WESTERN CONNECTICUT STATE UNIVERSITY

WestConn Research Day

May 13, 2010
Program

Luncheon with Seminar Presentations 11:30 AM – 2:00 PM
Student Center Room 201 – Midtown Campus

Registration and Poster Setup 1:00 PM – 2:30 PM
Science Building Atrium – Midtown Campus

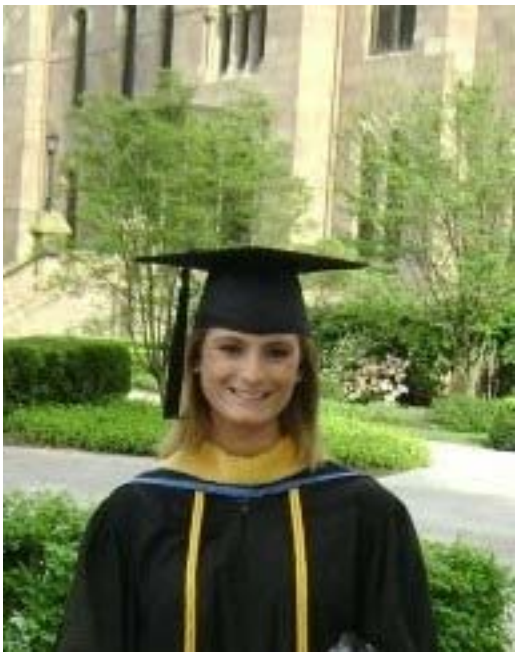
Opening Session and Keynote Address 2:30 PM – 3:00 PM
Science Building Room 125 – Midtown Campus

Poster Session 3:00 PM – 5:00 PM
Science Building Atrium – Midtown Campus

Concluding Remarks and Awarding of Prizes 5:00 PM – 5:15 PM
Science Building Room 125 – Midtown Campus

Refreshments will be served during the poster session in the Atrium of the Science Building.

KEYNOTE ADDRESS



Rosa Kyek

Clinical Project Manager

CogState, Inc.

"The Perpetual College Student: College Ends, but Your Education Never Does!"

Abstract

The key to success is an open mind. In any field of study there are, if you choose to see, countless of opportunities to use and expand your expertise, and fulfill your goals. For me, successes first began as a curiosity in an intriguing subject, blossomed into a passion for research, and eventually lead me to the awareness of an ambition much bigger than myself.

Biography

Rosa Kyek is a Clinical Project Manager at CogState, Inc., an Australian company that designs and implements neuropsychological testing software on global clinical drug trials. Her work takes her around the world where she meets with people working on pharmaceutical advancements for treatments for Alzheimer's disease, Schizophrenia, and other cognitively debilitating disorders. She focuses mainly on project management, training, and statistical analyses.

Rosa received her undergraduate degree in Psychology from Western Connecticut State University in 2006. She worked extensively with Dr. Mary Nelson developing a rating scale for a personal identification measure which can be used in simulated jury studies; she was also a student instructor for research methodology and statistics. Rosa earned her Master's degree from Seton Hall University in Experimental Psychology with a concentration in Behavioral Neuroscience. While at Seton Hall University, Rosa worked as a Graduate Research Assistant in the Behavioral Neuroscience Laboratory and focused her research on pharmaceutical interactions in the brain of animals and on an animal model for Post Traumatic Stress Disorder. She also researched the effects of REM sleep deprivation on learning and memory, stress

and drug induced place preferences as well as strategy learning in the HIV_1 Transgenic rat.

Rosa has been the recipient of several distinguished honors and achievement awards, has presented at countless international meetings alongside some of the brightest minds in clinical neuropsychology and medicine, and has close working relationships with clinical teams at nearly every major pharmaceutical company worldwide.

Rosa recently bought a home in Brookfield, CT with her fiancé, Nigel. They'll be married this July.

