### University of the Incarnate Word The Athenaeum

Research Week Archived Proceedings

**Archived Proceedings** 

Feb 25th, 12:00 AM - 12:00 AM

### 4th Annual Research Days- Event Proceedings

Office of Research Development

Follow this and additional works at: https://athenaeum.uiw.edu/researchweek

Research Development, Office of, "4th Annual Research Days- Event Proceedings" (2011). Research Week Archived Proceedings. 1. https://athenaeum.uiw.edu/researchweek/proceedings/2011/1

This Poster is brought to you for free and open access by The Athenaeum. It has been accepted for inclusion in Research Week Archived Proceedings by an authorized administrator of The Athenaeum. For more information, please contact athenaeum@uiwtx.edu.

shaping our universe through scholarship and research rse through scholarship and research shaping our universe through scholarshin av Asear it shapes are great and general pare shaping our universe through scholarship and research shaping our universe scholarship and research shaping our universe through scholarship and research

# 4th Annual UIW Research Days

February 2011



February 25<sup>th</sup>

### **EVENT PROCEEDINGS**

Sponsored by:

UIW EARDA Project [Funded by the National Institute of Health]

UIW School of Graduate Studies and Research Office of Research Development [ORD]

UIW Office of Instructional Technology

UIW Office of Mission Effectiveness



Dear Colleagues,

With great pleasure I welcome you to the University of the Incarnate Word's Fourth Annual Research Day. Today we celebrate academic accomplishment by showcasing the UIW faculty and student research and creative scholarship enterprise which contributes so much to our classrooms as well as to the world. We are indeed fortunate to belong to a community of educators and scholars seeking to advance our disciplines and help shape the broader community.

Elements crucial to the pursuit of academic excellence include a central place of reasonable and transparent discussion, where the path forward is determined by a critical examination of the past; a focus on reliable interpretations of the natural and moral world; the application of consistent standards of accomplishment; and the inclusive nature of truth-seeking, where insight is prized from commentators of all backgrounds. The relationship between these elements and the pursuit of knowledge remains even as disciplines change form and degree programs evolve. Today, more than ever, the world community must rededicate itself in support of academic environments which nurture this relationship.

As a result of a broad spectrum of work in higher education and by the significant achievements of faculty and students, University of the Incarnate Word enjoys a special place in the world of academe. The research presented today not only showcases disciplinary accomplishment in the art and practice of discovery, but serves to illustrate UIW's commitment to academic excellence.

Research Day would not be possible without the support and effort of many individuals. The list is too long to recount here in full, so instead I will simply indicate the groups that participated in organizing and sponsoring Research Day. These include the UIW EARDA project (sponsored by the National Institute of Health), the members of the Faculty Research Advisory Committee, the administrators and staff of the Office of Instructional Technology, and the School of Graduate Studies and Research Office of Research Development. To each individual who contributed to the planning and success of today's event I offer my sincere thanks and gratitude. To all presenters and attendees, please accept my best wishes on this special day.

