

**Addendum to  
Scheduled Presentations**

**9th Annual Massachusetts  
Undergraduate Conference**  
April 25, 2003

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**ANIMAL SCIENCES**

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**WATERFRONT 1B**

**2:40-3:40**

**PANEL 4**

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**SARA DIBACCO** (SALLIE SMITH), DEPARTMENT OF ANIMAL SCIENCES, UMASS AMHERST, AMHERST, MA 01003

**THE ROLE OF NOTCH 1 EXPRESSION IN MAMMARY EPITHELIAL CELLS ON THE SECRETION OF GROWTH FACTORS AND CYTOKINES**

Malignant tumors thrive in their microenvironment by secreting factors that affect the growth of cells around them and/or cytokine release from the immune cells sent to destroy them. In mammary gland tumorigenesis, the enhanced expression of Notch in tumor cells has been shown to play an active role in progression. Using the CellTiter96<sup>®</sup> Aqueous One Solution Cell Proliferation Assay (MTS assay), supernatants from Notch 1 expressing cells were tested on immortal HC11 mammary epithelial cells to determine the role of any secreted growth factors on cell proliferation. In addition, enzyme linked immunoassays (ELISAs) were used to quantify interferon gamma release from activated T cells grown in the presence of these supernatants. Data obtained from the MTS assays suggest a trend toward a reduction in the proliferative capacity of HC11 cells exposed to these supernatants. To distinguish whether the decrease in metabolic activity detected by the MTS assay is due to actual growth reduction or death of a subpopulation of cells, we perform cell death assays using two different markers of cell death. The assays confirm that growth arrest and not death is responsible for the decreased bioreduction of the MTS tetrazolium compound. FACSscan data from the cell death assays also indicate an interesting decrease in the size of cells grown in supernatant versus medial control. This is an important avenue for further study. ELISA results show a decrease in interferon gamma release from activated T cells grown in supernatant from Notch 1 expressing cells. Currently, we are attempting to identify the secreted factors responsible for these effects. Overall, the data suggests a novel mechanism in which Notch 1 expression may contribute to breast cancer progression through the secretion of factors that help tumor cells escape immunosurveillance and regulate growth of neighboring cells.

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**BIOLOGY**

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**CITYVIEW BALLROOM**

**1:40-3:40**

**BOARD 13**

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**KATHRYN PIKORA** (LARRY LEWIS), DEPARTMENT OF BIOLOGY, SALEM STATE COLLEGE, SALEM, MA 01970

**EVIDENCE OF CELLULAR DIFFERENTIATION IN THE TERMINAL CELLS OF SPIROGYRA COMMUNIS**

Cellular differentiation in the extant algal genus Spirogyra has not been reported, but examination of the cells at the end of filaments (terminal cells) and internal cells may reveal evidence of differentiation. Two-celled fragments created via shearing with a pipette were followed through at least one mitotic division. Observations suggest that the terminal cells of Spirogyra communis are longer than internal cells. A paired t test yields a 95% confidence interval that there is a significant difference between terminal and internal cells (two-tailed P value = 0.0012). In addition, each terminal cell of one filament exhibits a rounded outer end wall and a straight cross wall. Each internal cell exhibits two straight cross walls. In 0.6 M sorbitol the end walls flatten, and this is consistent with the hypothesis that turgor pressure causes the characteristic rounded appearance of the outer end walls. Thus, the data suggest that the rounded outer end walls occur because of turgor pressure and not cellular differentiation. However, the significant difference between the mean of terminal cell lengths and the mean of internal cell lengths is consistent with the view that cellular differentiation may occur in Spirogyra.

