tools such as pneumatic drills, rotary tool, dental picks, chisels, hammer and various types of brushes. In order to protect and stabilize the skull, the use of consilidants and adhesives is important. Techniques such as immersing fragments of the skull in water so that the matrix could be softened was used often in the process.			
TYPE OF PRESENTATION: Poster			

812	TITLE: Spatial Analysis of the Edwards Reef in North-Central Texas		
AUTHOR: Richard A Hodges		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Michael Schneider Alan Hodges Alexandra Breeding		MENTORS: Thomas McGehee Dan Jackson	
ABSTRACT: Outcrops of the Edwards Reef in North-Central Texas are examined to understand the economic potential of the subsurface oil, gas, and water reservoirs in the Edwards's limestone in Central and South Texas. Identification of the core, flank, and inter-reef elements of the Edwards Formation was established through a literature study, petrographic examination, and outcrop examination of a type section of the Edwards formation in North-Central Texas. Thirty six thin-sections were prepared, examined, and described from samples collected across the face of the outcrop. A comparison of the Edwards Formation was made between our examination of the rocks located at 97° 53' 12" W, 32° 10' 30" N and the outcrops examined in previous studies by Henry F. Nelson in "The Edwards Reef Complex and Associated Sediment in Central Texas". Remote sensing images and topographic maps were georeferenced in order to distinguish the ridge forming characteristics of the Edwards formation between the two study areas. The porosity is highest in the reef flank deposits where most of the micrite is removed by wave action. Limestone in the inter-reef and reef core limestones has limited porosity because of the concentration of micrite mud in the pore spaces			
TYPE OF PRESENTATION: Poster			

813	TITLE: Anion Recognition Properties of a Chiral Amino Acid Appended Porphyrin		
AUTHOR: Hikma Jemal		Undergraduate Level	Texas A&M University - Commerce
AUTHOR(S): Eli Hunt Stephen Starnes		MENTORS: Stephen Starnes	
ABSTRACT: Synthetic anion receptors may have numerous biological and environmental applications due to the abundance of anions in biological and environmental systems. Porphyrins are ideal for anion receptor design mainly due to their spectroscopic and electrochemical properties. We report here the			

synthesis and recognition properties of a chiral porphyrin receptor for chiral anionic guests. The key structural feature of the synthetic receptor centers on the functionalization of one porphyrin meso position with a chiral anion recognition moiety - an enantiomerically pure amino acid, in this case phenylalanine. Metallation of the porphyrin provides an additional binding site. The recognition properties of the host with chiral anionic guests such as amino acids and carboxylates will be reported.

TYPE OF PRESENTATION: Poster

814	TITLE: Development of Methodologies for the Modeling of Fluvial Aquifers using GMS	
AUTHOR: Paul R Laraway	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Billy Hales Alexandra Breeding Paul Laraway	MENTORS: Dr. Thomas McGehee	

ABSTRACT: Traditionally, groundwater modeling software tools such as GMS/FEMWATER assert laterally continuous, stacked layers. While this approach has provided acceptable results for projects where groundwater is a peripheral component, it is not compatible with many subsurface geometries and does not meet the rigorous demands placed on groundwater modelers. Recently, groundwater modelers have been tasked to simulate the fate and transport of contaminants. Scenarios such as these require a more detailed subsurface geometry than previous models. The primary research focus is to develop a set of procedures that compensate for the inherent weakness of the GMS/FEMWATER modeling process. Idealized fluvial landforms were used in the creation of these procedures to create a baseline from which further work can be calibrated and tested against. The results of this phase of research include not only a more accurate representation of a fluvial aquifer, but produce a set of tools and guidelines that can be adapted for future hydrogeologic modeling.

TYPE OF PRESENTATION: Poster

815	TITLE: Glacial Shrinkage in Mongolia's Altai Mountain Range as a Climate Indicator from 1988 to 2000 using Satellite Remote Sensing	
AUTHOR: Joe N Martinez	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): David Smith	MENTORS:	

ABSTRACT: Since the 1940's through the 1960's, studies have shown shrinkage of Mongolian glaciers located in the Altai mountain range. Four regions in this area, the Tsambagarav massif, Kharkhiraa massif, Turgen massif, and the Tavan Bogd region have shown a 10 to 30 % decrease in area loss due to climate change. The Tsambagarav massif has lost the most area with a 28.8% decrease in the shortest time. The data shows that the rate of loss is related to the glacier types. Flat top glaciers are more sensitive to equilibrium-line-altitude (ELA); this includes the Tsambagarav massif and the Kharkhiraa massif. Valley type glaciers are more resistant to these temperature changes as studies shown done by Beniston and Rebetez. An increase of 3o degrees in temperature can result in a 10% loss of glacial area. This drastic loss can be related to the sensitivity of the cryosphere in high latitude and altitude areas. This snow ball effect changes precipitation and snowfall coverage, hence changing the water cycle causing runoff due to melting of permafrost. Although there has been a loss in area, the Mongolian glaciers remain stationary unlike other types of glaciers. As stated before, glacial extent is very sensitive to climate change. Moreover, the last two decades have been the time period in which increased climate has changed

patterns the most. This study monitors glacial extend of the Tsanbagarau glacier from 1988 to 2000 employing Landsat TM and ETM+ data.
TYPE OF PRESENTATION: Poster

816	TITLE: Splitting Hairs: Developing An Ocelot Hair Steroid Methodology	
AUTHOR: Arielle McEwin	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Deborah Frip Dr. Gerald Binzcik	
ABSTRACT: This project determined whether the method used to pulverize ocelot hair samples affected steroid extraction and accordingly enzyme immunoassay results. Three unique hair sample pools were created using 1) male hair samples only, 2) female hair samples only and 3) mixed male and female hair samples. Each pool was be a) finely minced with an herb knife (1/3 of pool), b) minced with the knife and then ground by a mortar and pestle (1/3), and c) minced with the knife and then pulverized by a ball mill (1/3) by Retsch Inc. (Newtown, PA). Time to complete each method was tracked. Each pool/portion was then extracted and assayed in replicate for cortisol and testosterone content. The pulverization methods were compared by examining their effect on sample yield and variability. It was anticipated that milling would produce the most favorable results, grinding with mortar and pestle was next best and mincing – the most commonly used method because of its simplicity and low cost – was be last in performance.		
TYPE OF PRESENTATION: Poster		

817	TITLE: Characterization of Human Bone Quality by Nuclear Magnetic Resonance	
AUTHOR: Ricardo Medrano	Undergraduate Level	Texas A&M International University
AUTHOR(S): Sonya Anzaldua	MENTORS: Dr. Qingwen Ni	
ABSTRACT: Nuclear magnetic resonance (NMR) is a property possessed by magnetic nuclei within magnetic fields and electromagnetic (EM) pulses. The nuclei will absorb the energy and radiate it back out at specific frequencies determined by the magnetic field's strength and a host of other factors. It is this radiation of energy that can be detected by devices to produce images, the exact same technology found in magnetic resonance imagining (MRI). In the field of medicine, this technique allows physicians a better image of their patients' internal workings than an x-ray could. For example, NMR can be used to study the size and distribution of pores within human compact bone because it can detect these changes within the bone structure. The pores cause the bone to become more fragile and less structurally stable. It has been suggested and studied that there is a correlation between the patient's age and the number and size of the pores in their bone samples. In essence, this means that as a person ages, their bones become more fragile and prone to breakage. The point of NMR is to be able to detect these changes so that the patient may be given proper treatment before any irreversible damage is sustained.		
TYPE OF PRESENTATION: Poster		

818	TITLE: Variations in solar activity and biological consequences for space explorat	
AUTHOR: Christine Nguyen	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Saganti	MENTORS: Saganti, P	

ABSTRACT: Monthly sunspot number and solar activity as measured from the radio flux is being investigated for the assessment of space radiation for astronauts and air-crew members. From the current solar cycle, 1997-2008 (#23) and the current predictions for 2009-2020 (#24), we assess the expected biological damage and consequences of the anticipated space travel. We present solar cycle variation from the sunspot observations based on the past solar cycles (# 22 and # 23) along with the radio flux observations (F 10.7 values). Radiation environment in space is both challenging to measure and complex to understand the consequences. There are currently several NASA funded research studies to better understand and assess the radiation damage to human explorers. Solar activity alters the radiation particle flux in space and hence the radiation damage on the living organism also varies as a function of solar cycle. In our current study we analyze the radiation variation as a function of time and assess the anticipated radiation effects on the cellular systems over the current (# 23) and future predicted (#24) solar cycle phases.	
TYPE OF PRESENTATION: Poster	

819	TITLE: Space Radiation and Biological Assessment with RBE	
AUTHOR: Dorian Price	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Dr. Premkumar Saganti	MENTORS: Dr. Premkumar Saganti	
ABSTRACT: Space Radiation and Biological Assessment with RBE Dorian Price (1) and Premkumar Saganti (2) 1. Department of Biology and 2. Depart of Physics, Prairie View A&M University, Prairie View, TX-77446 ABSTRACT To better comprehend space radiation and its detrimental damages to human explores, there have been several biological studies that present Relative Biological Effectiveness (RBE) data to quantify the damage from radiation. These biological studies present information that is needed to understand the damage caused by space radiation particles along with their energy distribution, and damage at the cellular level. Relative Biological Effectiveness (RBE) is a factor that correlates the damage by various kinds of radiation with respect to that of the damage caused by x-ray dose in causing the same damage. It is certainly a quantifiable quantity; however, it is complex and organ-specific. Due to its complexity, a simple parameter, called the quality factor (Q), is used in regulatory practice. The relative biological effects as a result of space travel are high risk particularly for oculars, tumor formation, and inhibition growth. As part of this study, we have been expanding RBE data derived from neutrons, protons, C, N, O, Si and Fe ions. We present the measured RBE from the published data during the past several decades along with the assessment of the space radiation damage at the cellular level. This research is being supported in part by NASA Grant - NNX07AL91G and NASA Co-op Agreement – NNX07AT25A (PI: Dr. Saganti)		
TYPE OF PRESENTATION: Poster		

820	TITLE: Proton and Helium Particle Flux Measurements from Ulysses 2005-2009	
AUTHOR: Arielle C Scott-Turner	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Premkumar B. Saganti Antipas Marati	MENTORS: Premkumar B. Saganti	

ABSTRACT: Biological Consequences in Space: Proton and Helium Particle Flux Measurements from Ulysses 2005-2009 Arielle Scott-Turner (1), Antipas Marati (2), and Premkumar B. Saganti (3) (1) Department of Biology and (3) Department of Physics, Prairie View A& M University, Prairie View, TX 77446 (2) Department of Biology, Northwestern University, Evanston, IL 60208 ABSTRACT Space radiation environment is both a challenging task to comprehend and a daunting experience to prepare for safe human exploration. During the next decade we expect to comprehend and enhance our understanding to secure our preparedness for future human explorations. Space radiation environment is believed to consist of up to 85% of protons (H), 14% of alpha particles (He) and approximately 1% of heavy ions (Li-Ni). As NASA prepares a human exploration for a long-term stay on the moon and deep-space human exploration including travel to mars in the near future, we explore the understanding of proton and alpha particle flux from the spacecraft Ulysses during the years 2005-2007 a typical representation of the space radiation environment nearing a low period of solar activity (solar minimum condition for the current solar cycle was during earlier part of 2008). We present Ulysses measured data of the proton and the alpha particle flux in the Galactic Cosmic Ray (GCR) environment as well as their variations and perturbations due to several Solar Particle Events (SPE). From our analyses of the data we noted that the GCR environment was very active with several SPE enhanced events in the year 2005 and included mild variations during the year 2006 with almost no GCR fluctuations in the year 2007. These observations are of significant interest for the spacecraft was at about 5 AU in the polar orbit about the Sun during the years 2005 and 2007. Earth and Mars are about 1 and 1.5 AU in the ecliptic plane about the Sun. With the continuation of these studies, we intend to expand our understanding of the biological consequences of the radiation particle flux in the context of the deep-space human explorations in near future. This research is being supported in part by NASA Grant- NNX07AL91G and NASA Co-op Agreement – NNX07AT25A (PI: Dr. Saganti)

TYPE OF PRESENTATION: Poster

821	TITLE: Synthesis and Characterizations of Chitosan Grafted Derivatives	
AUTHOR: Melisa Stewart	Undergraduate Level	Prairie View A&M University
AUTHOR(S): Cordella Kelly-Brown A. Oki Z. Luo	MENTORS: L. E. Carson E. G. C. Regisford	