Student Participants

Undergraduate Students

Abstract #	Name(s)	Session
1	Olaoluwa Akande and Marc Rivadeneyra	Poster
2	Christine Beatty	Poster
3	Nicole Belmont	Seminar
4	Christopher Berchem	Poster
5	Maria Bortolleto and Ana Bortolleto	Poster
6	Jeffrey Botex and Emily Fiscella	Poster
7	Michaela Brown	Poster
8	Rosanna Bruzzi	Seminar
9	Emily Cole and Chris Koblynsky and Curtis Wright and Anthony Carvalho and Danielle King and Leslie Tracey and Mike Robbins	Seminar
10	Nicole Dzamko	Poster
11	Dana Fillippino	Poster
12	Mark Fitzgerald and Mary Alice Secola	Poster
13	Jessica Garvin and Esterina Gjushi	Poster
14	Esterina Gjushi and Jessica Garvin	Poster
15	Thorin Jacobs	Poster
16	Dinilio Jimenez	Poster
17	Cassandra Kocsis and Julia Sammartano	Poster
18	Jacqueline Malecki	Poster
19	Kyle Moske and Jason Conn and Jacqueline Malecki	Poster
20	Aubrey Nolan	Poster
22	Adrienne Ostrove	Poster
23	Anne Marie Palumbo and Ryan Suter and Paul Shupenis	Seminar
24	Jacob Putkowski	Poster
25	Sarah Quell	Poster
26	Andrew Ribeiro	Poster
27	David Rogers	Seminar
28	Derek Roy and Mr. Steven Bainer	Seminar
29	Fred Salcido	Poster
30	Julie Anne Sathoud and Petra Cepeda	Poster
31	Terrance Sheehan	Poster
32	Danielle Spangler	Poster
33	Jessica Ursini and Mary J. Davis and Ashley Anderson	Poster
34	Kate Veccharelli	Poster
35	Edward Wasenius	Poster
36	Valerie Watson and Courtney Pietropaolo and James Tanner	Poster
37	Rachel Yonika and Michael Ammirata	Poster

Student Participants

Graduate Students

Abstract #	Name(s)	Session
21	Uyiosa Osagie and Sandy Peterson	Poster

Faculty Participants

Research Sponsors

Faculty	Department
Dr. Carina Bandhauer	Social Sciences
Dr. Patrice Boiley	Biology
Dr. Dennis Dawson	Physics, Astronomy, and Meteorology
Dr. Robin Flanagan	Psychology
Dr. Rona Gurkewitz	Computer Science
Dr. Richard Halliburton	Biology
Dr. Rondall Khoo	Psychology
Dr. Chris Kukk	Social Sciences
Dr. Susan Maskel	Biology
Dr. Margaret Murray	English
Dr. Patricia O'Neill	Psychology
Dr. Albert Owino	Physics, Astronomy, and Meteorology
Dr. C. Thomas Philbrick	Biology
Dr. Theodora Pinou	Biology
Dr. Howard Russock	Biology
Dr. Russell Selzer	Chemistry
Dr. Alba Skar	World Languages & Literature
Dr. Katy Wiss	Communications
Dr. Edwin Wong	Biology
Dr. Yu-fong Yen	Chemistry

Abstracts

Poster Presentations

listed in alphabetical order by first author

1 THE EFFECT OF HANDHELD AND HANDS-FREE CELL PHONE USE ON REACTION TIME

Olaoluwa Akande and Marc Rivadeneyra
(Dr. Susan Maskel, Dept. of Biology)

The use of handheld cell phones for all drivers is banned in six states, Washington D.C. and the Virgin Islands; no state bans hands-free cell phone use for all drivers. To help determine if hands-free cell phone use is as dangerous as handheld cell phone use, a Biopac was used to test the reaction time of forty-eight subjects while talking on each phone type. Results indicate that reaction time with handheld cell phone use was significantly slower; in addition, subjects failed to respond to stimuli more often when using handheld devices. Implications in terms of driving will be discussed.

2 INTERACTIVE MAP OF NON-GOVERNMENTAL ORGANIZATIONS IN NICARAGUA

Christine Beatty
(Dr. Alba Skar, Dept. of World Languages & Literature)

Under the current Nicaraguan President, many of the citizens' basic rights are denied such as education and essential government assistance. Non-governmental organizations often fill the void in which citizens needs are not being met. However, the Nicaraguan President, Daniel Ortega, has accused numerous organizations of money laundering as a way to keep the citizens powerless and suppress them from speaking against his regime. I undertook this project in order to illustrate what purpose these NGOs serve, how vital they are to the functioning of Nicaragua and thus how devastating it is that they are repressed by the government.