## Addendum

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### CHEMISTRY

**CITYVIEW BALLROOM**

**1:40-3:40**

**BOARD 49**

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**THOMAS GASS** (CHRISTINE MACTAYLOR), DEPARTMENT OF CHEMISTRY, SALEM STATE COLLEGE, SALEM, MA 01970

**A STUDY OF ULTRAVIOLET LIGHT-INDUCED CHLORINATION OF HYDROCARBONS IN A SEAWATER MATRIX**

Ultraviolet light is known to have a detrimental effect on the environment by initiating reactions whose products are harmful to living organisms. One reaction that can proceed via ultraviolet light is the chlorination of a hydrocarbon. This research is to determine if such a reaction can occur in seawater and by what mechanism the reaction would proceed. Research will involve the employment of an ultraviolet light directed on a tank of simulated seawater. Hydrocarbons will be bubbled through the seawater for 24 hours and a determination of the products will be done using gas chromatography/mass spectrometry (GC/MS).

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**CITYVIEW BALLROOM**

**10:00-12:00**

**BOARD 6**

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**ANDREW LATHAM** (RONALD MACTAYLOR), DEPARTMENT OF CHEMISTRY, SALEM STATE COLLEGE, SALEM, MA 01970

**A STUDY OF THE EFFECT ULTRAVIOLET LIGHT HAS ON HYDROCARBONS IN SOLUTION**

Laboratory samples containing various hydrocarbons were prepared. These samples were irradiated with ultraviolet light. Gas chromatography and mass spectroscopy were used to verify the contents of the samples pre-irradiation and to analyze the effects the UV light had on the hydrocarbons in rivers and ponds resulting from biogenic processes as well as pollution. The presence of metals in the ice was also studied to determine if they acted as a catalyst in altering the hydrocarbons. These results along with possible environmental and geological implications will be presented.

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### COMPUTER SCIENCE

**CITYVIEW BALLROOM**

**10:00-12:00**

**BOARD 34**

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**DEBANGSU SENGUPTA**, COMPUTER SCIENCE, UNIVERSITY OF MASSACHUSETTS, AMHERST

**ISSUES IN MACHINE TRANSLATION MODEL FOR AUTOMATIC IMAGE ANNOTATION**

Digital libraries have strived to provide multimedia (image/video) retrieval capabilities on par with textual search. However, retrieval generally relies on manual image annotation, which is inefficient and scales poorly with an expanding collection. In this paper, we explore the probabilistic Machine Translation model described by Duygulu et al [1] as it applies to automatic image annotation. Images are segmented into regions and then clustered into blobs after extracting features. We use images with associated text captions to train the model, and automatically annotate others using words with high probability given blobs from an image. We experimentally show dependencies of the probabilistic model. Specifically, we demonstrate that by adjusting quantization parameters, the number of words predicted by the model reduces significantly (up to 65%). Also, by modifying the feature set extracted from the images, it can be shown that the performance of the model varies.

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### ENVIRONMENTAL STUDIES

**CITYVIEW BALLROOM**

**10:00-12:00**

**BOARD 81**

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**ANTHONY NUNES** (KATHLEEN ARCARO), ANIMAL SCIENCE, UNIVERSITY OF MASSACHUSETTS, AMHERST

**IN-VITRO ASSAY OF ESTROGENICITY OF ATRAZINE**

Recent studies have indicated that Atrazine, a common herbicide, may act as an artificial estrogen. These findings have been controversial due to conflicting results reported by various labs as well as the assertion that Atrazine may be more active in low concentrations. In order to further examine Atrazine's potential estrogenic affect, several in-vitro cellular assays were conducted. In the Assay, known as the Focus Assay, estrogen dependent breast cancer cells (MCF-7) were grown and exposed to varying concentrations of Atrazine in 48-well plates. An increase in post-confluent cell growth was assumed to be indicative of an estrogenic response. Measurement of cellular growth was accomplished through ascertainment of foci (tumor like growths) and cell density. The concentrations of Atrazine used are comparable to concentrations that have been found to be active in previous in-vivo studies and range from 510-11-510-6 molar. The results have thus far been inconclusive in regards to Atrazine's effect on foci growth associated with any concentration. However, exposure to Atrazine has induced large amounts of variability in cellular growth. The increase in variability may be due to conflicting effects of some metabolites of

## Addendum

Atrazine. Further experiments will be conducted in order to more conclusively determine the effects of Atrazine on the cellular growth of MCF-7 cells.