ABSTRACT: Much of the contamination of the environment has been attributed to the buildup of plastics which poses a threat to animal and marine life for many years. Recently, investigators sought to replace plastics with biodegradable materials and these studies have focused on agriculturally based and petroleum-derived products like cellulose, starch, chitin , chitosan , poly(lactic acid) (PLA) , polycaprolactone and polyvinyl alcohol (PVA) . Chitosan has been investigated due to its biodegradability, non-toxicity and excellent film forming properties. The objective of this study was to chemically modify chitosan in order to assess its' potential use as bone repair material. It is hypothesized that modifying chitosan using carbon nanotubes and poly(3-trimethoxypropylsilyl methacrylate) would greatly enhance its chemical, mechanical and thermal properties. Chitosan was degraded using potassium persulfate at 70oC and the purified product was then reacted with carbon nanotubes (CNT) to form the CNT-graft-chitosan derivative. This derivative was further reacted with 3-trimethoxypropylsilyl methacrylate to afford CNT-graft-chitosan-graft- poly(3-trimethoxypropylsilyl methacrylate). The thermal stability was analyzed in a Thermogravimetric Analyzer (TGA) Q500. The structure of these grafts were examined by Scanning Electron Microscopy (SEM). Further characterization was determined by Fourier Transform Spectroscopy (FTIR). FTIR results indicated that the structural integrity was maintained. SEM data

provided evidence that the CNT had attached to chitosan and this attachment may contribute to chitosan's thermal behavior as seen in TGA data. Conclusively, chitosan was chemically modified using CNTs and poly(3-trimethoxypropylsilyl methacrylate) to afford a derivative with improved thermal stability while the structural integrity of the chitosan was maintained.
TYPE OF PRESENTATION: Poster

822	TITLE: Synthesis of an Eight Coordinate Rhenium Complex	
AUTHOR: Christopher Washington	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Gregory Moehring	
ABSTRACT: The Rhenium element has a unique ability to make up to nine different bonds. There is very little known about the elements and the bonds that they make, and it could potentially be useful in several different money saving mechanisms. Rhenium is commonly seen in a dodecahedral structure, but the position of the attached structures is not known and that is the main purpose of the research. The attached structures are found in either A sites or B sites. The A site usually has more steric hindrance and they are usually occupied by anions, while B sites have less steric hindrance and they are usually occupied by neutral ligands. Phenyl and silyl groups were added to Rhenium by new synthetic routes to see if it the structure provides any useful information since there is only two known Rhenium polyhydride silyl structures. The molecule Silyl Triphenylphosphene is a large anion so experiments and NMR spectroscopy were ran to see if the Silyl Triphenylphosphene was located in an A site or a B site. This could be essential in making new and improved rhenium related molecules.		
TYPE OF PRESENTATION: Poster		

823	TITLE: Space Radiation and Relative Biological Effectiveness (RBE) Studies	
AUTHOR: James E Williams	Undergraduate Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Premkumar B. Saganti	
ABSTRACT: Space Radiation is an expanding research field particularly in context of human explorations in the anticipation travel to moon and Mars in the near future. While on these long-term missions, human explorers run the hazard of being exposed to an extensive spectrum of radiation environment and highly energetic particles such as protons, alpha, and heavy ions. In order to better safe guard, it is imperative to study the damaging from these particles on human beings at cellular level. Relative Biological Effectiveness (RBE) is used to interpret the kind of dangerous effects that these particles will produce at cell level compared to the damage caused by simple x-rays radiation dose. We have been developing a database with research accomplishments that deal with radiation biology and RBE studies, with the potential consequence from these space radiation types of particles at cell level from several ground based studies. We present our database of published RBE values based on the National Council on Radiation Protection and Measurement (NCRP-104) and other NASA publications till to date.		
TYPE OF PRESENTATION: Poster		

Social Sciences - Humanities

900	TITLE: The effectiveness of victim-offender mediation among juvenile offenders	
AUTHOR: Yvonne E Clarke	Doctoral Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr. Elechi	
ABSTRACT: The growing use of restorative justice to resolve conflicts provides a major opportunity to bring into sharp focus the issues and variables attendant to victim offender mediation. Victim offender mediation is the oldest and most empirically grounded restorative justice intervention program. It is a process which allows crime victims to meet face-to-face with the offender to talk about the impact of the crime and to develop a restitution plan. This study explores and examines what is known from victim offender research as well as related literature about victims' willingness to participate in such meetings and its significance for criminal justice practice. A descriptive exploratory framework is suggested, drawing from restorative justice articles, criminological theories in order to stimulate further investigation of this area. Victim and offender satisfaction, recidivism restitution, compliance were selected as appropriate outcomes to measure effectiveness Specific research questions and their implications for further research are identified.		
TYPE OF PRESENTATION: Poster		

901	TITLE: Juvenile Gun Homicides among Hispanics in Los Angeles	
AUTHOR: Fay Williams	Doctoral Level	Prairie View A&M University
AUTHOR(S):	MENTORS: Dr.Sorensen	
ABSTRACT: This is a correlational research investigating the relationship between selected sociodemographic variables and juvenile handgun homicides in Los Angeles. The study utilizes secondary data obtained from the California Vital Statistics and Supplementary Homicide report. The sample consisted of 5, 354 homicides representing cases with a single offender and a single victim. The majority of the suspects were from minority ethnic groups (86%). The ethnic group with the highest proportion was the Hispanic was 46% with Blacks accounting for 35.5%. The cross tabulation and Chi square tests were done using hand gun usage as the output and statistical significance was identified at the .05 level. The Chi square result for the suspect's age (X2 = 29.028) and suspect's gender (X2=69. 216) were statistically significant. The location of the crime on the street (X2= 20.804) was also statistically significant. From the correlation matrix, Pearson's correlation. The results indicated a fairly strong negative correlation between the victim and offender of both races. The findings revealed a positive significant relationship between being of Hispanic ethnicity and handgun homicide (r=.618). Three logistic regression models were investigated with handgun homicide as the outcome measure. They revealed that the significant variables were victim's age and sex, suspect's age and sex, location of the homicide and the relationship of the victim to the alleged suspect.The R2 of all models was approximately 4% which suggests that ethnicity is not a good predictor of handgun homicide. Further research is recommended that will explore intervening variables such as access and ownership of firearm which could provide an increased understanding of factors contributing to juvenile handgun homicide among Hispanics		
TYPE OF PRESENTATION: Poster		

902	TITLE: History from the Bottom Up: Irish History in the Novels of Morgan Llywelyn	
AUTHOR: MaryK Croft	Master's Level	Texas A&M University - Commerce

AUTHOR(S):	MENTORS: Dunbar-Odom
ABSTRACT: "History is the framework, but history means nothing without the people. That's why I relate history through the medium of the novel. It's one of the best ways to get an individual personally involved with the past." Morgan Llywelyn is an American-born author living in Ireland. She writes Irish history from the viewpoint of the people, pointing out when, how, and why the Irish people were suppressed by their conquerors. I will show, through a timeline and map of Ireland, the sequence of events that changed Ireland as seen through the words of this author in her books for both children and adults. From the first invasion of Celtic peoples who traveled there from the Iberian peninsula, to "The Troubles" of the late twentieth century, Ms. Llywelyn has created a body of work that gives the reader an understanding of not only what happened, but why the Irish fought so desparately to maintain their culture.	
TYPE OF PRESENTATION: Poster	

903	TITLE: The Birth of The Sadeian Woman	
AUTHOR: Sara Flores Haynes	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: DR. D. BLACKWELL	
ABSTRACT: My research paper will consist of a sociological and historical approach on how the Marquis de Sade and his work have influenced the formation of the "Sadeian woman". Sade's reputation as a writer, libertine, and a practitioner of sodomy opened a social and cultural change in sexuality and the perception of the dominative women inflicting a new form of pain, a "Sadeian" pain. Through his writings, one could see how de Sade constituted the importance of women characters, and relatable to French society through the process of empowering her was meant to actual dethrone her. The process in which I based my observations on Sade's most famous female characters, Justine and Juliette. Their relationships to the image of women in 18th Century France, and the juxtaposition of them changing drastically through closed doors foreshadows research in the Schools of History and Psychoanalysis. By studying the text of Sade's work added to historical empowered women from he took traits to finish his, and worked reached through psychoanalysts such as Freud, one can attest and hold the thesis of this paper.		
TYPE OF PRESENTATION: Poster		

904	TITLE: Bilingual Language Comprehension: An Analysis of Homograph Disambiguation	
AUTHOR: Omar Garcia	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Roberto R. Heredia	
ABSTRACT: The purpose of this study was to investigate how bilinguals process/comprehend cross-linguistic (i.e., English-Spanish) homographs [words with two competing meanings exhibiting an orthographic overlap between languages (e.g., cases = boxes in or situations in English, and cases = marrying someone in Spanish)] and cognates [words with same meaning exhibiting a similar or partial orthographic overlap between languages (e.g., actor being the same across English and Spanish)]. This study reported results from 135 bilingual participants. In two experiments, a lexical decision task was used in which participants were presented with the critical English-Spanish homographs, cognates, matched control words (e.g., fair/hoja), filler words (e.g., hammer/oreja), and non-words (e.g., yoor/joma). Participants were to determine if a presented letter item was a legal word (e.g., beso/kiss) or a nonlegal		

word (e.g., joma/yoor) in both English and Spanish. In Experiment 1, participants were presented with the critical target words mixed with English control words, fillers, and non-words. In Experiment 2, participants were presented with the same critical stimuli as in Experiment 1; however, the critical homographs and cognates were mixed with Spanish control words, fillers, and non-words. Reaction times (i.e., amount taken to identify the critical target) were taken for each response. Results are discussed in terms of current psycholinguistic bilingual language processing and general multiple activation models of human language performance. Keywords: bilingual, homograph, cognate, language processing Keywords: bilingual, homograph, cognate, language processing

TYPE OF PRESENTATION: Poster

905	TITLE: Understanding Myths and Realities	
AUTHOR: Tanya L Hanna	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS:	

ABSTRACT: Sex offenders are viewed with utter disgust by most people, and sometimes with good reason. However, there are many myths regarding these individuals that are perpetuated by not only our own fears but also by the media. In all reality, sexual offenses are one of the least commonly occurring causes of death among children. The “stranger danger” programs that have been taught in our schools for years are actually not effective tools. While it may help a child in a few situations, sexual offenses normally occur between a child and someone he or she knows, such as a family member, friend, or neighbor. How we protect our children from these well-known and well-loved individuals we share our lives with is where our focus should be. How we can protect them from people we all should be able to trust is the problem. This poster will show quantitative as well as some qualitative information regarding sexual offenses, and the offenders themselves. It will also discuss the unequal and unjust treatment that is handed down to sex offenders by our own justice system, as well as other areas of our society. This information is vital to get out to parents and other members of society to dispel commonly held beliefs about sex offenders. If the public knew the truth, and understood the nature of the offense, we could work harder on protecting children in a different way. Additionally, we could also become actively involved as advocates to change laws that hamper the rehabilitation of sexual offenders and help them become better integrated into society. As a benefit of them becoming more integrated, they could in turn receive less harassment from society at large , get better jobs, and have a better chance at staying out of prison or even homeless shelters.

TYPE OF PRESENTATION: Poster

906	TITLE: Handedness and the Hemispheric Lateralization of Encoding Nameable Objects	
AUTHOR: Amber L Harris	Master's Level	Tarleton State University
AUTHOR(S):	MENTORS: Dr. Jason Lyons	

ABSTRACT: Hand preference has been an important factor in many neurological studies including but not limited to: the processing of mental rotation tasks, memory, self-face recognition, and language. Studies concerning the cerebral lateralization of many of these processes have yielded differences correlated with handedness. However, the effects of handedness on the processing of nameable objects have yet to be studied. In the proposed experiment, the traditional divided visual field technique will be used to

determine the effects of handedness on the processing of nameable objects. Before data is collected, participants will be asked to complete a brief handedness inventory and a questionnaire containing information concerning demographics, family history of handedness, and confounding variables that may make them at risk for exclusion from the study such as: major vision issues, substance abuse, major brain episodes or damage, and medications. One third of the nameable object stimuli will be presented to the left visual field (to be initially processed in the right hemisphere), and one third will be presented to the right visual field (to be initially processed in the left hemisphere). The remaining third will be presented to both visual fields which will allow for the assessment of bilateralization. Accuracy and latency of response will be recorded. Stimuli will be presented for 250 milliseconds or less to reduce the temptation for excessive eye movements that may compromise the nature of the presentation to separate visual fields. Additionally, participants will be asked to place their head on a chin rest distancing their eyes approximately 30 cm from the computer screen. Because it is established that handedness can affect other types of processing, it is justified to investigate whether the same holds true for nameable object recognition.
TYPE OF PRESENTATION: Poster

907	TITLE: No Title Submitted		
AUTHOR: Erica M Morales		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS:	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

908	TITLE: Ferre's Search for Identity/Puerto Rico's Search for Identity		
AUTHOR: Cindy S Schwing		Master's Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS: Dr. Michelle Johnson Vela	
ABSTRACT: One of the strongest feminist voices of the 21st century was Rosario Ferre of Puerto Rico. Known for her critique of politics, Ferre focuses on the connection between Puerto Rico's colonial status and racial and sexual colonization therein. I intend to demonstrate this common thread as seen in some of Ferre's stories such as "La Muneca Menor" and "Mercedes Benz 220 SL." She attacks patriarchal society as she addresses issues of the family and gender issues. Ferre intertwines the theme of love with politics, encourages new ways of thinking, and supports full equality in society. She conveys a search for identity which can also represent a national identity quest for Puerto Rico, as evidenced in such works as "Sweet Diamond Dust," "The Youngest Doll," and "The House on the Lagoon." University of Minnesota. Voices from the Gaps. Minneapolis, MN: June 2009. Ferre explores the subjectivity of truth and how it relates to a society that is confining to women and persons of color. Miguela, Antonia Dominguez, Puerto Rican Literature in the United States. University of Huelva, Spain: March 2007. Ferre draws attention to how women have been depicted in Western myths of femininity, focusing on the relationships between gender and class, in particular the privileged class. Her primary concern is Puerto Rican women who historically have been tied to ideas of passivity and domesticity. eNotes.com, Inc. 2009. Clearly, Rosario Ferre			

commands the attention of any woman searching for an identity, a "place," within an already established society with gender, family and racial definitions. Politics, status, equality, respect, status and acceptance are all elements that contribute to defining these parameters. Ferre passionately explores these elements as she expertly weaves them into her writings.