3 THE RELATIONSHIP BETWEEN COLORED AND NON-COLORED FONTS AND WORD MEMORY

Nicole Belmont
(Dr. Rondall Khoo, Dept. of Psychology)

This experiment studied the effects of colored and non-colored (black/white) texts in relation to word memorization. It was hypothesized that colored fonts would cause an increase in word memorization. Half the subjects were given a list of twenty non-colored words while the other half got a list of twenty colored words to

review. Next, they reviewed a list of forty words containing the twenty words from the first list and twenty new words and asked to identify ones they remembered. A t-test showed that there is no significant difference between colored and non-colored fonts on memory.

4 SECOND HARMONIC GENERATION PROPERTIES IN METAL IMIDAZOLE QUARTZ ANALOGS

Christopher Berchem
(Dr. Yu-fong Yen, Dept. of Chemistry)

Increasing usage of lasers and other optics in the modern world makes the development of new optical materials essential. One important area of research is the development of non-linear optics, in which an incoming light frequency is multiplied. Early uses included the tuning of lasers, but as more applications are found, specialized materials need to be developed. This research involves the development of zinc or cadmium based, tetrahedral quartz imidazole structures. Cadmium and Zinc metals are used and the work focuses on small aromatic nitrogen containing ligands. These compounds may be used to improve current optical fiber technologies.

5 MTDNA BARCODING IN FAIRY SHRIMP

Maria Bortolleto and Ana Bortolleto
(Dr. Richard Halliburton, Dept. of Biology)

Fairy Shrimp (class Anastroca) are crustaceans that inhabit temporary pools. Due to their unpredictable environments, which dry up for long periods during the year, they reproduce through cysts capable of surviving prolonged dry periods. When the pools fill up, the cysts hatch. This lifecycle makes a study of mtDNA variation valuable. DNA barcoding is based on the concept that short standardized DNA sequences can be used to delineate species because genetic variation between species is greater than genetic variation within species. Our goal was to determine if the application of barcoding is useful in delineating different fairy shrimp species.

6 THE EFFECT OF INSTRUCTIONAL CONTENT ON STRESS AND ANXIETY

Jeffrey Botex, Emily Fiscella and Carolina Gutierrez
(Dr. Robin Flanagan, Dept. of Psychology)

This study assessed the effects of instructional content on stress and anxiety. Thirty subjects were used from a convenience sample of Westconn students. They were placed in one of three levels of the independent variable which were the instructions being administered: the control or neutral instructions, anxiety inducing instructions and the anxiety reducing instruction category. The stress

and anxiety (dependent variable) experienced by the subjects was assessed on a stress rating scale of numbers 1 through 10. There was no significant difference between the groups of anxiety inducing, anxiety reducing or neutral instructions.

7 POSITION ON DOG BREEDS

Michaela Brown
(Dr. Rondall Khoo, Dept. of Psychology)

This study explores people's opinions of dogs based on the breed of dog. Thirty one Western Connecticut State University students were given four identical questionnaires and four pictures of dogs; one Golden Retiriever, one Pit Bull, one Rottweiler and one Black Labrador. The subjects were then asked to fill out one questionnaire for each dog. The results indicate that people found the Golden Retriever to be the cutest dog and the Pit Bull to be the best guard dog. Results obtained were significant.

10 ANOLIS CAROLINENSIS TRPM8 RESPONSE AFTER MENTHOL APPLICATION

Nicole Dzamko
(Dr. Patrice Boiley, Dept. of Biology)

The thermoregulatory response of the species Anolis carolinensis after different menthol applications was examined. Mammalian temperature preference has been documented in relation to menthol application. The reptilian response is not yet known, but it can be speculated that a difference will be found due to the way reptiles maintain their body temperatures. The trials were done by taking lizards and placing them in a controlled temperature gradient to test the reptiles' temperature preference with and without menthol application. The results were inconsistent and inconclusive.