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**CITYVIEW BALLROOM**

**1:40-3:40**

**BOARD 28**

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**J. WANG** (B.M. ZUCKERMAN, K.F. ARCARO), ENVIRONMENTAL SCIENCE, UNIVERSITY OF MASSACHUSETTS, AMHERST

### **DISRUPTION OF CELL MEMBRANE CARBOHYDRATES IN BREAST CANCER CELLS BY LECTINS AND ENZYMES**

Surface membrane carbohydrates play a vital role in the growth and proliferation of cancer cells and in signaling and recognition among these cells. A principle objective of this project was to prevent the formation of estrogen-dependent tumor-like growth, known as foci, in MCF-7 cultured cells through the use of lectins and enzymes without causing cell death. Lectins, which are proteins that bind carbohydrates, and enzymes are believed to interfere with cell-to-cell signaling and recognition in such a way that they prevent the formation of foci. MCF-7 cells were grown in the presence of estradiol and an enzyme,  $\alpha$ -galactosidase. Treatment with  $\alpha$ -galactosidase exhibited a dose-response relationship on MCF-7 cell foci formation. As the concentration of  $\alpha$ -galactosidase was increased in solution, there was a proportional decrease in the number of foci. These findings suggest that  $\alpha$ -galactosidase disrupted the cell-to-cell signaling between MCF-7 cells. In a competitive binding assay using fluorescence labeled lectins and their competitive sugars, binding of lectins to the MCF-7 cells was visualized using fluorescent microscopy. In these trials, galactose and mannose/glucose were identified as membrane surface carbohydrates on MCF-7 cells. Experiments designed to determine if receptors with terminal galactose moieties are recycled and resume their normal function in cell-to-cell recognition are presently being performed.

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## INTERNATIONAL STUDIES

**BACKBAY2**

**2:40-3:40**

**PANEL 4**

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**CHRISTINE CAHILL** (THOMAS SIMMONS), DEPARTMENT OF ECONOMICS, GREENFIELD COMMUNITY COLLEGE, GREENFIELD, MA 01301

### **FIRESTONE TIRE COMPANY IN LIBERIA; A STUDY OF CORPORATE POWER IN AFRICA**

A study of the history and development of Firestone Corporation in Liberia; including a brief history of American Liberian relations, Liberia's history as an African Nation, its unique status from the perspective of colonization, as well as the history of Firestone Company itself. Firestone Company as an example of foreign corporate power in Africa, and how this contributed to the developing market for labor and resources as it unfolded in Africa ,especially the ways in which this fostered the future pattern of globalization The study portrays the development of Liberia's dependence on foreign capital, in particular the United States and the dollar. It also includes an exploration of Liberian / US economics ties and how they were influential in the emerging patterns of African independence and the World War era. The paper studies the relationship between race and class in Liberia and the ways in which Firestone took advantage of this to supply its labor quota. It explores the Tubman presidency and its importance in changing the historical divisions of Liberian society. How did US foreign policy in relation to Liberia contribute to the conditions that created the Liberian Civil War? The US relationship with Liberia, up to and including the government of Charles Taylor, influenced every area of Liberian society; civil, political and economic. In light of this, where does our responsibility to Liberia lie? Last, it explores Liberia as an indicator of the civil, political, and economic factors that underlie the state of Africa today; history that must be understood in order to grasp the complexity of this region.