Sincerely,

Dr. Kevin B. Vichcales, Dean

Kevin B. Vicho los

School of Graduate Studies and Research



#### **Table of Contents**

Table o	rch Abstracts 1	II - V - 41 -2-46
	THE EFFECT OF THE IMPLEMENTATION OF THE TREATMENT GUIDELINES FOR ATRIAL FIBRILLATION ON THE INCIDENCE OF STROKE - Abelida, Scott -	1
	THE POWER OF SOCIAL MEDIA ON BUYING BEHAVIOR OF THE MILLENNIALS AND GENERATION Y - Adams, Pate -	2
	SUSTAINABLE MINING AND THE GLOBAL ECONOMY: LESSONS FROM THE GRASBERG MINE - Alexander, Lewis, Teachout -	3
	A UNIVERSITY DIMENSION OF WELLNESS CLASS IMPACT ON BEHAVIORAL REGULATION IN EXERCISE: A PILOT - Barton-Weston, Soukup, Henrich -	4
	CONNECTIONS BETWEEN NAMES OF NUMBERS AND STUDENT PERFORMANCE IN MATHEMATICS ACHIEVEMENT TESTS - Beauford -	5
	AGAINST SEXISM: LESBIAN MASCULINITY IN BLACK FEMINIST THOUGHT - Bishop, Miller -	6
	ACADEMIC ENTITLEMENT IN FIRST-GENERATION AND NON-FIRST-GENERATION UNDERGRADUATES - Boswell, Fischer -	7
	BLOOD PRESSURE KNOWLEDGE AND SELF MANAGEMENT BEHAVIORS OF HISPANIC ADULTS DIAGNOSED WITH HYPERTENSION: A PILOT STUDY - Cassells, Kolb, Cook, Davila, Loftis, Armstrong -	8
	PROMOTORAS DE SALUD: VALUE TO PROVIDING CULTURAL CONNECTION WITH THE COMMUNITY - Cook, Cassells, Kolb, Davila, Loftis -	9
	DOES CLASS SCHEDULE IMPACT STUDENT OUTCOMES IN DEVELOPMENTAL MATH? - Fike, Fike -	10
	USE OF TEXT MESSAGING AS A TOOL TO INCREASE PHYSICAL ACTIVITY IN COLLEGE STUDENTS - Goei, Munoz, Fike, Dominguez, LaFrance, Herbers, Gunter -	11
	THE CARDIOVASCULAR AND RENAL EFFECTS PRODUCED BY MICROINJECTION OF KAPPA OPIOID AGONIST, U-50448H, INTO THE MPA - Gottlieb Afshar Franklin Toney -	12
	LIFE AFTER DOOM - A DIAGNOSIS OF NORMAL PRESSURE HYDROCEPHALUS - Harvey, Heath, Gale, Goulet -	13

CONVERGENT MEDIA AND THE DECLINE OF THE AMERICAN NEWSPAPER - Greenberg, Bertling -	14
THE OPPOSING EFFECT OF IONIC STRENGTH ON BOVINE SERUM ALBUMIN AGGREGATION AT VARYING PH - Grillo, Nguyen -	15
A COMPARISON OF EXPERIENCED AND POTENTIAL U.S. MEDICAL TOURISTS' EXPECTATIONS OF FOREIGN HEALTHCARE FACILITY SERVICE QUALITY - Guiry, Scott, Vequist -	16
THE IMPACT OF TENSION IN ABDOMINAL AND LUMBAR MUSCULATURE IN SWIMMERS ON VENTILATORY AND CARDIOVASCULAR FUNCTIONS - Henrich, Soukup, Barton-Weston, Carleton -	17
WHEN GENTLE WOMEN TAKE A STAND - Herbers, Buckley -	18
HOPE AND HEALING: PEACE BUILDING IN NORTHERN IRAQ BY MUSLIMS INSPIRED BY FETHULLAH GÜLEN - Kirk -	19
PROMOTION OF ADOLESCENT AND CHILD HEALTH IN SAN ANTONIO: A COMMUNITY ROUNDTABLE - LaFrance, Herbers, Munoz, Jones, Kimmel, Parker, Dominguez -	20
NONLINEAR DIGITAL CONTROL OF CONTINUOUS UNCERTAIN SYSTEMS - Langston, Frye -	21
CAN WE TEACH SOCIAL JUSTICE THROUGH SOCIAL PSYCHOLOGY CURRICULUM? A PRELIMINARY STEP - Lockhart -	22
HOW WE LET THEM DRIVE: DEVELOPING DASHBOARDS AND DELIVERING MULTIPLE YEARS OF NATIONAL SURVEY OF STUDENT ENGAGEMENT/FACULTY SURVEY OF STUDENT ENGAGEMENT (NSSE/FSSE) RESULTS - Logan, Harmsen, Schulte -	23
INTEGRATION OF SOCIAL NETWORKING IN AND OUTSIDE OF THE PHARMACY CLASSROOM - Oliveira, Maize -	24
WORLD BANK TAX ADVICE AND INCLUSIVE DEVELOPMENT: LATEST FINDINGS - McGuire, Alexander, Cromartie, Diaz, Martinez, Narvaez, Ogawa, Padron, Sanchez, Wright -	25
SIMULATION IN INTERDISCIPLINARY EDUCATION REGARDING END OF LIFE CARE - McNeill, Gilliland, Frei, Stovall -	26
TO SAVE THE WORLD WITH A PHOTO ALBUM": THE THEOLOGY OF MOTHERHOOD AND MEMORY IN CONTEMPORARY SCRAPBOOKING DISCOURSES - Miller -	27
IS THIS MY SHANGRI-LA? THE BHUTANESE REFUGEE RESETTLEMENT IN SAN ANTONIO, TEXAS - Nath -	28