11 DETERMINING IF SPOT PATTERN IS DEPENDENT ON THE DISTRIBUTION OF AMBYSTOMA MACULATUM

Dana Fillippino
(Dr. Theodora Pinou, Dept. of Biology)

The spot pattern of Ambysotma maculatum (spotted salamander) is dependent on the distribution of the species. This hypothesis is based mainly on two populations separated by the New Haven Harbor that were collected in Woodbridge and East Haven, Connecticut. In order to test the Spot Pattern Hypothesis, eleven spotted salamanders were studied at the Yale Peabody Museum of Natural History. Spot pattern was assessed by counting spots on both the left and right dorsal lateral parts of the body from the tip of the nose to

the base of the tail. The anticipated outcome of this research is that the spot pattern of the two populations in Woodbridge are equal compared to the populations in East Haven.

12 MICROBIAL METAGENOMIC ANALYSIS AND COMPARISON OF CANDLEWOOD LAKE SEDIMENTS IN WINTER DRAW-DOWN AND SHALLOW SUBMERGED SHORELINE AREAS

Mark Fitzgerald and Mary Alice Secola
(Dr. Edwin Wong, Dept. of Biology)

To control the invasive plant Myriophillum spicatum along the shores of Candlewood Lake, an annual water level draw-down is performed. As a result, unintended effects on microbial communities are possible. We performed metagenomic analysis and comparison of microbial communities in the sediment of the exposed draw-down shoreline region and the still submerged shoreline area to determine any impact on the lake's microbiome. Metagenomic analysis methods used include DNA sequencing of 16s rDNA, T-RFLP fingerprint analysis, and DNA database comparison with BLAST and TAP search engines.

13 ATTIRE AND ITS EFFECT ON THE PERCEPTION OF SERIOUSNESS

Jessica Garvin, Esterina Gjushi and Dorota Bigus
(Dr. Robin Flanagan, Dept. of Psychology)

This study investigated present-day effects of perceived seriousness coming from a presenter based on choice of attire. Twenty-eight participants volunteered in one of two identical presentations by the same female presenter who either dressed in casual attire or professional attire. Following the presentation, participants were asked to rate the presenter based on their opinion of the presenter's overall seriousness about the information presented. The results indicated that ratings of seriousness when the presenter was dressed in professional attire (dress shirt, dress pants) were significantly higher than when the presenter was dressed in casual attire (yoga pants, tee-shirt).

14 LABELING AND ITS EFFECT ON MEMORY RECALL

Esterina Gjushi and Jessica Garvin and Dorota Bigus
(Dr. Robin Flanagan, Dept. of Psychology)

This study investigated whether pictures with labels or pictures alone would result in a better memory recall. Twenty-eight college students volunteered for one of the two conditions that either involved viewing a PowerPoint with 8 buildings with printed names following the picture, or 8 buildings without their names printed. After, participants were asked to recall what they saw. The

results indicated memory recall for the buildings that included labeled names following the picture were significantly better than the results of just pictures.

15 STELLAR MODELLING OF PS VIR

Thorin Jacobs
(Dr. Dennis Dawson, Dept. of Physics, Astronomy, and Meteorology)

By analyzing light curves and adjusting models to fit, the characteristics of eclipsing binaries may be determined. This study examines and models the light curve of the W Ursa Majoris-type PS Vir.

16 LATINO SERVICES IN CT; CULTURALLY SPECIFIC VS. CULTURALLY COMPETENT

Dinilio Jimenez
(Dr. Alba Skar, Dept. of World Languages & Literature)

Typically not considered a prime area for Latino immigrants, New England has seen a large increase in its foreign and national born Latino population. With the growth of this population, many new social services have been directed to this community specifically. Many already present social services have adopted cultural diversity and competency models to accommodate the growing population. Social services in two of Connecticut's counties with the largest Latino population were researched and compared based on cultural specificity and competency. Ideas for needed Latino specific and culturally competent social services are presented and discussed.

17 DNA ANALYSIS OF BACTERIAL COMMUNITIES ON EQUINE SKIN

Cassandra Kocsis and Julia Sammartano
(Dr. Edwin Wong, Dept. of Biology)

This experiment sought to isolate bacterial communities from the skin of a horse with a bacterial skin infection and a horse not infected. Four sites were sampled: an infected site and non-infected site from one horse, and the same two areas on the non-infected horse. To identify the bacterial species present, ribosomal gene sequences were isolated and sequenced. Furthermore, community DNA was fingerprinted using T-RFLP.