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## INTERNATIONAL STUDIES

**BACKBAY 2**

**2:40-3:40**

**PANEL 4**

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**YANYU LI** (DOUGLAS LARSON), DEPARTMENT OF ACCOUNTING, SALEM STATE COLLEGE, SALEM, MA 01970

### **DOING BUSINESS IN CHINA**

China's entry into the World Trade Organization (WTO) on December 11, 2001, has great significance for international business. The objectives of my study are to give potential investors an overview of doing business in China and to introduce pertinent features of Chinese culture, especially in light of its evolution and modernization. Consulting current Chinese laws and regulations, and consulting the professional literature, I show that China has been rapidly changing its legal, economic, and foreign trade policies since it opened its doors to foreign investors twenty years ago. Interviewing with an American teacher who taught in China provides an insight of Chinese current education system and potential education market. This work will benefit potential investors who must know the business environment, investment policies, trade opportunities and risks, as well as the human resources and culture of contemporary China. A lack of updated information or awareness of the speed of change in China will undermine the prospects of any business ventures there.

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## **LITERATURE**

**WATERFRONT 1A**

**1:40-2:40**

**PANEL 3**

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**JOSEPH NAVAS** (MARY CORDILL), DEPARTMENT OF SOCIOLOGY, CAPE COD COMMUNITY COLLEGE, WEST BARNSTABLE, MA 02668

### **GAMEY: LURID ACCOUNTS OF INCIDENTS THAT MAY HAVE OCCURRED**

"Gamey: Lurid Accounts of Incidents that May Have Occurred," is a self-published collection of three personal essays that look at some of the formative incidents of my youth. The collection is humorous, as is most of my literary writing. It describes my life as a 5 year old in Pennsylvania, as a 9 year old newcomer to Cape Cod and as an awkward adolescent. This collection, however, was also written with a greater emphasis put on catharsis and self examination. I am a 32 year old recovering addict. I have been sober for nearly four years. In this time I have examined and often discarded, a number of ideas about addiction and sobriety. One idea that has remained true for me is the absolute necessity of remembering, in order for me to continue writing creatively and living soberly.

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## **MECHANICAL ENGINEERING**

**FEDERAL 2**

**11:00-12:00**

**PANEL 2**

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**ALEX VON BRAUN** (JAMES RINDERLE), MECHANICAL & INDUSTRIAL ENGINEERING, UNIVERSITY OF MASSACHUSETTS, AMHERST

### **CONDENSING DRYERS**

Inefficient residential electric clothes dryers consume a substantial 3% of all U.S. household energy. My Objectives are to design and fabricate the conversion of a conventional electric clothes dryer to recover and so reduce consumption of energy normally wasted. While "condensing" clothes dryers operating on similar principles are available, they are geared to a high-end market, with prices unlikely to justify a purchase based solely on reduced operating costs, as is intended here. The existing market for residential clothes dryers was analyzed to predict its receptivity to a more-expensive but more-efficient dryer. Several competing thermodynamic cycles were considered, including thermoelectric and vapor-compression. Vapor-compression and psychrometric cycles were analyzed to determine the most efficient working temperatures, mass flow rates, etc. for maximum energy efficiency. Benchmarking tests of an unconverted dryer were conducted. A dryer was converted using the optimized design, and tested. Preliminary analysis indicates that the amount of water extracted per unit of energy, measured as lb/kWh, can be increased from 3lb/kWh for a resistance electric dryer to roughly 5 lb/kWh for the vapor-compression cycle developed here. Somewhat higher values can be attained if a longer drying cycle can be tolerated. The price premium of approximately \$400 is justified for heavy users and/or those paying higher electric rates. My conclusion is that a more-expensive but more efficient vapor-compression clothes dryer is technically feasible and can make economic sense, especially for heavy users and/or those paying high electric rates.