TYPE OF PRESENTATION: Poster

909	TITLE: Graduate Student Counseling in colonias: Challenges & Resiliency	
AUTHOR: Melanie Somerville	Master's Level	Texas A&M International University
AUTHOR(S): Amanda Aleman	MENTORS: Bonnie Rudolph	

ABSTRACT: Challenges & Resiliency 1 Abstract Graduate Student Counseling in "Colonias": Challenges & Resiliency Problem: Since 2000, Laredo, TX. has grown by 22.03 percent. "Colonias", unincorporated tracts of land not receiving city services, represent a significant proportion of this growth. Growth has outstripped mental health services and inadequate funding hampers cross-agency cooperation. Thus colonias' services are very limited. Flores and Kaplan (2009) document widespread lack of mental health resources, and barriers to care. Many homes lack electricity and running water. Roads are mostly unpaved which prohibits or handicaps resident's receipt of services. Questions: Can graduate students from the Master's Program in Counseling Psychology at TAMIU provide counseling and psycho-educational groups to residents of colonias that 1) is easily accessed by colonia residents? 2) documents and clarifies resident problems, needs and service barriers, and also identifies resident strengths and effective coping methods? 3) sustains residents' participation? 4) facilitates the healthy development of participants and their families? Pilot Design: BCFS Healthy Start Laredo funds TAMIU Community Stress Center (TAMIUCSC) graduate counseling students to provide counseling and psycho-educational group services to residents of two colonias. Services, provided at two colonia community Challenges & Resiliency 2 centers, began in July and continue until May 31, 2010. TAMIUCSC Director keeps records of attendance, supervises the students and coordinates data collection. Outcomes to Date: 1). One counseling/psycho-educational group with consistent membership has been operating since July 2009. 2) Participants report satisfaction with the group and report they have learned coping strategies from each other, and the group leaders. 3) Group leaders have identified strengths and resiliency among participants, as well as problems and needs. 4) A group has met at another colonia, but membership is low and sporadic. 5) We are investigating the differences between these two colonias to identify service barriers and enhance utilization.

TYPE OF PRESENTATION: Poster

910	TITLE: Implications of an Undefined Pause Duration in Suprasegmental Measures Used	
AUTHOR: Tonia A Taherzadeh	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Salvatore Attardo Lucy Pickering and Marcella Corduas	

ABSTRACT: Prosodic features can be used to assess non-native speaker proficiency levels for placement purposes. Several of the prosodic features used to determine proficiency are affected specifically by pause length and pause duration, including articulation rate, mean length of runs, phonation time ratio, mean length of silent pauses, and pace. At present, there is no established cutoff point differentiating a cognitive pause to be included in formulas from an articulatory pause, which serves no function in speech.

The most commonly accepted cutoff points for a pause unit range from 100 ms (Griffiths 1991) to 250 ms (Goldman-Eisler 1958). This study was designed to determine if there is a significant variation in suprasegmental measures when calculated with three different pause cutoff points in this range. Using spectrographic analysis, we analyzed 120 speech samples from NNSs. The samples were approximately 60 seconds in length, and were recorded during ETS listening and reading comprehension tests. Each sample was analyzed to measure the duration of all pauses. The suprasegmental measures, including AR and pace, calculated with pause measurements were calculated using cutoff points of 100 ms, 200 ms, and 250 ms. Results demonstrated significant variation in the data between each of the three cutoff points, indicating the pause based prosodic measures are affected by pause durations. The broader implications suggested by the study are that using pause-based suprasegmental measures could lead to questionable conclusions without further research into standardizing pause duration.

TYPE OF PRESENTATION: Poster

911	TITLE: Webb County Teen Pregnancy		
AUTHOR: Victor Trevino		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS:	

ABSTRACT: The issue of teenage childbearing not only affects the larger spectrum of the population but foremost, this particular social incident exerts tremendous influence, directly and indirectly, on the adolescent mother as well. As with any other social dilemmas, adolescent pregnancy and teen childbirth have long been subjects of concern and social importance. Recently, most research and statistical analyses have focused mainly on socioeconomic status as the main variable that correlates with school-age pregnancy. The data that was analyzed shows that the issue of teenage childbearing in Webb County has been and still is one of serious consideration, for government representatives, school officials, the general public, and, particularly, the individuals which it affects. Today, an estimated one million teenage pregnancies occur per year in the United States, thus, producing the highest rate of live births to females under age 20 among the developed Western countries (Vincent & Dod, 2001: 191). Nationally, Hispanic rates per thousand females aged 15-19 were 80 in 1986, increased to 107 in 1991, and then decreased slightly to 100 per thousand in 1995 (Berry, Shillington, Peak, & Hohman: 2000, 81). Since 1994, Hispanic teens have had the highest adolescent birth rate among the major racial/ethnic groups in the United States and for the year 2000, the birth rate for Latino females fifteen to nineteen years old was 94.4 per 1,000, nearly double the national rate of 48.7 per 1,000 (Valdez, 2004: 99). Recent reports indicate that, among Hispanics, the proportion of new mothers under 17 is 7.1% (Berry, Shillington, Peak, & Hohman: 2000, 80). According to statistical data provided by the Texas Department of Health, the percentage of adolescent mothers, between thirteen and seventeen years of age, giving birth in the Webb County area is 7.7 % and the overall percentage for the state of Texas is only 6.4% (1998). In 2002, the percentile for teen births in Webb County was 7.3% and, for the overall state, the proportion was 5.2% (Texas Department of Health, 2005). Despite the drop in percentiles, the number of teen births in Webb County has increased 106.2% from 1998 to 2002. This increase prompted me to find a correlation between several variables that might have influence on the rate of teenage births in Webb County. The purpose of this research is to show the correlation between several independent variables, including poverty within a household, the absence of a parent within a household, and the overall poverty rate. After the original preliminary statistical analysis, the primary independent variable tested was the educational level achieved by the teenage mother and its correlated effect on teen births.

TYPE OF PRESENTATION: Poster

912	TITLE: Views of Death and Dying	
AUTHOR: Ella M Zavala	Master's Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Laura C. Garza	
ABSTRACT: Views of death and dying have been in existence since the beginning of time. The way people have viewed death and dying has not changed much in past years. There are several contributing factors to views of death and dying. Some of those factors include race, culture, age, marital status and gender. The study was based on thirty-four Caucasian and Hispanic older adults found in different churches and recreational vehicle parks in South Texas. The self-constructed survey on views of death and dying was filled out by the participants. Statistical significance was found between marital status and spirituality. The results of marital status and spirituality showed divorced people having less spiritual belief or have less influence from their spirituality. Statistical significance was also found between gender and ethnicity. The findings on gender and ethnicity showed that men are more ethnic than women. Men may also be more likely to talk about death or feel more comfortable dealing with their ethnicity in regards to death and dying. The data was analyzed using an Analysis of Variance through the Statistical Package for Social Sciences.		
TYPE OF PRESENTATION: Poster		

913	TITLE: A Revealing of the Early 20th Century Feminist Authors	
AUTHOR: Vanessa A Almazan	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Katrina M. Alejandro	MENTORS: Michelle Johnson Vela	
ABSTRACT: Rosario Castellanos of Mexico and Alfonsina Storni of Argentina were writers of the early 20th century. These Latin American women were writers with a cause, a vision and a dream; a dream for themselves and a dream for future generations of Latin women. Virgina Woolf and Helene Cixous were also feminist writers of the early 20th century with a dream and a cause. These women however, differ from Castellanos and Storni in the way that they are women of English descent, not Latin. During the time of their publications women weren't as liberated in expressing neither their emotions nor their views, but through writing this was their voice, this was their hope. The words of these women's literature spoke volumes, and not only did they write with the hope of finding freedom from their broken past, situations or of fear of their future, they wrote of hope for all women. Although these feminists of different parts of the world and different ethnicities have many differences from each other, they have just as many similarities. While analyzing these women we discovered their eccentric and astonishing similarities that they had and one which also led them to their identical death.		
TYPE OF PRESENTATION: Poster		

914	TITLE: Course Delivery Designs and Their Effects	
AUTHOR: Braden A Bozer	Undergraduate Level	Tarleton State University
AUTHOR(S):	MENTORS: Dr. Pati Hendrickson	

ABSTRACT: With the current movement to get more college classes online at Tarleton State University, research needed to be conducted to get a better idea of the differences between classroom deliveries. This research focuses on the available resources for students, the amounts that students use the resources provided to them, and the levels of cheating. The formal problem statement for this research was: What is the relationship between class delivery and their effects among students at Tarleton State University in spring 2009? Primary research questions addressed how classroom environments impacted various aspects of students' learning experiences. Levels of student cheating and student assistance, and course grades were among effects measured. Quantitative data gathered from a sample of 101 students revealed no significant differences between course delivery (i.e., face-to-face instruction, ITV, and on-line classes) and cheating or course grades: however, students in face-to-face lecture classes did receive more assistance and have more resources available to them than did students registered in ITV or on line courses.

TYPE OF PRESENTATION: Poster

915	TITLE: No Title Submitted		
AUTHOR: Natalie M Elizondo		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS:	
ABSTRACT: No Abstract Submitted			
TYPE OF PRESENTATION: Poster			

916	TITLE: Relationship between obesity and breast cancer		
AUTHOR: Rachel Gitahi		Undergraduate Level	Tarleton State University
AUTHOR(S): Lilian Gisiora		MENTORS: Dr. Marilyn Duran	

ABSTRACT: According to the American Cancer Society, breast cancer is the most commonly diagnosed cancer in women in the United States (US). The American Cancer Society also reports that approximately 192,370 new cases of invasive breast cancer will occur in 2009. It is also predicted that there will be 40,160 breast cancer deaths in 2009. Some risk factors associated with breast cancer include increasing age, family history of breast cancer, hormones, smoking, alcohol use, lack of physical activity, and obesity (American Cancer Society, 2009). Purpose: The purpose of this research study was to explore any possible relationship between obesity and breast cancer. Methodology: A meta-synthesis of research studies that included evidence based articles and current data from the American Cancer Society were reviewed. Searches were done on CINAHL, PubMed database and articles were obtained from the American Cancer Society webpage. The articles had to be in English and the search terms used included "breast cancer", "obesity", "physical activity" and "risks". Results: Results from the research studies indicate that there is a strong relationship between obesity and breast cancer. According to results from a research study article that involved 7,523 elderly menopausal women, higher percentage of body fat, larger waist circumference, higher body mass index (BMI), greater weight, and greater weight gain in adulthood are associated with higher incidences of breast cancer (Krebs et al, 2006).