18 A NEW GENUS & SPECIES OF FLOWERING PLANT FROM THE AMAZON OF VENEZUELA

Jacqueline Malecki
(Dr. C. Thomas Philbrick, Dept. of Biology)

The purpose of the study was to develop a detailed description of a flowering plant species discovered in Venezuela that is new to science: Antania andersonii C.T. Philbrick (Podostemaceae). The plant, which occurs in tributaries of the Orinoco River, exhibits unique characteristics (reproductive, vegetative) not found elsewhere in the family: (1) anastamosing pattern on the stem; (2) swollen and hollow pedicel apex; (3) unique tear-drop shaped patterns on the pedicel apex, and (4) fused stigmas. Studies of DNA variation, conducted by others, reveal its distinct phylogenetic position among Neotropical Podostemaceae. The morphology, geographic distribution, and phylogenetic position will be presented.

19 METAGENOMIC ANALYSIS OF CIGAR MICROBES

Kyle Moske, Jason Conn and Jacqueline Malecki
(Dr. Edwin Wong, Dept. of Biology)

A recent study by Sapkota, et. al. (2009) examined the diverse bacterial communities found in cigarette tobacco. The purpose of this study was to investigate the bacterial metagenome present within commercially available cigar tobacco. This study used a 16S rRNA based taxonomic survey to evaluate the total bacterial diversity in cigars from Nicaragua and the Dominican Republic. It has been established that tobacco smokers are most likely to develop respiratory infections due to colonization by bacterial pathogens found in their oral and nasopharygeal cavities (Sapkota, et. al., 2009). This study sought to determine whether there are any pathogenic species within the cigar tobacco.

20 DIGITAL MANIPULATION IN NEWS PHOTOGRAPHY

Aubrey Nolan
(Dr. Katy Wiss, Dept. of Communications)

Digital manipulation of news photographs is one of the factors currently jeopardizing the credibility of the news industry. Newspapers and magazines constantly doctor images for both ethical and unethical reasons. A survey was used to explore the attitudes of college students. The purpose of this research is to determine how tolerant the public is regarding manipulations of news photos that appear in newspapers and magazines. The results indicate that college students are more tolerant of manipulations than would be expected based on the literature.

21 METAGENOMIC ANALYSIS OF WATER SAMPLES

Uyiosa Osagie and Sandy Peterson
(Dr. Edwin Wong, Dept. of Biology)

WCSU uses Danbury's West Lake Reservoir as a water source. The reservoir contains a diverse microbial community. Before water reaches WCSU faucets it

is treated to reduce the bacterial load. The purpose of this research is to compare the bacterial communities in both the reservoir and the WCSU tap water. The methods used in this project include PCR amplification of metagenomic samples, DNA cloning and sequencing, and T-RFLP fingerprint analysis.

22 IMAGINING INDIGENISM IN MEXICO: THE "NOBLE SAVAGE" IN MODERN TOURISM

Adrienne Ostrove
(Dr. Alba Skar, Dept. of World Languages & Literature)

The present paper addresses the representation of the indigenous population of Mexico in the 21st century. Specifically, it explores the role of the tourism industry in maintaining the image of the “noble savage”, a concept originating from colonial times that conveys the indigenous Mexican as passive, complicit, and overly generous. This paper also seeks to dispel some of the myths surrounding the indigenous cultures in Mexico, namely the tendency to shrink indigenous cultures into something concrete and objective.

24 ANALYSIS OF THE BACTERIAL COMMUNITY WITHIN A BUILDING VENTILATION SYSTEM

Jacob Putkowski
(Dr. Edwin Wong, Dept. of Biology)

Numerous studies have been conducted that investigate the correlation between Sick Building Syndrome (SBS) and the microbiological contaminants emitted from mechanical ventilation systems. This project involved taking swab samples from ceiling vents on the second and third floor of WCSU's Science Building. Bacterial biodiversity was examined by sequencing 16S ribosomal DNA. Methods involved ligation of PCR amplified rDNA to a plasmid vector, electroporation into electrocompetent cells. Transformants were isolated and their plasmids were extracted for sequencing. DNA sequences were compared on the BLAST search engine. Terminal Restriction Fragment Length Polymorphism (TRFLP) analysis was also performed.