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## **MANAGEMENT**

**CITYVIEW BALLROOM**

**1:40-3:40**

**BOARD 78**

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**FIONA FINCH**, DEPARTMENT OF MANAGEMENT, SALEM STATE COLLEGE, SALEM, MA 01970

### **A COMPARISON OF FEMALE MANAGEMENT STYLES IN SMALL-SIZED COMPANIES WITH THOSE OF LARGER CORPORATIONS**

It is known that female managers are underrepresented in corporate America. This study was conducted to determine if female managers have to adopt the traditional male management style (i.e. directive) to succeed in a male-dominated environment. It is hypothesized that women exhibit greater success in small-sized companies when using the democratic management style. When women advance to large-sized corporations, the directive style may be better suited to the large nature of departments and work groups. For this study, ten female managers are selected from small-sized companies and ten from medium and large-sized companies. Small-sized companies are defined in this study as having between 5-150 employees. Medium and large-sized companies are between 100-150 and 150+, respectively. Each manager is interviewed on her leadership style and actions. The results will test the hypothesis that female managers have to adopt the directive management style to succeed. Success is defined in this study as the rate and speed of promotions and percentage salary increases within the company or industry. Employee turnover rates will also be factored into defining success for the management styles used.

The US relationship with Liberia, up to and including the government of Charles Taylor, influenced every area of Liberian society; civil, political and economic. In light of this, where does our responsibility to Liberia lie? Last, it explores Liberia as an indicator of the civil, political, and economic factors that underlie the state of Africa today.

## Addendum

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### NURSING

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**WATERFRONT 1A**

**10:00-11:00**

**PANEL 1**

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**JENNIFER BESTOR** (JUDITH KINLEY), DEPARTMENT OF NURSING, GREENFIELD COMMUNITY COLLEGE, GREENFIELD, MA 01301

#### **NAVAJO HEALTH DECISIONS**

NUR120H is an honors course (3 credits) offered to first and second year nursing students in the AD Nursing Program at Greenfield Community College. Preparation for the course includes research and presentation of an aspect of Navajo culture and eight hours of group process training. There is also a required reading list of books on the history and culture of the tribe as well as on native healing practices. During the January inter-session of 2003, seven students lived in a dormitory at Dine College on the reservation, sharing space with Navajo students. They spent weekdays working in the Indian Health Service (IHS) Hospital in Chinle, caring for patients in a variety of clinical settings. They heard lectures from a Navajo anthropologist, the Navajo director of native healing services at the hospital and a native nurse midwife. The focus of my presentation will be the juxtaposition of Western Biomedicine and the traditional Navajo healing culture. Specifically I will address clinical applications as they occur in the Emergency Department of the Chinle Indian Health Service Hospital. Using two case examples I will discuss attempts by patients and their families to integrate traditional Navajo, Native American Church and modern western health belief systems. My assessment of these cases will include both the promise and the cost of such attempts.

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**CITYVIEW BALLROOM**

**1:40-3:40**

**BOARD 81**

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**JENNA CULLIVAN** (KRISTEN SETHARES), DEPARTMENT OF NURSING, UMASS DARTMOUTH, N. DARTMOUTH, MA 02747-2300

#### **BACCALAUREATE NURSING STUDENTS GAIN FROM COMMUNITY BASED SERVICE LEARNING PROJECT**

The purpose of the presentation is to describe a community service project organized by nursing students. Promoting the health of the community is one role of nurses. This can be accomplished through community service projects. In an effort to become involved in community service, the sophomore nursing class organized a clothing drive for a homeless shelter in Cambridge, MA. The sophomore class felt that it was important to help serve this homeless adolescent shelter during the holiday season. Signs were posted with a list of what these adolescents needed, e-mails were sent out to all nursing faculty and students, and announcement were made in several classes to keep the students informed of what was being collected and what was still needed. Students and faculty donated numerous amounts of toiletries, sleeping gear, clothes, jackets and other essentials. A group of nursing students went to the shelter to deliver the materials collected and benefited from speaking with the director of the program. The students were informed about the program and the importance that nurses have in the community. In all this the community project was a success. Students gained knowledge on health promotion and prepared for professional roles including community service.