TYPE OF PRESENTATION: Poster

917	TITLE: Is there a relationship between oral contraceptives and blood clots?	
AUTHOR: Kelly D Hall	Undergraduate Level	Tarleton State University
AUTHOR(S): Miriam Rodriguez	MENTORS: Dr. Marilyn Duran	
ABSTRACT: Introduction: Oral contraceptive is a common form of birth control used among females. It is estimated that more than 100 million women of reproductive age, currently use oral contraceptives (World Health Organization, 2005). Although, it is the most used form of birth control, the side effects that have been related to oral contraceptives have been found to be very harmful to females over time. Studies have shown that females taking oral contraceptive have a higher chance of developing blood clots. Blood clots can cause serious health complications and may even result in death. Not all women who take oral contraceptives will develop blood clots. Women taking a lower dose of the oral contraceptive show low or no risk for developing blood clots (Vlieg, A.V., Helmerhorst, F.M., Vandenbroucke, J.P., Doggen, C.J.M.,& Rosendaal, F.R., 2009). Purpose: The purpose of this research study is to identify known risk factors in females taking oral contraceptives and the development of blood clots. Methods: A meta-synthesis of research studies including randomized controlled trials were reviewed. Articles were retrieved using the databases CINAHL, Medline, Cochrane and Science Direct. Key words used were oral contraceptives, thrombosis, and blood clots. Results: Through our preliminary research, we found that there is a relationship between oral contraceptives and blood clots. Research shows that an estimated 2-3 per 10, 000 women develop blood clots annually (Johnson, et al, 2008). Although this estimated number is minute it is significant because blood clots can be fatal.		
TYPE OF PRESENTATION: Poster		

918	TITLE: European Union Integration and Development of an Identity	
AUTHOR: Laura J Hayes	Undergraduate Level	Texas A&M University
AUTHOR(S):	MENTORS: Dr. J. Robertson	
ABSTRACT: This project aims to explore the prospects of EU expansion in terms of both widening and deepening. Through the developement of a European identity and embrace of certain "European" identity marker, the bounds and barriers of the EU are tested.		
TYPE OF PRESENTATION: Poster		

919	TITLE: Impact of Ghrelin and Cocaine on Intracranial Self-Stimulation	
AUTHOR: Tracey C Kniffin	Undergraduate Level	Texas A&M University
AUTHOR(S):	MENTORS: Dr. Paul Wellman	
ABSTRACT: Ghrelin is a 28-amino acid peptide that is secreted in the peripheral and central nervous systems and has been observed to correlate with hunger. Additionally, ghrelin is the only gut hormone known to stimulate food intake. Psychostimulants induce locomotion and augment reward-seeking behavior. Recent studies have examined the effects of ghrelin on locomotion when paired with cocaine and report its augmenting effect; however, neither the effects of ghrelin nor the effects of a combination		

of ghrelin and cocaine on reward-seeking behavior have been examined. In the present study, we examine the effects of systemic injections of cocaine, ghrelin, and a pairing of both on rate-frequency curves obtained during intracranial self-stimulation (ICSS) of the medial forebrain bundle (MFB). Rats are run in 75 minute sessions, consisting of five 15 minute passes; during each pass, the intensity is lowered each minute from 141 Hz to 28 Hz (decreased in 0.05 log units). Each rat runs multiple trials and is injected with either vehicle (0.5 ml saline), cocaine (0, 1.25, and 5.0 mg/kg), ghrelin (0, 5, and 15 nmol), or a combination of ghrelin and cocaine (5 nmol ghrelin and 1.25 or 5.0 mg/kg cocaine). The dose-dependent effects of these trials will be analyzed by examining the shift in threshold as compared to a baseline graph of ICSS responding. We expect an increase in reward-seeking behavior after administration of both ghrelin and cocaine and a greater increase after the combination of both. Dopamine plays a critical role in reinforcement and is known to exist in neurological reward pathways, such as the ventral tegmental area (VTA) and the nucleus accumbens. Since ghrelin exists in these two areas, there may be a common pathway shared by the rewarding aspects of food and psychostimulants that may lead to obesity and drug abuse, respectively.

TYPE OF PRESENTATION: Poster

920	TITLE: When the Fan Group Grows: Implications for Personal Emotions and Fandom	
AUTHOR: Jason Lloyd	Undergraduate Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Stephen Reysen	

ABSTRACT: Previous research has found that fanship (personal identification with a fan interest) is an empirically distinct construct from fandom (social identification with others fans of the same interest). In one study (N = 60) we examined the effects of a change in fan group size on personal emotions and fandom. Participants were asked to imagine that their favorite small band either (1) attracted a greater amount of fans, (2) saw a reduction in the amount of fans, or (3) no change in the quantity of fans. Fans expressed greater anger toward the fan interest when the band grew compared to when the fan group size did not change. Similarly, fans expressed greater positive emotions when the group size did not change compared to when the group grew or shrank. Fans expressed the lowest fandom when the group grew when contrasted with participants who imagined that the group shrank or did not change in size. The relationship between growth of the group (compared to no change) and decreased fandom was mediated by the reduction in positive emotions. The relationship between fanship, fandom, entitativity, and collective happiness were found to be positively correlated (regardless of whether participants were active members in a fan club or not). This latter result suggests that fans perceive themselves to be members of a group even when they are not. Implications for past research examining fanship and fandom are discussed.

TYPE OF PRESENTATION: Poster

921	TITLE: Illegal Immigrants Detained: Just or Injust?	
AUTHOR: Krystle A Lopez	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS:	

ABSTRACT: A new current trend in the United States has been illegal aliens detained for crimes committed and for asylum issues. The illegal aliens from Mexico are detained in the prison system in the United States for various reasons. There are several key problems with this system. For one, there are government grants and bills being provided to create more jails and detention centers to house these immigrants. Americans' tax money is funding illegal immigrants to be held in the jail system for long periods of time. Secondly, the act of jailing these individuals creates a degrading image of illegal immigrants that come from Mexico. The media portrays Mexican illegal immigrants as the problem of the United States. Lastly, the creation of more jails is adding to the problem instead of taking an active approach to find a real economical solution. This presentation will demonstrate the current situation in the United States of America concerning Mexican illegal immigrants in detention centers and jail systems while attempting to present an economical solution.

TYPE OF PRESENTATION: Poster

922	TITLE: Alcohol Use among Greek Affiliated Students at Tarleton State University	
AUTHOR: Jessica McCurry	Undergraduate Level	Tarleton State University
AUTHOR(S):	MENTORS: Dr. Pati Hendrickson	

ABSTRACT: The purpose of this research is to analyze the relationship between alcohol use and involvement in a Greek organization among students at Tarleton State University in the spring of 2009. Twenty- two Greek affiliated students were given questionnaires about their alcohol use history, present alcohol use, and alcohol's relation to their Greek organization. Members of Pan-Hellenic, IFC, IGC, and locally based organizations were surveyed. Results from the questionnaires showed that alcohol use did not increase after affiliation with a Greek organization as hypothesized. Results also showed that students who took on leadership roles within their organization reported a decrease in alcohol use, or their alcohol use remained the same. It was also found that a large percentage of respondents said there were consequences for irresponsible and illegal behavior within their organization.

TYPE OF PRESENTATION: Poster

923	TITLE: An Analysis of Pre-Natal Health Care for Low Income Women: The Case of Came	
AUTHOR: Michelle Rico	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Nirmal Goswami	

ABSTRACT: Cameron County, Texas, an area that borders Mexico, is rapidly increasing in population. The county's total population was 387,210; 86.2% of the population which is Hispanic. According to the Texas Department of Health State Services, Cameron County does not contain a sufficient amount of health care resources, and is thus considered a medically underserved area. Access to pre-natal health care for low income women is one of the major public health issues (provide some info about how you know this). While there are facilities where pre-natal care is available, these facilities do not cater to the needs of low-income women. Government programs such as the Women, Infants, and Children's Program (WIC); Children's Health Care Insurance Program (CHIP); and Medicaid do assist low income population groups access health care. However, research indicates that participation in various government public health programs is not proportionate to the number of people eligible to receive assistance; participation is significantly lower. This research examines factors contributing to the low participation rate and offers

possible public policy options which address the problem.
TYPE OF PRESENTATION: Poster

924	TITLE: Shaping the Genre of the Western: Structuralism and the Hero	
AUTHOR: Angela M Rosales	Undergraduate Level	TAMU - Corpus Christi
AUTHOR(S):	MENTORS: Dr. Elisabeth Mermann	
ABSTRACT: Structuralism provides a concrete and scientific approach to reading, analyzing and understanding all kinds of literature. It allows the reader to organize, classify, and identify binaries, archetypes, character types, character relationships, setting, and/or plot structure. Pieces such as The Theory Toolbox: Critical Concepts for the Humanities, Arts, and Social Sciences; Northrop Frye's "The Archetypes of Literature"; Reading the West: An Anthology of Dime Westerns; the western movie The Man Who Shot Liberty Valance; and Tzvetan Todorov's "The Typology of Detective Fiction" have provided me with the material to uncover that the journey and struggles of the hero within the genre of Westerns actually invariably shape the elements of plot within fiction. Elements of plot are constructed as so: exposition, conflict, rising action, climax and falling action which goes hand in hand with the denouement. I've applied structuralism to the struggles of Malaeska and Seth Jones: heroes from two very different stories but Dime Westerns just the same and Ransom Stoddard, our hero in the Western movie, The Man Who Shot Liberty Valance. They all share the commonality that their struggles always begin with a promise to someone or something which is always made in the exposition. Malaeska, Seth, and "Rance" are three very distinct characters who all have interesting journeys and struggles; they couldn't be any more different. Nonetheless, as the heroes in our Westerns, their struggles always shape the plot of the entire Western. This study of structuralism allows for the deconstruction of the hero's struggle in the Western genre of literature and culture and it would be interesting to see if this theory of the hero's journey and struggles shaping the plot of fiction can or would carry on into other genres of literature such as romance, adventure, or science fiction.		
TYPE OF PRESENTATION: Poster		

925	TITLE: Manipulating Ingroup Identification	
AUTHOR: Natalie Saladino	Undergraduate Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Dr. Stephen Reysen	
ABSTRACT: In two studies (N = 572), the effectiveness of previously unexamined factors to increase group members' ingroup identification are empirically tested. The factors examined in the present paper include (1) prototypicality threat, (2) category salience by means of group symbols, (3) clear group goals, (4) social proof, (5) increase in group size, (6) knowledge of positive group history, (7) threats to the group's existence, (8) personal investments, (9) public and private commitment to the group, and (10) self-generated persuasion. Each of the above factors was found to increase ingroup identification above ratings in a control condition. Threats and reminders of the group's value did not differ for scores of ingroup identification.		
TYPE OF PRESENTATION: Poster		

926	TITLE: Corporate Naming of Stadiums, Fanship, and Uniqueness	
AUTHOR: Jamie S Snider	Undergraduate Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Stephen Reysen	
ABSTRACT: In one study, we examined the effect of the corporate naming of a stadium on participants emotions, perceptions, and actions. Participants were asked to imagine that the college basketball fieldhouse was either renamed, or not renamed, after a large corporation made a donation to the basketball team. Participants expressed strong negative emotions when the fieldhouse was to be renamed, compared to when the name remained the same. The harm to the schools distinctiveness and personal uniqueness were also greater when the fieldhouse was to be renamed. Importantly, there were no changes in support for the basketball team or degree of fanship (identification with the basketball team) between conditions. Fans were found to express fear that their team may encounter difficulties recruiting future players and that there own personal uniqueness may be harmed. Furthermore, the latter constructs were found to mediate the relationship between the condition and the fear experienced.		
TYPE OF PRESENTATION: Poster		

927	TITLE: Analysis of the association between attention-deficit/hyperactivity disorde	
AUTHOR: Valerie Solis	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Laura Garza	
ABSTRACT: Although attention-deficit/hyperactivity disorder (ADHD) was once thought to disappear with age, data suggests that two thirds of children diagnosed will continue to exhibit symptoms though out their life. It is believed that 1-6% of adults meet the formal diagnostic criteria for ADHD (Wasserstein, 2005). Children with ADHD are often overactive, impulsive, and inattentive, yet symptoms may alter into adulthood and often are replaced by fidgetiness and/or cognitive restlessness. Substance abuse, antisocial behavior and criminality are common characteristics of adults with ADHD. Poor social skills or deficits in self-awareness have also been known to be present. Thus adults with ADHD have a greater likelihood of violence, delinquency, and multiple marriages (Wasserstein, 2001). The primary purpose of this study was to examine the lifestyle of a diverse group of ADHD participants and determine if they exhibit many of the typical adult symptoms associated with ADHD. Participants filled a questionnaire, which questioned subjects about their typical behavior, use of substances, and criminal background. As a secondary focus, the age and sex of individuals was compared and evaluated to those subjects who were not diagnosed with the disorder. ADHD subjects strongly displayed a variety of symptoms and characteristics on the questionnaire, indicating a positive correlation. Therefore, it is clearly evident that there must be more psychiatric support and on going care for those who still can not cope with the disorder later in life.		
TYPE OF PRESENTATION: Poster		

928	TITLE: Elena Poniatowska her Journalism and her Narrative	
AUTHOR: Cristina Suarez-Machuca	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Cristina Suarez Hector Castelltort	MENTORS: Michelle Johnson-Vela	

ABSTRACT: Elena Poniatowska has written for many years her style is clearly useful in her telling of the individual's plight or that of a group of people's plight. While comparing her style of writing through several of her books it shall be shown that her narrative style shines through from her journalist experience. Her works show her distinctive and creative way of telling stories that are history based events. The novels to be examined are Massacre in Mexico, Nothing, Nobody: Voices of the Mexico City Earthquake, The Taking of the Zocalo and Here's to you Jesusa these three of her many books show the way in which she puts in the forefront some of Mexico cultural, political and social problems. Her many other books with such social themes remind us that many Spanish writers with such talent have not yet been given the accolades they deserve. Poniatowska's way with words show us clearly that she is a journalist she seems to hold her emotions in check with all her writing doing so with passion and control at the same time. Her personal experience with Massacre in Mexico is not seen until the end when she lets the reader know that her brother died the year of the massacre. The social plight of women like Jesusa in Here's to you Jesusa all show that she can feel strong emotions for this woman and yet not let on that she is touched by the story of this woman. The research and comparison of these novels will show the creative narrative writings of Elena Poniatowska and how she affects so many people in Mexico and abroad.	
TYPE OF PRESENTATION: Poster	