25 HUDDLING BEHAVIOR DURING HYPERTHERMIA IN MICE INDUCED BY ACTIVATION OF TRPM8 RECEPTORS BY MENTHOL

Sarah Quell
(Dr. Patrice Boily, Dept. of Biology)

This study tests the hypothesis that mice will huddle more with menthol application because menthol mimics cold exposure by activating TRPM8 receptors. Eight mice with implanted transponders were paired with 8 other mice

and then anesthetized. Mice were rubbed on both sides of their abdomen with randomly chosen (0, 5, 10%) menthol solutions. In each experiment both mice had behavioral observations recorded every 4 minutes. Mice with transponders had temperature and activity recorded once every minute. The results suggest that menthol increases core Tb and activity levels in mice, but does not increase the behavioral heat gain and heat conservation response of huddling.

26 DISTRIBUTED CONTROL OF ROBOTS VIA REST

Andrew Ribeiro
(Dr. Rona Gurkewitz, Dept. of Computer Science)

The systems that facilitate distributed control of robots traditionally use a client/server architecture in their implementation. The interchange between the client and server is often costly, in terms of CPU cycles, and the information format is not governed by a standard protocol. The advantages and disadvantages of an implementation of a system that uses standard HTTP protocols to facilitate the distributed control of robots, as opposed to the traditional approach, are discussed.

29 THE EXISTENCE OF MARITIME PIRACY IN AMERICAN HISTORY

Fred Salcido

Maritime piracy has been an ongoing threat throughout American history. These pirates, whose exploits included the plundering of ships and harbor blockading, comprised of the Western pirates that plagued North American waters in the seventeenth and eighteenth centuries, and the Barbary Corsairs that attacked American shipping in the Mediterranean Sea. This project examines the threat of piracy within the American historical context in order to understand the dangers poised by modern-day piracy, particularly in this era of global terrorism.

30 THE EFFECT OF TEXT MESSAGING ON REACTION TIME

Julie Anne Sathoud and Petra Cepeda
(Susan Maskel, Dept. of Biology)

Text messaging while driving is legal in twenty-seven states in the United States. To help determine the effect of text messaging on reaction time, a Biopac was used to test the reaction time of sixty subjects. Half of the tests were done while subjects were text messaging; the other half were done while subjects were not text messaging. Results indicate that text messaging significantly increased reaction time; no difference was found between males and females. In addition, subjects responded faster to stimuli given at 4 second rather than random intervals, and younger subjects responded faster than older subjects.

31 STUDYING THE VIGILANCE BEHAVIOR OF WINTERING BALD EAGLES

Terrance Sheehan
(Dr. Howard Russock, Dept. of Biology)

This study examined whether wintering bald eagles display increased vigilance behavior when in groups. It was hypothesized that eagles perching in groups observe other eagles for cues as to food locations and piracy opportunities. Eagles were classified as adult or sub-adult and as being alone at the study location or not alone. Vigilance behavior was quantified as the number of head turns a given eagle exhibited in a 15 min observation period. A one-way ANOVA comparing the number of head turns per minute in the four groups failed to reach significance. Similarly, a simple regression analysis of all the data, comparing the number of head turns per minute to the number of other eagles present indicated no significant trend. Possible reasons for these results are discussed.

32 THE EFFECT OF MOOD AND ATHLETIC PARTICIPATION ON PAIN TOLERANCE

Danielle Spangler
(Dr. Patricia O'Neill, Dept. of Psychology)

This study explores the effect of mood and athletic participation on pain tolerance. A cold pressure test was used as a baseline tolerance test. After, they had a mood induced by reading statements using the Velten procedure. A second cold pressure test was administered following these statements. Finally, subjects completed questionnaires regarding athletic participation. Participants in the positive mood group were expected to have a higher pain tolerance than the negative mood group. Athletes were expected to have a higher pain tolerance than non-athletes. Results thus far indicate no significant findings; however, data collection is currently still in progress.