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**WATERFRONT 1A**

**10:00-11:00**

**PANEL 1**

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**MICHELE DESROSIERS** (JUDITH KINLEY), DEPARTMENT OF NURSING, GREENFIELD COMMUNITY COLLEGE, GREENFIELD, MA 01301

#### **CEREMONIAL REPRESENTATIONS OF TRADITIONAL NAVAJO CULTURE**

NUR120H is an honors course (3 credits) offered to first and second year nursing students in the AD Nursing Program at Greenfield Community College. Preparation for the course includes research and presentation of an aspect of Navajo culture and eight hours of group process training. There is also a required reading list of books on the history and culture of the tribe as well as on native healing practices. During the January inter-session of 2003, seven students lived in a dormitory at Dine College on the reservation, sharing space with Navajo students. They spent weekdays working in the Indian Health Service (IHS) Hospital in Chinle, caring for patients in a variety of clinical settings. They heard lectures from a Navajo anthropologist, the Navajo director of native healing services at the hospital and a native nurse midwife. The focus of my presentation will be the similarities and differences between the individualistic western culture and the community based culture of the traditional Navajo. There are ceremonial representations of the Navajo culture that I will describe and discuss e.g. Kinaalda, the girl's puberty ceremony, and the Yei Bei Chai, a nine night blessing way ceremony done for physical and spiritual healing. I will discuss my observations of decision-making processes in the hospital setting where family and clan have far more influence than in the autonomy based western model. I will also mention some problems related to the breakdown of traditional cultural values and how that breakdown is related to current health care issues on the reservation.

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**WATERFRONT 1A**

**10:00-11:00**

**PANEL 1**

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**DAWN GORMLEY** (JUDITH KINLEY), DEPARTMENT OF NURSING, GREENFIELD COMMUNITY COLLEGE, GREENFIELD, MA 01301

#### **EDUCATING CLINICAL STAFF ABOUT NAVAJO CULTURE**

NUR120H is an honors course (3 credits) offered to first and second year nursing students in the AD Nursing Program at Greenfield Community College. Preparation for the course includes research and presentation of an aspect of Navajo culture and eight hours of group process training. There is also a required reading list of books on the history and culture of the tribe as well as on native healing practices.

## **Addendum**

During the January inter-session of 2003, seven students lived in a dormitory at Dine College on the reservation, sharing space with Navajo students. They spent weekdays working in the Indian Health Service (IHS) Hospital in Chinle, caring for patients in a variety of clinical settings. They heard lectures from a Navajo anthropologist, the Navajo director of native healing services at the hospital and a native nurse midwife. The focus of my presentation will be the juxtaposition of Western Biomedicine and the traditional Navajo healing culture. Specifically I will address educational attempts by the Indian Health Service Chinle Unit to integrate the healing practices of the two cultures. An office of Native Medicine has been established for the purpose of educating the largely Caucasian American staff and acting as liaison between the two cultures. This education attempts to promote culturally sensitive behavior as well as to weave together when possible Navajo and Western medicine. Case examples will demonstrate how and why this is largely not a successful endeavor.

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**WATERFRONT 1A**

**10:00-11:00**

**PANEL 1**

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**ELIZABETH SCHEURER**, DAWN GORMLEY, JENNIFER BESTOR, MICHELE DESROSIERS (JUDITH KINLEY), DEPARTMENT OF NURSING, GREENFIELD COMMUNITY COLLEGE, GREENFIELD, MA 01301

### **NAVAJO CULTURE**

NUR120H is an honors course (3 credits) offered to first and second year nursing students in the AD Nursing Program at Greenfield Community College. Preparation for the course includes research and presentation of an aspect of Navajo culture and eight hours of group process training. There is also a required reading list of books on the history and culture of the tribe as well as on native healing practices. During the January inter-session of 2003, seven students lived in a dormitory at Dine College on the reservation, sharing space with Navajo students. They spent weekdays working in the Indian Health Service (IHS) Hospital in Chinle, caring for patients in a variety of clinical settings. They heard lectures from a Navajo anthropologist, the Navajo director of native healing services at the hospital and a native nurse midwife. The observations I will share will provide an introduction to the Navajo culture. Any description of the Navajo must begin with their Creation Story. This story explains the clan system as well as patterns of belief held by traditional Navajo. From my pre-trip reading and my direct experience of the culture I will discuss cultural stereotypes and false assumptions that are held by the Navajo and by members of my own culture. I will include the divergent characteristics of the two cultures that are often points of friction.