929	TITLE: Social Function of Chocolate during the Aztec Empire		
AUTHOR: Genesis R Urbina		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS:	
ABSTRACT: Chocolate is one of the world's most evolved and consumed food products while at the same time the way it is consumed is similar to the ways of the ancient Olmec, Maya and Aztec indigenous tribes. Chocolate goes back as far as 3,500 years originating in South and Central America. Most of the accurate information about chocolate from the ancient Mesoamerica comes from the time period of the Aztec Empire, which introduced chocolate to the Spanish and would then take on a new level of consumption throughout the world. As a whole, the Aztec Empire is best described as one of the most ethnically and culturally diverse systems that consumed chocolate on a daily basis by all social classes of the society. The role of chocolate in the Aztec society provides a different point of view that forms a series of questions, however, from the discoveries and publications of chocolate of Central America, the curiosity of how chocolate became such a valued product in the Aztec Empire is the way to compare the way chocolate is consumed and valued today. This study will reveal how chocolate made its way into the Aztec Empire and how is gained popularity among the different ethnic groups.			
TYPE OF PRESENTATION: Poster			

930	TITLE: Oppression and Violence along the Border:		
AUTHOR: Miriam Villanueva		Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):		MENTORS: Dr. Roger Tuller	

ABSTRACT: This research examines the release of the revolutionary document, the Plan de San Diego in February 1915, which revealed the racial tension that existed along the South Texas Border. The plan consisted of thirteen resolutions that would enable minorities to overthrow the existing establishments, conquer the Southwest, and murder white males over the age of sixteen. The plan was a result of the influx of people from the North and the transformation of a ranching society to a farming capitalistic society that shifted the balance of power. The movement generated violent warfare across the Lower Rio Grande Valley border towns between rebels and the Texas Rangers. The continuous violence throughout the months after the publication of the Plan of San Diego and the Mexican Civil War, induced fear and anger in local community members. In the Lower Rio Grande Valley there were various local Spanish newspapers that covered the event throughout its course with different views on the Plan de San Diego. The suppression of the revolts and the murders of the guilty and innocent citizens, newspapers printed articles that favored and that detested the movement and its leaders. Newspapers, in particular, Mexican newspapers, published articles that resented the United States government and the involvement of the Texas Rangers who developed the reputation of devils. Uncovering past local newspapers there are articles connected to political factions that are described in various books on the Plan de San Diego. The political factions involved with certain newspapers are ones that are closely tied to the Mexican Civil War and the different revolutionaries. Utilizing the materials in the Lower Rio Grande Valley an analysis of the reactions of Spanish language newspapers provides additional research to the social aspect of the Plan de San Diego.

TYPE OF PRESENTATION: Poster

931	TITLE: American Recovery and Reinvestment Act		
AUTHOR: Paul Wang		Undergraduate Level	Tarleton State University
AUTHOR(S):		MENTORS: Dr. Janis Petronis	

ABSTRACT: The American Recovery and Reinvestment Act (ARRA), which became law on February 17, 2009, was designed to provide stimulus funds to jump start the recessing American economy. Stephenville is a city of approximately 20,000 people in north central Texas, about 65 miles southwest of the Dallas-Fort Worth Metroplex, and home to Tarleton State University. For a city of its size, Stephenville is home to a relatively large number of multinational companies, boasting three manufacturing companies with 100 or more employees: FMC Technologies, Saint-Gobain Abrasives, and Fibergrate Composites. All three have been rated tops within their companies in revenues and output and all three have direct subsidiaries or suppliers in Mexico. All three Stephenville MNCs want to benefit from the ARRA, either through direct funding for projects, or indirectly through customers they serve. The research question for this project is "How can a local company delineate the processes for accessing ARRA funding directly or indirectly within the “Buy American” restrictions of the Act?" The specific restrictions in Section 1605 dictate that …"manufactured goods" used in projects funded by the stimulus package, for the construction, alteration, maintenance or repair of "a public building or public work", be "produced in the United States." Further, Section 1605 (d) requires that this "Buy American" provision be applied "in a manner consistent with United States obligations under international agreements." The North America Free Trade Agreement (NAFTA) requires the USA to treat goods and services from Mexico (and Canada) as "domestic" goods and services. Section 1605 (d) has the effect of exempting Mexico from the "Buy American" requirement for construction projects valued at $7.4 million or more. It follows that if the country of origin of goods coming from Mexican facilities of the three MNCs is indeed Mexico, those products are not excluded from the stimulus-package-financed projects.

TYPE OF PRESENTATION: Poster

Social Sciences - Humanities (Oral)

1000	TITLE: Watching The Joy Luck Club from a Cultural Perspective	
AUTHOR: Sandra Shu-Chao Liu	Doctoral Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS:	

ABSTRACT: The Joy Luck Club is a novel depicting the assimilation of Chinese families into the American society and the tragedies they previously met in Communist China during World War II (Gioia 47). Amy Tan's novel was published in 1989, keeping on the New York Times bestseller list from April to November. The book was later adapted into a movie and produced by William Oliver Stone in 1993. The movie has been found attractive by both multiethnic U.S. and overseas spectators, who may have asked themselves about what accounts for its charm and also wanted to learn more about its cultural features. The four mothers' life experiences in the movie, presented against a very different, unpropitious, mainland Chinese background, include one of them having to kill her son in order to get free from her philandering husband, another needing to feign madness for escaping the teenage husband she was forced to marry, another getting good care from her abusing step family after her mother had committed suicide, and the last of them losing her husband and their twin children in the war. All these happenings may seem very ridiculous or tragic to a Western-culture-centered audience, yet they underline those mothers' ardent will and determination to help their daughters pursue better lives and marriages in America. The unfolding of the plot makes it appealing to various ethnic groups. Although different ethnic groups may subscribe to rather diverging cultural values, all mothers want their daughters to lead a better life and benefit from a better social status. That is also the reason why The Joy Luck Club is still able to draw the attention of many viewers of various cultural dispositions.

TYPE OF PRESENTATION: Oral

1001	TITLE: Images and words back and forth	
AUTHOR: Sergio Pizziconi	Doctoral Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Dr Salvatore Attardo Dr Robert Baumgardner	

ABSTRACT: Images and words back and forth: Some applications of cognitive linguistics for a new grammar curriculum Profiles and bases, mental spaces and viewing frames, prototypes and conceptual blendings, metaphors and metonymies: they are just few of the basic concepts underpinning the approach of cognitive linguistics to language. Most of them were imported from the visual arts and the psychology of perception, mainly visual perception, under the assumption that language should be conceived as a body involving cognitive activity. In the presentation, these analytical tools, applied by cognitive linguists to verbal languages, will be used to decode—and encode—visual texts, thus returning to the very original source. The aim is to suggest the possibility that English grammar—and potentially any other language's grammar—can be taught and learned through the use of semiotic materials and codes that seem to be much more familiar than words to younger generations. Even though in an indirect way, the proposal overtly addresses the vexed question of the definition of literacy, trying to find a common methodological and conceptual ground on which linguists and grammarians, on one end, and composition, rhetoric, literacy scholars, on the other, can expand the current conversation on writing.

TYPE OF PRESENTATION: Oral

1002	TITLE: Deforestation Dynamics and Policy Changes in Bolivia's post-Neoliberal Era	
AUTHOR: Daniel Redo	Doctoral Level	Texas A&M University
AUTHOR(S): A.C. Millington D.H. Hindery	MENTORS: A.C. Millington	

ABSTRACT: This work compares the effects of neoliberal and post-neoliberal land-use policies on forest cover along the Corredor Bioceánico of southeastern Bolivia to determine if rates of agriculturally-driven forest clearance have changed since Morales' 2005 election victory. Satellite image analysis, supported by semi-structured interviews with farmers and representatives of key institutions, shows that deforestation for commercial agriculture in Santa Cruz continues and increased in certain "hotspots." Previous research has shown that the environmental effects of neoliberalism on forest cover are varied, but more broadly, reduced state intervention has meant less environmental regulation while strong government is better able to curtail deforestation. Although neoliberal policies triggered an unprecedented level of forest clearing in Bolivia, rates have generally continued to increase and can be directly linked to the administration's new Agrarian Reform and pro-environmental regulations. This trend is counterintuitive and stems from unanticipated responses such as deforestation through fire to prove productive use under the reform's socio-economic function. However, given increased regulation and enforcement of forest clearing and burning under Morales, compared to the neoliberal era, our analyses suggest that while rates will continue to increase under the current political climate which has further polarized the opposition.

TYPE OF PRESENTATION: Oral

1003	TITLE: The Alfonsi Factor	
AUTHOR: D'Andra K White	Doctoral Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Dr. Jacobs	

ABSTRACT: In the last century and especially in the last few decades, modern technology and forensic study have given researchers the ability to dispel as well as verify several myths of origin in the Middle Ages. The following study is fortified with this same deference to authenticity in the pursuit of historical accuracy and viability. In the Middle Ages intense prejudice as well as other mitigating factors failed to identify Petrus Alfonsi as a viable source for several medieval texts including Boccaccio's The Decameron, Chaucer´s The Canterbury Tales, Hita's El Libro de Buen Amor, and Manuel's El Conde Lucanor. Over the centuries linguistic and literary static traditions continued to omit Alfonsi's contribution to medieval literature in translation and composition. However, in the last few decades several prominent scholars have noted and referenced the relationship of Petrus Alfonsi to Chaucer, Boccaccio, Hita, and Manuel in their research (Burnett, Dinshaw, Serrano-Reyes, Tolan). Building on their expertise, I will argue for the authenticity of Petrus Alfonsi as a primary source for and his subsequent influence on other authors, which resulted in a reciprocity of textual interaction. Furthermore, I will argue specifically that it was Petrus Alfonsi's lineage and religion that kept him suspended in obscurity during the Middle Ages, tradition has kept him hovering, but that scholarly discourse over the last few decades demands that his place in history be redressed. Numerous scholars have noted the similarities between Chaucer and Boccaccio and Chaucer himself notes in his retraction his translation of Boccaccio, But of the translacion of Boece de Consolacione (1088). Yet, Chaucer goes on to say in the same line ...and othere bookes of legendes of seintes, and omelies, and moralitee, and devocioun (1088). It is in these ...and othere bookes that a minority of researchers have noted similarities between Chaucer and Alfonsi, and a few have noted connections between Chaucer and Don Juan Manuel and Ruiz. However, it is in tying all four authors,

Ruiz, Manuel, Boccaccio, and Chaucer, to Petrus Alfonsi that warrants further examination and merits extensive analysis. Therefore, it is time for history to acknowledge Petrus Alfonsi's contribution to the literature of Don Juan Manuel, Juan Ruiz, Geoffrey Chaucer, and Boccaccio as one of the many predecessors for all four authors' works. Petrus Alfonsi has for centuries been hidden historically and during the last several centuries this could be explained; however, with the centrifuge of scholars today dedicated to preserving the integrity of text and eschewing any perspicuity of prejudice, it is time to universally recognize Petrus Alfonsi as a literary source.

TYPE OF PRESENTATION: Oral

1004	TITLE: A Brief History of an Amateur Mathematician: Pierre de Fermat	
AUTHOR: Juan J Arellano	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Firooz Khosraviyani	

ABSTRACT: Pierre de Fermat's daily and public life revolved around both administrative and legal functions, but his hobbies revolved on something completely different. This was because he was deeply in love, not only with his wife and children, but with the world of mathematics. He is one of the two fathers of analytic geometry and played a large role in the creation of calculus. He is also famous for his contributions to number theory, for which there are theorems named after him. Fermat's Little Theorem and Fermat's Last Theorem will be more specifically addressed. Some of Fermat's proofs were unknown. This was mostly because he didn't have enough leisure time to write them down. His works and contributions were communicated to others through the use of numerous amounts of letters. Fermat used mathematics as a refuge from the daily disputes of his job. Hence, he refused to publish any of his discoveries out of fear from further controversies in another field. Several years after his death, some of his works were revealed in more detail. Fermat was not a professional mathematician. Yet, his new and profound findings have greatly enhanced the mathematics of today. How is it that someone works so much on mathematics for pleasure? How is it that an amateur mathematician has contributed so much to mathematics? Perhaps his insights and accomplishments may help us today to help teachers teach and students learn.

TYPE OF PRESENTATION: Oral

1005	TITLE: "A Disgrace to the State of Texas": Lynching Trends in Texas 1902-1930	
AUTHOR: Thomas Avila	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS:	

ABSTRACT: This paper will examine the escalation of lynching and mob violence in Texas between 1902 and 1930. Specifcally, it will examine the lynching of James Buchanan in Nacadoches in 1902; the lynching of Jesse Washington in Waco in 1916; the lynchings of McKinley Curry, Mose Jones, and John Cornish in Kirven 1922; and the lynching of George Hughes in Sherman in 1930. These four cases demonstrate the breakdown of the legal system including failures of law enforcement to adequately protect the accused from mob violence and failure of the local legal establishment to provide due process. Also complicating these four cases is the role of executioner that the mob assumed in these instances. The details of each case will be explored as well as a comprehensive analysis of the common links between them. An in-depth discussion of the evolution of lynching in the American context is included.