33 MEMORY RECALL FOR BLACK AND WHITE OR COLOR PICTURES

Jessica Ursini, Mary J. Davis and Ashley Anderson
(Dr. Robin Flanagan, Dept. of Psychology)

Twenty participants viewed computer reproductions of photographs either in black and white or in color. The participants were then asked to write down the words that they were able to remember. Using a t-test for independent groups, the authors found that individuals viewing color photographs did not obtain significantly higher recall scores than those who viewed black and white photographs. These results suggest that using color as a memory tool may not enhance cognitive performance.

34 EXPLORING ELECTRONIC TRANSITIONS WITH SINGLE WALLED CARBON NANOTUBES WITH COVALENTLY LINKED PORPHYRIN ANTENNAE AND NON-COVALENTLY LINKED PORPHYRIN NANOHYBRIDS

Kate Veccharelli
(Dr. Russell Selzer, Dept. of Chemistry)

Single-wall carbon nanotubes (SWNT) coupled with electron donating species, such as porphyrins, show potential for the future of photovoltaics. SWNT have an extended π; system and can be functionalized through π;- π; interactions with the porphyrins. SWNT were attached to the 5-p-hydroxyphenyl-10,15, 20-tetraphenylporphyrin (H2P) via a covalent ester linkage or non-covalently by electrostatic interactions. Optical spectra was taken of the nanocomposites to observe their electronic transition properties. The instrumentation that was used to track the electronic transitions was the UV-VIS spectrometer, the fluorometer and the electronic pulse laser. The results showed quenching of the fluorometer spectroscopy indicating successful SWNT-H2P interactions.

35 EMOTIONAL RESPONSE TO IMAGERY

Edward Wasenius
(Dr. Rondall Khoo, Dept. of Psychology)

This study used visual stimuli to further the understanding of gender-based emotional response. Two film clips were shown to 9 men and 12 women; one depicted two people engaging in romantic activity and another in which two people engaged in violent activity. After each clip participants were presented a Likert scale questionnaire. The results indicate that while men assume women would prefer the romance clip and women assume men would prefer action, that is not the case. An important note is that men claimed to enjoy action sequences less after viewing the romance film.

36 DNA SEQUENCE ANALYSIS OF LAKE ZOAR SEDIMENT MICROBES

Valerie Watson, Courtney Pietropaolo and James Tanner
(Dr. Edwin Wong, Dept. of Biology)

Lake Zoar, the fifth largest freshwater body in Connecticut, is flanked by two dams, creating a unique microbial community in the sediment. This research attempts to use DNA sequencing to classify sediment microbes based on sampling sites and environmental factors. In addition, biodiversity will be investigated by Terminal Restriction Fragment Length Polymorphism (T-RFLP) analysis of 16S rRNA gene sequences.

37 INTESTINAL COLONIZATION OF EQUUS FERUS CABALLUS FOR THE FIRST WEEK OF LIFE

Rachel Yonika and Michael Ammirata
(Dr. Edwin Wong, Dept. of Biology)

Immediately following birth, the newborn mammalian gut is exposed to a wide variety of microbes. With the hypothesis that the gut is sterile and colonized after birth, a pregnant horse and its newborn foal were tested. Fecal samples were taken from the mare before giving birth as a control, followed by the first defecation of the foal and a second sample one week later to determine any change in colonization. Preliminary DNA tests detected little sign of microbial life at birth, but clear evidence of an abundance of bacteria in the mature mare and the foal after one week of life.

Abstracts

Seminar Presentations

listed in alphabetical order by first author

8 ENVIRONMENTAL ISSUES: ARE PEOPLE CONCERNED?

Rosanna Bruzzi
(Dr. Chris Kukk, Dept. of Social Sciences)

This research explores the concerns that faculty and students have regarding environmental issues. Those interviewed expressed concerns such as the amount of paper used, recycling, and getting connected with nature through the use of the nature preserve. Students and faculty would like to see more information available and more events that involve the nature preserve and/or hiking.