AGE AND ACTIVITY RELATED DIFFERENCES IN THE MECHANISMS UNDERLYING MAXIMAL POWER PRODUCTION IN YOUNG AND OLDER ADULTS - Newstead, Korff, van Zandwijk, Jensen -	29
EXPLORING RESILIENCY, EMPOWERMENT, CONFLICT MANAGEMENT STYLES, AND INTERPERSONAL CONFLICT IN THE WORKPLACE AMONG NURSING STUDENTS - Pines, Rauschhuber, Norgan, Cook, Canchola, Richardson, Jones -	30
OPORTUNIDADES: IS THE CASH TRANSFER ONLY AN INCENTIVE? - Plascencia, Zanca -	31
A MUSICAL AND CULTURAL ANALYSIS OF NONDIEGETIC SOUNDTRACK ASPECTS IN THE 1995 BBC ADAPTATION OF PRIDE AND PREJUDICE - Quiñones -	32
EVOLUTION OF THE ANNUAL STUDENT ASSESSMENT AND PROGRESSION EXAM: A TOOL FOR MEASURING STUDENT COMPETENCY - Ramsinghani, Brady, Gottlieb, Grillo, Maize, Oliveira, Tovar, Witte, Johnson-Fannin -	33
IN-CLASS DISCUSSIONS OR ON-LINE ENHANCED DISCUSSIONS: DO THEY AFFECT EXAM SCORES? - Rodinsky -	34
IS LATIN AMERICA READY FOR SERVANT LEADERSHIP? - Rubio-Sanchez, Rodriguez-Rubio -	35
ENRICHING THE FUTURE: PRESENTING THE INHERITANCE OF CHRISTIAN SPIRITUALITY TO THE MILLENNIAL GENERATION - Ryan -	36
SMALL MOLECULE DISCOVERY: PHENYLALKYLAMINE-BENZENESULFONAMIDES AS 5-HT <sub>6</sub> RECEPTOR LIGANDS - Sikazwe, Dukat, Roth, Glennon -	37
VALUE - Soukup, Henrich, Barton-Weston -	38
FASHION MERCHANDISING AND INTERIOR DESIGN CURRICULA CROSSOVER: INTEGRATING BRANDING AND SPATIAL STRATEGIES WITHIN BUILT ENVIRONMENTS - Studak, Morthland -	39
THE RELATIONSHIP BETWEEN INFANT TEMPERAMENT, AGE, AND EEG ASYMMETRIES IN RESPONSE TO ATTRACTIVE AND UNATTRACTIVE FACES - Taylor-Partridge, Langlois -	40
LEARNING OUTCOMES OF A CULTURALLY-FOCUSED FOOT CARE PROGRAM FOR MEXICAN AMERICAN ELDERS - Zarate-Abbott, Etnyre, Loftis, Kolb -	41

### THE EFFECT OF THE IMPLEMENTATION OF THE TREATMENT GUIDELINES FOR ATRIAL FIBRILLATION ON THE INCIDENCE OF STROKE

Joeresty Abelida, RN, BSN, CNS Student, and Brendon Dean Scott, RN, BSN, CNS Student

#### Purpose of Study

This study assessed compliance to the national treatment guideline of oral anticoagulant (OAC) use in atrial fibrillation (AF) patients and compared the incidence of stroke in patients who received OAC and those who did not. The research questions were: 1) Are physicians following the 2006 guidelines for stroke related to the use of OAC among patients with AF?; and 2) Is there a difference in stroke incidence between those patients who were given OAC and those who were not?