TYPE OF PRESENTATION: Oral

1006	TITLE: This essay will nalyze the origin and meaning of the soic	
AUTHOR: Abel De los Santos	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. J. Cardona Lola O. Norris	
ABSTRACT: Day of the Dead in México: Present and Past This essay analyzes the origin and meaning of the sociological symbols representing México's Day of the Dead. It describes the challenges the sterotypes of the death-obsessed Mexican people by describing images of celebration of this national holiday which derives from a mixture of profane and sacred beliefs. I will provide a brief comparison between the American Halloween and the Day of the Dead. Nowadays skeletal and cranial images have become virtually synonymous with México's bleiefs of death.		
TYPE OF PRESENTATION: Oral		

1007	TITLE: The Rhetoric of Tecumseh	
AUTHOR: Shelly Fox	Master's Level	TAMU - Corpus Christi
AUTHOR(S):	MENTORS: Charles L. Etherige, Jr.	
ABSTRACT: The rhetoric of Native Americans has not been a topic of much discussion. This paper discusses the rhetoric of the Native American Tecumseh to illustrate how it was used in the early 1800's. Tecumseh's speech to Governor Harrison regarding the Treaty of Vincennes is the text examined. This paper shows that, though Native Americans may not have been taught the Aristotelian concepts of rhetoric, including pathos, logos, and ethos, they are still utilized.		
TYPE OF PRESENTATION: Oral		

1008	TITLE: Not a "Feminine Mystique": Women's Place in the Workforce during the 1950s	
AUTHOR: Karla D Garcia	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Deborah L. Blackwell	
ABSTRACT: This paper will focus on women during the 1950s, and will argue that the image Betty Friedan portrayed in her groundbreaking book The Feminine Mystique, that portrays unsatisfied and unhappy suburban housewives who were looking for a self-fulfillment, was not always accurate. Some historians argue that women left the work force and returned home due to the prosperity that followed World War II and by the Cold War, during which time the home offered a sense of security from the uncertainties of the outside world and a place where mothers served as a buffer from communist ideology. Still others agree with Friedan's argument that theorizes that women were forced back into the home by the media and the consumer culture, as well as by pressures from American society. However, these historians fail to take into consideration women's ability to take charge over their own destinies. My paper will argue that women were not victims of the media or of society's expectations, but returned to their domestic lives because they wanted to do so, and many others continued working and had careers of their own.		
TYPE OF PRESENTATION: Oral		

1009	TITLE: Attitudes of City Administrators toward Terrorism: North Central Texas 2009	
AUTHOR: Andrew F Johnson	Master's Level	Tarleton State University
AUTHOR(S):	MENTORS: Dean A. Minix	
ABSTRACT: An analysis of a survey conducted on the attitudes of city administrators, secretaries, and managers concerning terrorism. The survey, conducted in the spring and summer of 2009, included all municipalities in the North Central Texas Region. Respondents were asked to rate the preparedness of their respective cities as well as give indications as to how funding, equipment needs, training and other factors impact their cities ability to respond to potential terrorist activity. The survey also gathered information on the demographics of the population studied.		
TYPE OF PRESENTATION: Oral		

1010	TITLE: Teaching Through Comedy	
AUTHOR: Sean Kennedy	Master's Level	Texas A&M University - Commerce
AUTHOR(S):	MENTORS: Salvatore Attardo Donna Dunbar-Odom	
ABSTRACT: Teachers in every field constantly ponder how to best hold the attention of their students. Even when teachers use techniques that range from threats to bribery, there often seems to be a lack of interest by at least a few students in class. What can help students to pay attention and actually learn something? Typically what students remember most are the things that amuse and entertain them, which is why the use of humor can be an effective teaching tool. This essay takes a close look at the ways in which teachers, authors, and even comedians have used humor to get their point across. Studies performed on the effectiveness of humor as used by teachers, as well as the advantages and disadvantages of comedy in an academic setting, are analyzed. Also, the tradition of stand up comedy is studied in terms of how comedic techniques can be used to effectively teach an audience, even on very serious subjects. Humorists such as Mark Twain and George Carlin are used as examples of comedic teachers; I conclude that many of their methods can be incorporated in a classroom setting in order to capture the interest and enthusiasm of students.		
TYPE OF PRESENTATION: Oral		

1011	TITLE: Complejidad del Romanticismo en “Los hijos del limo” de Octavio Paz	
AUTHOR: Luz M Martinez	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. Jose Cardona-Lopez	
ABSTRACT: Gran parte de la peculiaridad del estilo de Octavio Paz radica en su condición primordial de ser más poeta que ensayista. En concordancia con esta condición del autor, sus ensayos, casi todos argumentativos, suelen tener como centro de discusión la poesía, el hecho poético, el poema. Las reflexiones en torno a la poesía de Octavio Paz se enfrentan también a las circunstancias de la Historia. Lo anterior está presente en su ensayo “Los hijos del limo”, en el que Paz estudia a detalle el movimiento Romántico desde sus inicios en Alemania, al que considera un movimiento moderno de Occidente. Según		

él lo explica, con el Romanticismo se inaugura una tradición artística revolucionaria: la tradición de la ruptura. En mi estudio, haré una reflexión de la forma y el estilo con que Octavio Paz muestra su idea propia sobre la complejidad y la ambigüedad del Romanticismo expuestas en su ensayo "Los hijos del limo", el cual da título a su conocido libro publicado en 1974. Destacaré la presencia de binarios opuestos que contribuyen a dinamizar la discusión propuesta por Paz. Tales binarios son repulsión y atracción, angustia e ironía, religión e irreligión, y todos ellos correspondientes a la esencia del pensamiento revolucionario del Romanticismo.

TYPE OF PRESENTATION: Oral

1012	TITLE: I Am the Ox		
AUTHOR: Mario E Martinez		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS:	

ABSTRACT: I have selected five poems under the collected title "I Am the Ox." These poems explore what is important to me as a poet, namely history, society, self-reliance, the border, and a displaced sense of identity. The first poem, "A Challenge to the Modern Artist," is aimed at the poet's underappreciated role in the artistic world while invoking images of modern art. The second, "Juggernaut of Inches" describes the self-reliance needed for the poet's lifestyle using the image of an ox plowing an endless field. This theme bleeds into "The Perpetual Nursery," a poem dealing with the relationship between the poet and his fit audience. "The Sword Collector" is a poem relating days of childhood, which shows the musings and mental wanderings of the child that would eventually grow into a poet. The final poem of the collection, "The Breathing Riddle," attempts to dissect the identity of a poet born and raised on the banks of the Rio Grande, using this unique setting as a jumping point for a discussion on identity itself. In essence, these poems reflect my growth and eventual settling into the role of a poet in these times of transition. Apart, they illustrate fragments of an overall theme, but together, they attempt to understand one of the greatest mysteries of the artistic world: the nature of a poet.

TYPE OF PRESENTATION: Oral

1013	TITLE: Borges y la Cábala		
AUTHOR: Manuel Moya		Master's Level	Texas A&M International University
AUTHOR(S):		MENTORS: Dr. José Cardona	

ABSTRACT: La cábala y Borges La cábala es un esquema de creencias místicas que rige a una corriente ortodoxa de la religión Judía. La misión de los cabalistas es la de encontrar, mediante el libro del Tora, los infinitos significados del texto sobre la existencia humana y sobre Dios. En el ensayo "La cábala" escrito por Jorge Luis Borges, nuestro autor recopila la historia, creencias, contradicciones y virtudes sobre la cábala y sus seguidores. Borges analiza profundamente todos los preceptos cabalísticos; y además expone lo que he denominado los pensamientos borgianos, que son una mezcla de su visión particular sobre el mundo derivada de su entendimiento de la cábala. Al analizar otros textos literarios de Borges y contrastarlos con la lectura de este ensayo, resaltan varias similitudes entre las leyendas y creencias cabalísticas y el contenido de varios de los textos de él, por ejemplo la leyenda del Golem que refiere uno de sus poemas. Basándome en lo anterior, explicaré como en la cábala puede encontrarse una explicación de la literatura de Borges y sobre todo la del Jorge Luis Borges como ser humano. En mi lectura, daré una

visión amplia sobre la doctrina de la cábala; en conjunto con la visión de Borges en la que destaca la maldad como materia con la que tiene que trabajar Dios para darle estructura a este mundo. En esta visión que brinda el autor, la raza humana tiene la responsabilidad de ayudar a construir un mundo con Dios. En su enyaso "La cábala" Borges dice: "Dios es algo que no pertenece al pasado, que quizá no pertenezca… si nosotros somos magnánimos, incluso si somos inteligentes, si somos lúcidos, estaremos ayudando a construir a Dios."
TYPE OF PRESENTATION: Oral

1014	TITLE: Border VIolence	
AUTHOR: Lorena G Robles	Master's Level	Texas A&M International University
AUTHOR(S): Lucia Juarez Citlaly Palau Amy Cruz	MENTORS: Dr. San Miguel	
ABSTRACT: In the past 5 years border violence has exponentially increased as a result of the waging war between drug cartels for border supremacy. Border violence has become such a hard-pressed issue that President Obama and President Calderon have begun to take action. Border violence has encouraged increased abductions, murders/mutilations, corruption, and fear of crime. This study will provide original data from the Drug Enforcement Administration and various secondary sources will also be used to demonstrate the increase in the drug trafficking trade and to describe the current conflictive nature engulfing the border. This study will also apply various theories to explain border violence as well as provide a content analysis of newspaper stories about the war on mexican cartels.		
TYPE OF PRESENTATION: Oral		

1015	TITLE: A Historical study of Elliptic Curves	
AUTHOR: Tomas Rodriguez	Master's Level	Texas A&M International University
AUTHOR(S): Tomas Rodriguez Jr	MENTORS: Firooz Khosraviyani	
ABSTRACT: Although the study of elliptic curves is still in its infancy, it has shown to be a powerful branch in mathematics having profound impact in the fields of cryptography and having a part in Andrew Wiles' proof of Fermat's Last Theorem. Although the study of elliptic curves has not seen centuries of scrutiny and research as other topics in mathematics, albeit it has seen decades, it shows tremendous promise for new and exciting applications of mathematics that will further humanity's mastery of its environment. Therefore, it is of paramount importance for humanity to shake off the veil of misconceptions plaguing this study through a historical context of its inception into the mathematical community and its applications to our modern world.		
TYPE OF PRESENTATION: Oral		

1016	TITLE: El México pre-colombino en Visión de Anáhuac (1519) de Alfonso Reyes	
AUTHOR: Tania I Saavedra	Master's Level	Texas A&M International University
AUTHOR(S):	MENTORS: Dr. José Cardona-López	

ABSTRACT: Anáhuac, tierra entre las aguas, palabra originada desde tiempo inmemorial por antiguas civilizaciones mesoamericanas, ha sido y es fuente de vida e inspiración para la humanidad. Es la belleza y perfección de este lugar, lo que ha sobresalido y perdura desde las culturas pre-colombinas, Toltecas y Aztecas hasta la fecha. En el presente, Anáhuac es la región del centro del país conocida como el Valle de México. Mas la caída de civilizaciones y el paso del tiempo, no han logrado que la esencia de esta área se pierda, el ensayo Visión de Anáhuac (1519) del mexicano Alfonso Reyes es una muestra ello. En el ensayo, Reyes representa una descripción artística que recrea el pasado de México. Desde el inicio del ensayo el autor nos presenta la admiración del viajero ante nuevas tierras, pasando con la representación del sistema social, siguiendo con la lamentación de la pérdida cultural, y finalizando con el análisis de la importancia del pasado histórico en la creación de un presente próspero. La descripción del ecosistema provoca en el lector emoción acorde con la belleza pura y natural de la imagen. Cabe destacar el estilo del autor al crear la visión poética con un lirismo que no pierde lo conceptual ni lo erudito. En mí potencia haré una aproximación hacia la visión artística y el estilo del autor, al retratar un pasado histórico lleno de color y sonido por medio de imágenes, metáforas, y símbolos que perduran en la memoria. De igual modo, examinaré la erudición de sus palabras, y la fuerte imagen del hombre ante la utopía.	
TYPE OF PRESENTATION: Oral	

1017	TITLE: Chaucer's Role in the War of the Two Pedros		
AUTHOR: Christopher A Warner		Master's Level	Texas A&M University - Commerce
AUTHOR(S):		MENTORS:	
ABSTRACT: Chaucer's Role in the War of the Two Pedros The proposed paper will fill an existing gap in the criticism and timeline of Chaucer's life and works by establishing that the documentation concerning Chaucer's presence in Spain is both sufficient and convincing in its fourteenth century context; and second that the impact of Spanish literature on Chaucer's later works is both present and significant. During Chaucer's lifetime John of Gaunt, his primary employer, was involved in the War of the Two Pedros over control of the Iberian Peninsula, and stood in line for the Castilian throne. In 1366, the year that Chaucer was issued a safe-conduct in Navarre, a major turning point occurred in that war, swaying the balance of power in favor of Gaunt's ally. The change involved the subversion of English mercenary troops fighting for Trastámara and their subsequent change of alliance to Pedro of Castile. This delicate situation leaves open the possibility that Chaucer was working as a diplomat in Iberia despite his purposes not being explicitly stated in the issued safe-conduct. Some textual evidence of contact between Manuel's Count Lucanor and Chaucer's Canterbury Tales will demonstrate potential influence while underscoring the pan-European nature of Chaucer's work in terms of literary and intellectual development. An analysis of a potential Iberian source for Chaucer's retraction also raises questions about its reasonable interpretation and underscores the impact of new sources on the field. A more thorough examination of Chaucer's potential literary and political sources in Iberia could lead to a more solid foundation for decisions made about the dates and order of Chaucer's accepted works, as well as helping to make more solid decisions when accepting or rejecting a particular manuscript as genuine.			
TYPE OF PRESENTATION: Oral			