9 THE FALLEN WOMAN IN AMERICAN LITERATURE AND CULTURE

Emily Cole, Chris Koblynsky, Curtis Wright, Leslie Tracey, Anthony Carvalho, Danielle King, and Mike Robbins
(Dr. Margaret Murray, Dept. of English)

The construct of “the fallen woman,” the sexually active woman, is one that extends into the cultural imaginary across all marginalizing categories in American society. Age, class, marital status, education, race, ethnicity, and religion: all become ineffectual signifiers when discussing this most gendered behavior. (It should be noted that there is no parallel definition for men.)This panel is a “roundtable, such as those presented at MLA, the definitive organization of our profession. It consists of a moderator and six students, who are respondents. The topic of the fallen woman will be focalized through literary and cultural context, including linguistics, socio-economics, film and history.

23 GEOGRAPHIC EFFECT ON SNOW CRYSTAL STRUCTURE

Anne Marie Palumbo, Ryan Suter and Paul Shupenis
(Dr. Albert Owino, Dept. of Physics, Astronomy and Meteorology)

During coastal storms occurring on December 31, 2009 and January 3, 2010 snow crystal structures were observed and recorded at coastal, valley and control locations in southwestern Connecticut. Methodology was derived primarily from Bentley, Libbrecht, Magono, Lee, Peterson, Yeh, Cotton, Gold, and Power. Snow crystal samples were classified according to Libbrecht’s Basic Classification and the more complex meteorological classification of Magono and Lee. Results indicated differences in snow crystal structure, size, riming, and aggregation between locations. These characteristics may prove as indicators for

locations as the distribution of aerosols during the winter season acts as a control for each location.

27 THE ROLE OF THE MILITARY INDUSTRIAL COMPLEX IN THE REALM OF STATE SOVEREIGNTY

David Rogers
(Dr. Christopher Kukk, Dept. of Social Sciences)

The Military Industrial Complex (MIC) is a vast, evolving entity of individuals, Non-Governmental Organizations (NGO's), governments, and economies. Its role in International Political Economy (IPE) has been one of vast power, especially since the end of the Second World War. A primary point of analysis, when studying the MIC, involves ideas encompassing 'Westphalian' state sovereignty. The coupling of such ideas with the MIC creates a very important question in the modern context of globalization which will be the focus of the paper; How does the Military Industrial Complex affect the sovereignty of states, internally and externally, and are its effects positive or negative?

28 MEASURING THE POLITICAL ORIENTATION OF COLLEGE STUDENTS

Derek Roy and Mr. Steven Bainer
(Dr. Carina Bandhauer, Dept. of Social Sciences)

In my experience both professionally as a young politician in Connecticut and academically as an undergraduate student at Western CT State University, I've witnessed firsthand the political stereotypes of the college environment on and off campus. Traditionally, one could make a strong argument that college students and professors are both socially and fiscally liberal for a variety of reasons. It's my intention to measure the actual political efficacy as compared to a pre-determined sliding scale of political ideologies within matriculated undergraduate students enrolled in a college or University between the ages of 18 – 24 years by using an online survey.

WestConn Research Day is co-sponsored by the Office of Academic Affairs, the Office of Student Affairs, the Ancell School of Business, the School of Arts and Sciences, the School of Professional Studies, the School of Visual and Performing Arts, and the Graduate School.

WestConn Research Day is sponsored by the Office of Academic Affairs

Appreciation and thanks to the people who made this event possible:
Dr. James Schmotter, President
Dr. Linda Rinker, Provost and Vice President of Academic Affairs
Dr. Lynne Clark, Dean of the School of Professional Studies
Dr. Ellen Durnin, Dean of the Graduate School
Dr. Carol Hawkes, Dean of the School of Visual and Performing Arts
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Judges for the Provost's Prize
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Dr. Patrice Boily, Biology Department
Dr. Michael Chappell, English Department
Dr. Robin Flanagan, Psychology Department
Dr. Josephine Hamer, Mathematics Department
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Dr. Anne Roberts, Chemistry Department
Dr. Alba Skar, World Languages Department
Mr. David Skora, Art Department
Ms. Virginia Verhoff, Health and Promotion Exercise Department

WRD Volunteers
Jacqueline Buckley
Michelle Dease
Barbara Ghent
Debbi Johnson
Catrina Morgan

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Dr. Susan Maskel, Co-Chairman, Biology Department
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