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## **NUTRITION & FOOD SCIENCE**

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**CITYVIEW BALLROOM**

**1:40-3:40**

**BOARD 79**

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**MEGAN BISK**, (WILLIAM MILLER), NUTRITION & FOODS SCIENCE, UNIVERSITY OF MASSACHUSETTS, AMHERST

### **HELPING CHILDREN MAKE HEALTHY FOOD CHOICES: AN EVALUATION OF A PRESCHOOL NUTRITION EDUCATION PROGRAM**

Nutrition education for young children may help to alleviate many of the long-term problems and risks associated with poor nutrition: growth retardation, anemia, impaired learning ability, and obesity. This research evaluates the effectiveness of a nutrition education program provided by UMass Extension to preschool children in West Springfield, MA. The program is designed to help young children learn about different foods and begin to understand the importance of healthy eating. Interviews will be conducted with participating preschoolers to determine the extent to which they have retained information presented by nutrition educators about certain foods and their health value. Parents and teachers will complete questionnaire surveys to gain additional information about how the nutrition education program may be benefiting the children. The information will be helpful in determining the extent to which the program is successful. The instruments and the procedures used in this research will also serve as a pilot towards the design and development of a larger, statewide evaluation of UMass Extension's preschool nutrition education program that will be implemented in the future.

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## **PSYCHOLOGY**

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**WATERFRONT 1A**

**10:00-11:00**

**PANEL 1**

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**ANDREW GONSKA**, PSYCHOLOGY, UNIVERSITY OF MASSACHUSETTS, AMHERST

### **SELF-MONITORING, EXCHANGE AND COMMUNAL PERSONALITY FACTORS, AND DECEPTION**

The present study examines the roles of communal properties and evaluation apprehension both in self-presentational strategies and on deception levels. 85 participants were asked to fill out a number of questionnaires to assess communal, exchange, and self-monitoring tendencies. Then they were paired with a partner and asked to present themselves to their partners as either likeable, competent, or in no predetermined manner (control) while their conversations were secretly videotaped. After engaging in the interactions, the participants

## Addendum

were asked to watch videotapes of themselves and record all the instances of their own deception. The results revealed that high self-monitors had a tendency to tell greater numbers of lies, and that various types of participant lies also varied in accordance with their exchange and communal motivations.

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### WATERFRONT 1A

10:00-11:00

PANEL 1

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**KIMBERLEY REYNOLDS, (ROBERT KUNZENDORF), PSYCHOLOGY, UNIVERSITY OF MASSACHUSETTS, LOWELL**

#### **FAMILY VALUES: A GENEALOGICAL ANALYSIS**

Generally speaking, one might assume our present day "family values" are directly derived from our parents. However, the following study was conceived on the idea that perhaps our "family values" originate farther back in the family line. Over 200 General Psychology students took home a Survey of Ancestral Demographics requesting information about their parents, their grandparents, and their great-grandparents. One week later, over 80 students returned surveys containing critical information about both parents, all four grandparents, at least three great-grandmothers, and at least three great-grandfathers. These returning students completed a Survey of Personal Values that included 22 items regarding their "family values." Four ancestral demographics—the probability of ancestors being Catholic, the probability of ancestors being Protestant, the probability of maternal ancestors working outside the home, and the probability of maternal ancestors being divorced—were correlated with students' ratings of their agreement with the 22 family values. The resulting correlation indicated that demographic information about students' great-grandparents was more predictive of the students' "family values" than demographic information about their parents. The proportion of Protestant great-grandparents, for example, was significantly correlated with 4 family values, whereas the proportion of Protestant parents was significantly correlated with 0 of the 22 values.