1018	TITLE: Social Bonds in Hispanic Culture

AUTHOR: Luis A Aguila	Undergraduate Level	Texas A&M International University
AUTHOR(S): Araceli V. Aguila	MENTORS: Dr. San Miguel Mr. Dae-Hoon Kwak	
ABSTRACT: Western society is continuously plagued with a criminological problem linked to the social bonds developed during adolescent years. Travis Hirschi's theory of Social Bonds has been the basis of continuous research, due to the type of culture in America where much of our criminal behavior, or lack thereof, is attributed to the strength of bonds and types of upbringing. These bonds are not only to school or parents, but also to organizations friendships and group interactions. This principle serves as the basis for this experiment in which we will test the Social Bond theory using college students in a predominantly Hispanic culture. We will test this theory using the article, "Social Control and Delinquent Behavior: An Examination of the Elements of the Social Bond." The information from this article gives way to test the reliability and validity of this theory among Hispanic youth.		
TYPE OF PRESENTATION: Oral		

1019	TITLE: Racism in European Soccer	
AUTHOR: Michelle K Arishita	Undergraduate Level	Texas A&M University
AUTHOR(S):	MENTORS: Dr. Arnold LeUnes	
ABSTRACT: Racism and soccer have been virtually synonymous throughout the past decades in Europe. Because soccer is such an integral part of European culture, the racist remarks committed by fans against not only the opposing but sometimes their own teams has created a near epidemic. Numerous players from both Africa and African-American players from the United States have been subject to the unsportsmanlike atmosphere during this so-called "beautiful game." Though there have been many plans to attempt to eliminate racism from fans, many of these have been very unsuccessful. Through meeting with various soccer federation officials this summer in Germany, I have begun to gain an understanding of the roots of racist problems within the country and why many of the previous plans have failed. I visited with the Deutscher Fussball-Bund (DFB) and studied their efforts to improve the culture of soccer. I also have met with a teacher who recently visited South Africa and observed the construction of stadiums for the World Cup, which frequently involved demolishing lower income communities. I have continued to research through examining articles about the roots of racism in South Africa and studied with professors who specialize in social psychology and racial issues. I am continuing to research and propose new alternatives that may be more successful in combating racism during the 2010 World Cup than previous attempts. I am interested in exploring how a program through youth soccer leagues could instill positive morals in a relaxing and fun atmosphere.		
TYPE OF PRESENTATION: Oral		

1020	TITLE: The Heretics Mission: The Trans-Asiatic Spread of Nestorianism	
AUTHOR: Jacob Cates	Undergraduate Level	West Texas A&M University
AUTHOR(S):	MENTORS: Dr. Paul Clark	
ABSTRACT: In the 400s, a priest in Constantinople named Nestorius became embroiled in a controversy involving whether the title of the Virgin Mary should be "Mother of God" or no title or all since Christ was viewed as eternal and Mary only being the agent through which Jesus Christ entered the world. While		

neither of those perspectives was considered heretical, Nestorius' compromise, "Mother of Christ" was due to underlying assumptions, and the First Council of Ephesus declared him a heretic for denying the union of the divine and human in the person of Jesus Christ, commonly referred to as the hypostatic union. By looking at an ancient stele the resides in the city of Xi'an, China, and more modern secondary sources I laid out the narrative of the Nestorian spread into China and discuss whether or not the Nestorian missional methodologies were successful in infiltration Chinese society and provoking change. My hypothesis is that due to its long existence in China, the Nestorians were successful at winning friends in high places, but since we don't see a grassroots movement they failed to appeal to the masses. My research looks briefly at other missionary movements to see if those conclusions hold water.
TYPE OF PRESENTATION: Oral

1021	TITLE: Is It Really Dangerous Place to Live?	
AUTHOR: Emanuel Diaz	Undergraduate Level	Texas A&M International University
AUTHOR(S): Emanuel Diaz Diana Carreon	MENTORS: Professor Dae-Hoon Kwak	
ABSTRACT: Is It Really Dangerous Place to Live? An Empirical Comparison of Crime Rates in Southern Border Cities in U.S. Emanuel Diaz, Diana Carreon, & Dae-Hoon Kwak Criminal Justice Program Texas A&M International University Although the average number of violent crimes in southern border cities does not much deviate from the national average, the domestic and international media illustrate the border cities as a region of constant battles among drug cartels and dangerous places to live. Using official crime data, this study will examine and compare crime rates in southern border cities in U.S. Especially, this study will attempt to disprove negative stereotype regarding violence in the border cities, which are frequently exposed by the media coverage.		
TYPE OF PRESENTATION: Oral		

1022	TITLE: Unspoken Heroes: A Crossover of Identities in Chicana Writings	
AUTHOR: Santos Dominga Trevino	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Michelle Johnson Dr. Robert Vela Cordova	
ABSTRACT: No Abstract submitted		
TYPE OF PRESENTATION: Oral		

1023	TITLE: Taíno Indians in Puerto Rico: Demystifying the Loss	
AUTHOR: Hermelinda Garcia	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S):	MENTORS: Dr. Roberto Vela-Córdova	

ABSTRACT: Hermelinda Garcia wholic81@yahoo.com Texas A & M University-Kingsville, Undergraduate Department of Language and Literature Faculty Mentor: Dr. Roberto Vela-Córdova Taíno Indians in Puerto Rico: Demystifying the Loss Much of what is known of the Taíno has been recorded through observational tasks and documentation from Spaniards whose prime objectives for their voyage into the New World was to occupy unmarked land and find riches. In the process, the journey concluded with the extermination and enslavement of thousands of Taínos. Looking at both contemporary studies and the documents by conquering Spaniards, this study examines two opposing stories: on the one hand a myth of the disappearance and extinction of a whole society and on the other a story of their survival, resistence, and continuous influence. The research will discuss how the group survived, dwelled, and worshiped certain figures. In particular, modern day Puerto Rico has vast roots of Taíno culture embedded into its core. The Taíno legacy thrives in persons whose ancestors fought to survive and to keep their heritage from being destroyed. The presentation argues how Taíno folklore managed to carry on through the centuries and how one can identify the heritage on the island of Puerto Rico. That heritage, we will argue, is still present on aspects such as the types of food, the physique of a Taíno, beliefs the group held on to, also, their choice of instruments for music, which cities carry Taíno names and what vocabulary is spoken, seen and heard throughout Puerto Rico. Our thesis will also be supported by dental and more recent DNA studies that trace Taíno bloodlines for people currently living in Puerto Rico. In the fifteenth century Taínos appeared to many Spaniards, not as human beings or average individuals, but as a group unworthy of possessing human rights. Taínos resisted this treatment and because of this fight one is able to explore their unique existence which allows us to recognize their contribution to society.

TYPE OF PRESENTATION: Oral

1024	TITLE: The Jewish Question: An Analysis of Fundamental Persuasive Tactics	
AUTHOR: Eva Harder	Undergraduate Level	West Texas A&M University
AUTHOR(S):	MENTORS:	

ABSTRACT: This study attempts to provide an elementary view of anti-Semitic arguments made by the Nazi Regime in the World War II era; it examines the ways in which the Nazi Regime and the Third Reich attempted to persuade audiences to see the Jewish people as an inferior sub-people and as an enemy. The effects and goals of the campaign, the target audience of the campaign, and the validity and the success of the campaign are considered. First to be examined are the basic arguments made against Jewry, primarily in speeches made and articles written by the Reich Minister of Public Enlightenment and Propaganda, Dr. Joseph Goebbels. Basic advertisements, such as flyers, pamphlets, and other visual propaganda are then considered. Finally, the employment of anti-Semitism in education is examined.

TYPE OF PRESENTATION: Oral

1025	TITLE: Prefacing Purple: Researching Performances of THE COLOR PURPLE	
AUTHOR: Elizabeth M Melton	Undergraduate Level	Texas A&M University
AUTHOR(S):	MENTORS: Dr. Kirsten Pullen	

ABSTRACT: Dear God, Which do you like best—the book, the movie, or the musical? Since its introduction to the world, Alice Walker's novel, The Color Purple, has been recreated in other media and audiences are just as likely to have learned about Celie's journey from the 1985 Warner Bros.' movie or

the 2005 Tony Award-winning musical as from the Pulitzer Prize-winning novel. Each iteration of The Color Purple offers ambivalent representations of Black female experience in the early 20th century era of the American South. My research thus far has placed me in the midst of other audience members enjoying the highs and lows of Celie's on-stage story and behind a desk shuffling through Walker's personal letters and manuscripts. In my research I look at all three performances of The Color Purple- the book, film, and musical- in order to evaluate the broader scope of effects created by all three. The four primary components of my research are performance, adaptation, representation, and audience reception, which allow me to analyze the impact of portrayed Blackness in The Color Purple. In my research I define all three media as performance and explain the important contrasting elements of each as performance. This then leads to analyzing specific alterations as the performances adapt from novel, to screenplay, and then again to musical. Looking at how the adaptations vary leads into analyzing the choices made by each director, author, and playwright when representing fundamental elements, like race, gender and class, in The Color Purple. Though the generic differences between literature, film, and the stage are enough to ensure that the representations will be different, I'm interested in the impact of those changes. Using reviews and other testimony of audience experience, I am developing the potential of each performance to influence personal and social change.

TYPE OF PRESENTATION: Oral

1026	TITLE: The Role of Modernism in the View of Women in Society	
AUTHOR: Maritza N Morales	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Zinnia Sepulveda	MENTORS: Roberto Vela Córdova	

ABSTRACT: This study will be used to see the influences Modernism has played on the view of women in society since the early 20th century to the present. One must fully understand what the Modernism movement is before they can understand its role in changing women social status in all countries. Modernism is a literary movement, the embrace aspect of social statuses and modern tendencies in the early 20th century that has never been seen in prior literary movements before it. Before the 20th century, women did not have a sense of independence nor did they have the liberty to express themselves in society. After the Modernism movement, in literature, it is seen that there was an increase in changes of the view of women in society. For example, the creation of the automobile gave women for the first time the freedom to attend social event without the protection of a family member or the sense of been chaperoned everywhere they went. The study will also see the drastic changes with the example of Luisa Capetillo, who was a Puerto Rico author that was best known for her arrest in the 1920's for dressing in men's work clothes, which was not seen social correct at the time for a woman to wear and with her courage, it is now seen social correct for a woman to dress however she pleases. Another example is during the World War II, women took the place of men in the work force but when the men returned women realized what they were capable of accomplishing and knew that there place was not only in the home. The study will include these example and many more to show the role of modernism in the change of women in our present society.

TYPE OF PRESENTATION: Oral

1027	TITLE: "Doomsday" The Misinformed	
AUTHOR: Alexis N Rodriguez	Undergraduate Level	Texas A&M University - Kingsville

AUTHOR(S):	MENTORS: Roberto Vela Córdova

ABSTRACT: Doomsday is what many misinformed readers and writers have created. People are only informed by Hollywood movies and books like . In the film 2012 The script barely even hints at the details or origins of any of the real theories about 2012, suggesting that the association is mainly here just to cash in on a trend. Instead, Emmerich and co-writers Harold Kloser and Matt Charman shoehorn in several brief but glaringly awkward attempts at political commentary and even what could be construed by some as a few baffling jabs at religion. And of course everything leads to an unbearably neat and happy ending, despite the fact that the film is about the vast majority of the world's population being wiped out. There are particular issues with the year 2012. The main issue is where the people are receiving information through films such as 2012.The year 2012 is more so a year of Galactic Alignment; this only happens every 26,000 and was what the Mayans were pointing to with the 2012 the end of their long count calendar. This paper will view the aspects of the misinformed, where they are receiving their information from and how movies and books can mislead people.

TYPE OF PRESENTATION: Oral

1028	TITLE: The Drug Bust Heard 'Round the World: A Fantasy Theme Analysis of "Tulia,TX	
AUTHOR: Kirk Scarbrough	Undergraduate Level	West Texas A&M University
AUTHOR(S):	MENTORS:	

ABSTRACT: In 1999, a covert drug sting in Tulia, Texas resulted in the arrest of 46 individuals, 39 of those being African-American. This one action sparked much national media attention as claims were made that the incident was merely a target on the black community of Tulia, further segregating the town into conflicting factions. In 2008, the documentary "Tulia, Texas" was released that documents both sides of the situation in order to give a platform for the oppressed voices to share their narratives on the historical events. Through this critique, I analyze "Tulia, Texas" using Ernest Bormann's method of fantasy-theme criticism to identify the themes and overall rhetorical vision created. By doing so, an image of continuous battling groups is evident, showing two completely contrasting views on the same situation framed by racism and prejudice. These contradictions create an image of a town that is still torn by conflict, hindered by the past and unable to move on to the future.