#### Rationale and Significance

Atrial fibrillation is an independent risk factor for stroke with estimated 60,000 new cases annually. In 2006, the second treatment guideline published by AHA/ACC/ESC recommended antithrombotic therapy for AF patients except when contraindicated. Patients with 1 stroke risk factor based on CHADS scoring system, should be anti-coagulated with vitamin K antagonist (warfarin). Non-compliant to INR monitoring to maintain OAC therapeutic level and low risk patients may receive anti-platelet therapy such as aspirin. After the publication of the second guideline; few to no US studies document the rate of OAC use among AF patients and its impact on stroke.

#### Description of Methodology

A South Texas medical center's database identified 201 AF patients admitted with the International Classification of Disease (ICD-9) code 427.31 from January to December 2007. Using systematic sampling, data on 55 AF patients was collected using retrospective medical record review. Data were analyzed using frequency distributions and Chi-Square to answer research questions.

#### Findings and Conclusion

Participants were 63% Hispanic (35), 67% female (37), and aged 65-90, with 53% (29) diagnosed with new onset AF. Patients discharged on OAC were 52.7% and anti-platelet therapy 42.3%. The use of total antithrombotic therapy was noted with cumulative 97% (53). Four patients (7.2%), 3 on OAC and 1 on anti-platelet therapy, were subsequently readmitted with a stroke diagnosis. Over all, there was a high compliance to the treatment guideline regarding use of antithrombotics for stroke prevention. However, the study did not show an increase in OAC usage and readmission rate is consistent to the current national incidence of stroke at 7.8% (AHA 2009). On the other hand, the use of anti-platelet, as an alternative only to OAC, increased twofold indicating unique treatment approach among clinicians. The size of the group without OAC was too small to measure any statistically significant variations. Larger samples are needed to truly determine the value of OAC in stroke prevention.

### THE POWER OF SOCIAL MEDIA ON BUYING BEHAVIOR OF THE MILLENNIALS AND GENERATION Y

Melinda K. Adams, Ph.D., and Sharon S. Pate, Ph.D.

#### Purpose of Study

The researchers in this exploratory study were interested in determining the extent of the influence of social networks on Fashion Merchandising and Design students and students in other majors.

#### Rationale and Significance

Social media sites have become an important part of Millennials and GenY's lives. According to the Pew Research Center (2010), Millennials' are living their lives on the internet where 75% of them have a profile on a social networking site. When compared with only half of Gen Xers and 30% of Boomers, this gives them the distinct identity of being more technologically advanced. Students often are on multiple social networking sites. Social media can be linked to a positive association providing instrumental value that assists consumers in making decisions about what product to buy, when to buy, and where to buy (Weigand, 2009).

As a transaction channel, social media may allow consumers to buy items through the social media site or by clicking a link. Distribution channel could be achieved by locating the outlet nearest the consumer or arranging shipping to their home (Li, Kuo & Russell, 1999). As communication channels, social media provides users with informational and instrumental value and students in retailing classes may have a greater understanding of this media influence on shopping behaviors and adjust the promotional aspects of the company.

#### Description of Methodology

The participants were undergraduate students in southern states. The anonymous on-line survey was administered by sending an e-mail with a link to participants. Participants were told they could withdraw at any time by simply closing their browser. Survey participants were asked a series of questions concerning social media and their opinions concerning the time spent, products viewed, and relationships. Most participants, 87.7%, were 18 - 24 age and a few non-traditional students were over 30. Ninety-four percent of the participants were female. Fashion merchandising and fashion design majors was the largest segment of the participants followed by child and family studies, and education.