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### CITYVIEW BALLROOM

10:00-12:00

BOARD 80

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**JACQUELYN SMITH (JEAN RHODES), DEPARTMENT OF PSYCHOLOGY, UMASS BOSTON, BOSTON, MA 02125**

#### **RAISED IN A SMALL TOWN: VARIATION IN THE ADAPTATION OF RURAL YOUTH**

Compared to urban and suburban youth, rural youth have greater difficulty adjusting to the psychosocial stressors they are exposed to in adolescence. However, present research falls short in identifying the variation with which rural youth adapt to these stressors. This study will investigate the risk factors that account for the variation in the development of depression among rural adolescents. It is hypothesized that 1) relative to urban and suburban adolescents, rural adolescents will report a more negative experience of school climate, significantly lower levels of family income, less social support, and higher levels of depression, 2) rural youth who are female, perceive their school climate as more negative, come from families of lower socioeconomic status, and have less social support will have higher levels of depression, and 3) social support will interact with a perceived negative school climate to attenuate the risk of depression among rural youth. Participants in this study were more than 4,000 Illinois middle school students who were given measures of depression, classroom environment, and perceived social support over a period of three years. This data will be analyzed using a one-way ANOVA to determine if there are significant differences between the rural and suburban/urban subgroups, with a Tukey post-hoc test to be used to examine the specific differences between the groups. Then a series of hierarchical regressions will be used to determine whether gender, perceived school climate, and socioeconomic status put rural youth at risk for depression, as well as whether social support mediates the effects of school climate.

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## PSYCHOLOGY

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### CITYVIEW BALLROOM

1:40-3:40

BOARD 80

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**JOHN TAWA (KAREN SUYEMOTO), DEPARTMENT OF PSYCHOLOGY, UMASS BOSTON, BOSTON, MA 02125**

#### **THE SELF IN BICULTURAL CONTEXTS: THE PROCESS OF SELF-CONSTRUAL AMONG ASIAN AMERICANS**

This study challenges the prevailing theory that the bicultural, Asian American experience involves frame switching between independent and interdependent construals of self, as adaptations to individualistic and collectivistic environments, respectively. This theory fails to represent the multiple ways in which the self in various contexts may be construed. The qualitative interview methodology adopted in this study reflects 1) the need for an exploratory investigation into a concept that is not well understood, and 2) the overall lack of quantitative, empirical support for Markus and Kitayama's theory of self-construal. Asian American adults who have been resident in the United States since at least five years of age were recruited from the Greater Boston area and participated in a two part, in-depth interview. The first portion was an open-ended exploration of participants' experiences of selfhood in various contexts, while the second introduced and evaluated Markus and Kitayama's theory at a structural level. A grounded theory constant comparative analysis of participants' stories, 1) offers multiple ways in which the self may be developmentally constructed, construed and negotiated in multicultural spaces and 2) provides support for Markus and Kitayama's theory as a monocultural construct only while challenging its relevance to the bicultural experience.

**SOCIAL WORK**

**BACKBAY2**

**2:40-3:40**

**PANEL 4**

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**CHILD ABUSE: ACKNOWLEDGING RESILIENT SURVIVORS**

Individuals victimized by child abuse, despite the sympathies their stories might evoke, are often stigmatized by society as irreversibly damaged or handicapped. Standards and expectations of these individuals are lowered, and they are stigmatized and typically expected to fail in many aspects of life. Much research in this area, in line with society's perspective, accentuates the damaging consequences of child abuse. This study, through background research on resilience and interviews with five victims of child abuse, will illuminate the possibilities for positive outcomes. Might survivors emerge with particular strengths, insights, capacities, and actual life successes? A sample of child abuse survivors with positive stories to tell is drawn from a pool obtained through a local social service agency, H.A.W.K., (Help for Abused Women and Children) and the Department of Social Services. Interviews are built around a qualitative, semi-structured instrument designed with enough flexibility to put respondents at ease. Results will potentially challenge the unrelentingly negative and often misdirected depiction of child-abuse victims, a depiction that unintentionally fuels societies' prejudices against these individuals, potentially damaging them even further.