TYPE OF PRESENTATION: Oral

1029	TITLE: The Effects of Migration on the Dynamics of Family Relationships.	
AUTHOR: Juan Vasquez	Undergraduate Level	Texas A&M University - Kingsville
AUTHOR(S): Priscilla Marin	MENTORS:	

ABSTRACT: The frequency of international and intercontinental migration has serious effects on the stability and dynamics of family relationships. In the desire to find better opportunities and better social welfare, family dynamics are exposed to distance and in some cases irreparable ruptures. In this paper we analyze in detail the causes and effects of this phenomenon departing from several interviews as primary sources of immigrant workers from different economic levels. To facilitate the understanding of those interviews, we will review sociological and cultural studies that address the issue of family relationships in the experience of people who have immigrated, particularly to the United States. Ultimately, our goal is to

elucidate and understand more fully the sensibility that operates among the large number of immigrants to the United States in the context of family relationships, and the effect within the family structures of those migrants.
TYPE OF PRESENTATION: Oral

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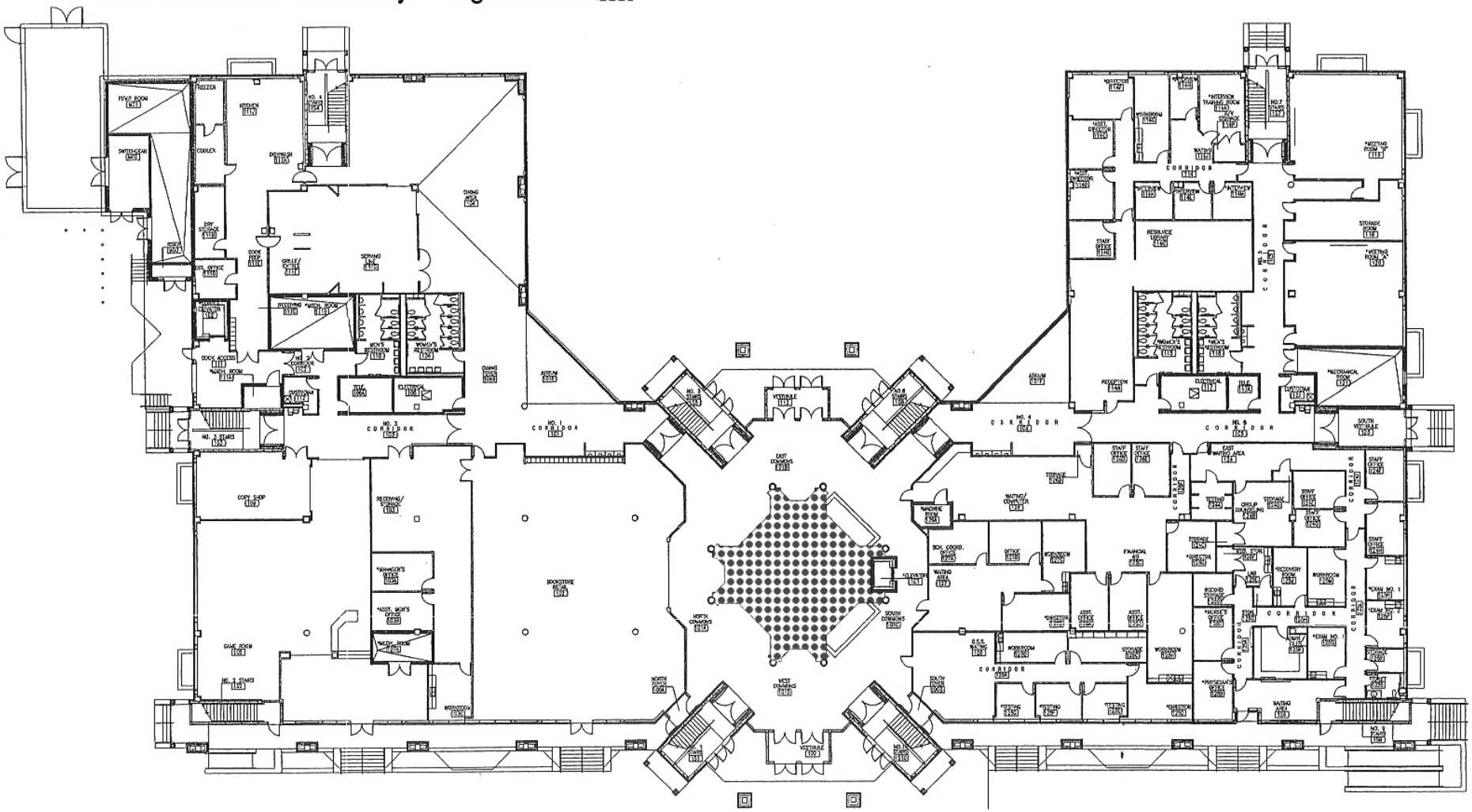

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STUDENT DEVELOPMENT CENTER
SECOND FLOOR

Outer Rotunda: Friday Lunch

President's Dining Room: Dean's Breakfast

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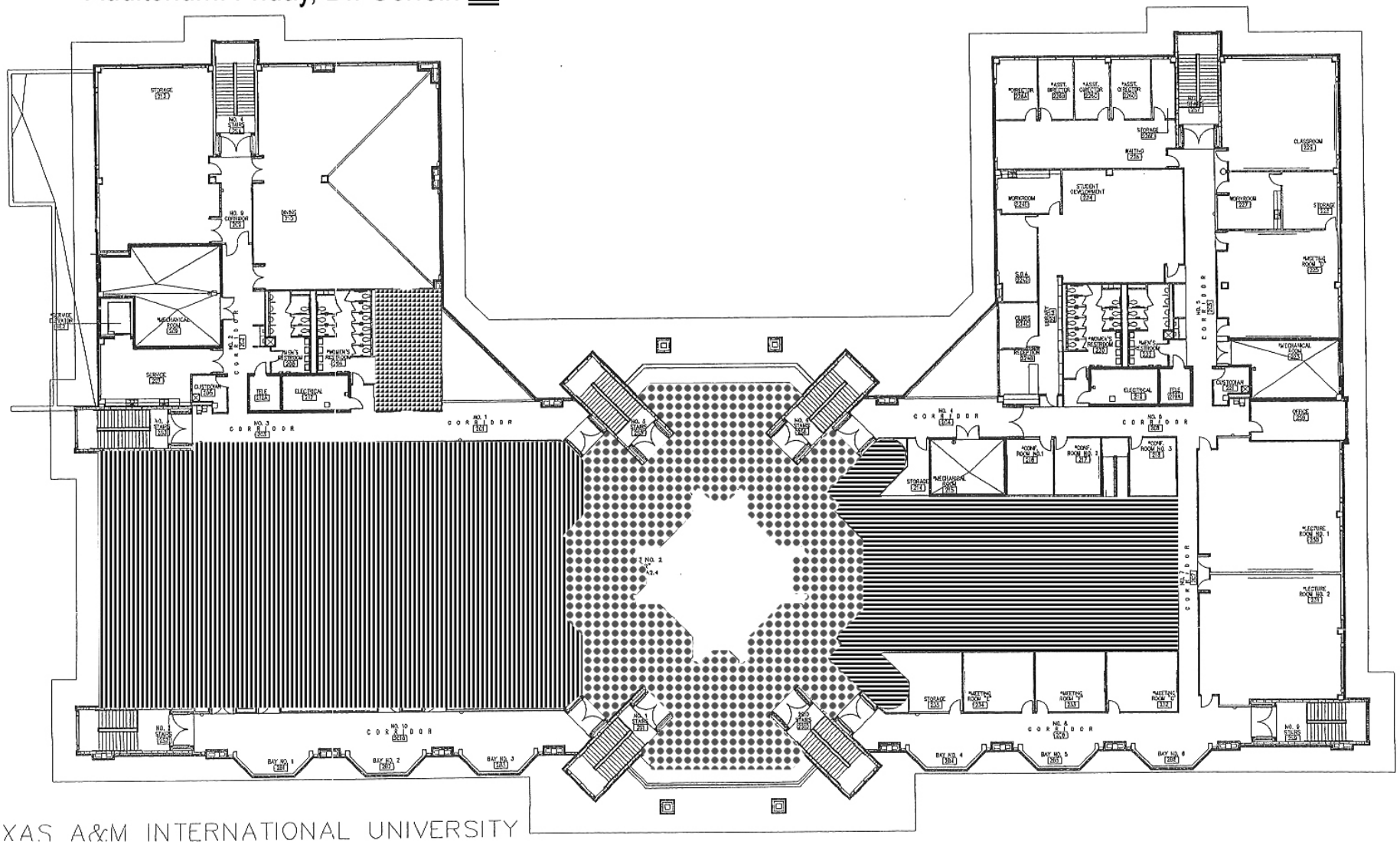
Auditorium: Friday, Dr. Gorfein



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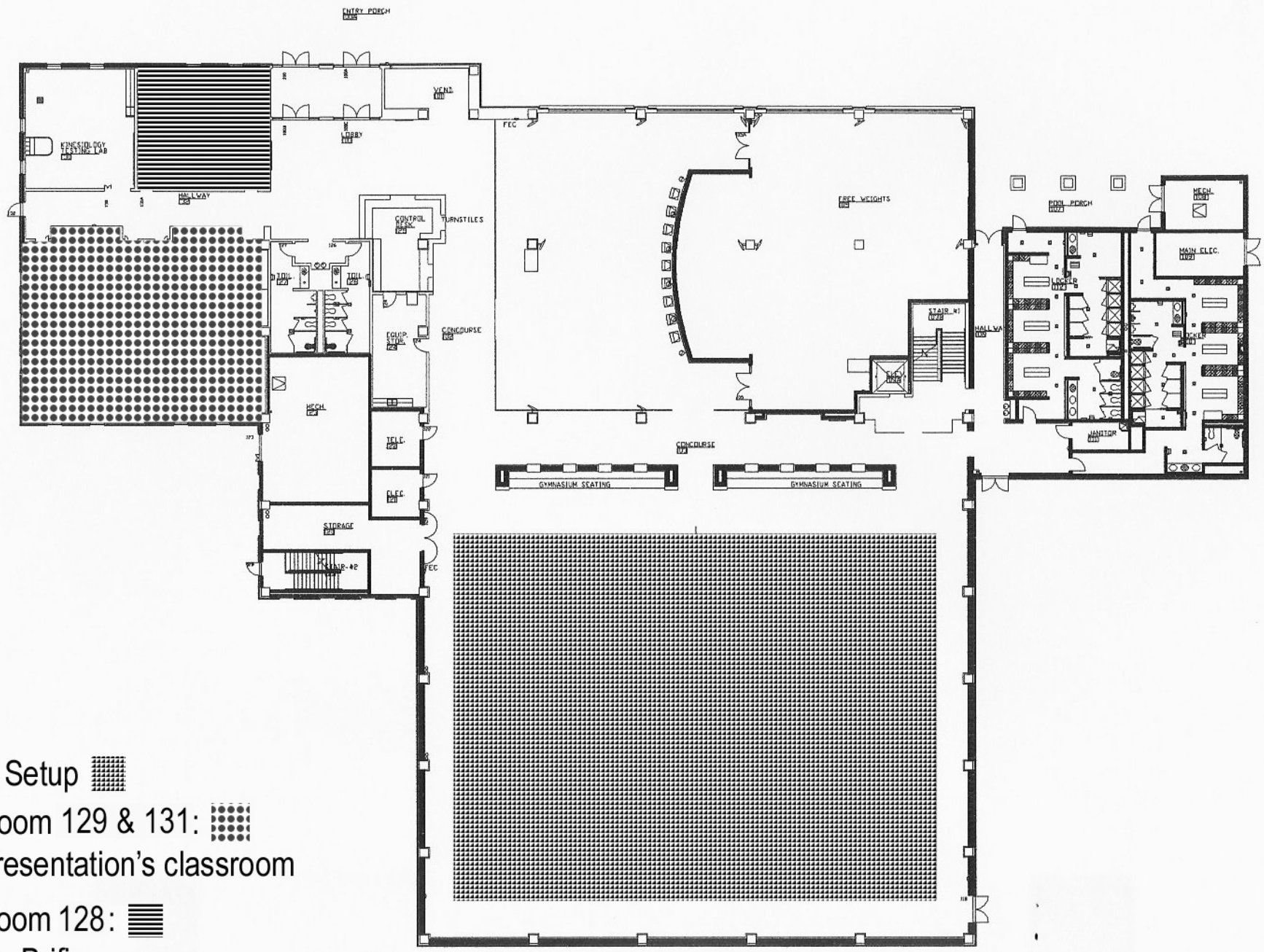
RECREATIONAL SPORTS CENTER
FIRST FLOOR



Poster Setup

Classroom 129 & 131:
Oral presentation's classroom

Classroom 128:
Judge's Brifing room

Notes

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