Cross tabulation revealed the differences were not pronounced when asked do they send "like" messages concerning products to their friends. Most students would recommend a video or send a joke but were not likely to send information about products. Fashion merchandising and design majors were more likely to purchase products endorsed by celebrities while child and family studies, business and education majors were not likely to be swayed.

#### Findings and Conclusion

Researchers found that fashion merchandising and design students more likely to buy based on information posted on social networking sites. The Millennia's were more likely to purchase items based on social media ads than older participants. 86.5% of the respondents said they had purchased between one and five items based on a social media advertisement. Newer advertisements that bombard social media participants are more pervasive than traditional models of advertising because it can reach consumers constantly through their cell phones. The researchers found the university students surveyed were reacting positively to these advertisements. Reaching this generation requires further studies to determine the extent of their purchases and brand loyalty.

### SUSTAINABLE MINING AND THE GLOBAL ECONOMY: LESSONS FROM THE GRASBERG MINE

Chrystal Alexander, McNair Scholar, And Paul L. Lewis, Ph.D., Mark S. Teachout, Ph.D. McNair Mentors

#### Purpose of Study

The purpose of this study is to examine the mechanisms by which multinational companies choose to act in socially responsible ways using a case study of the copper mining industry. Members of the mining industry have established standards for sustainable mining. Using established standards combined with recognized theories of why corporations act in socially responsible ways, this study explores the history of the Grasberg mine, identifies major issues faced by the corporation, and proposes an explanation for shifts in corporate priorities.

#### Rationale and Significance

As emerging economies become stronger, and technology continues to advance, finite resources become increasingly scarce. While rapidly expanding development continues to place heavy demands on the minerals sector, mining corporations must balance this demand against the ever growing demand for sustainability. A leader among the sustainable mining movement, Freeport McMoRan's Grasberg mine boasts the world's largest gold reserve and the world's third largest copper mine. This American multinational has operated in West Papua since the 1960s.

#### <u>Description of Methodology</u>

Using industry standards, corporate reports, external audits, and media sources, this case study analyzes PT Freeport Indonesia (PTFI) management responses to the environmental harms, political complications, and human rights violations that have plagued operations at the Grasberg mine. The six questions that guided this research can be summarized into three categories: what are the most pressing problems at the Grasberg mine, how has PTFI management responded to these problems, and how do these responses compare to current trends in corporate social responsibility?

#### Findings and Conclusion

Results indicate that the most pressing issues at the Grasberg mine are increasing environmental degradation, political corruption, and human rights violations. Responses to these issues have gained momentum over the past seven years. In response to environmental concerns, PTFI management has committed to rehabilitating the damaged areas. External audits have praised PTFI for their human rights training and PTFI management has provided financial and community support for at least a decade. These responses can best be explained using political theories of corporate social responsibility, specifically Integrative Social Contract Theory.

### A UNIVERSITY DIMENSION OF WELLNESS CLASS IMPACT ON BEHAVIORAL REGULATION IN EXERCISE: A PILOT STUDY

Heather Barton-Weston M.S., Gregory J. Soukup Sr., Ph.D., and Timothy W. Henrich, Ph.D.

#### Purpose of Study

The purpose of this study is to determine the impact of a Dimensions of Wellness lecture and activity class on the behavioral regulation of exercise as measured by the Behavioral Regulation of Exercise Questionnaire.

#### Rationale and Significance

According to the Center of Disease Control (CDC) and The American College of Sport Medicine (ACSM) many of the necessary health benefits of physical activity can be gained in accumulate of 30 minutes of moderate intensity physical activity per day. CDC suggests that there are three determinates to physical activity participation: physiological, behavioral, and psychological. The Behavioral Regulation in Exercise Questionnaire (BREQ-2) measures five different behavioral variables to exercise participation. In 2005 Racette et al found that upon entering into a university setting roughly 7% of students will discontinue physical activity between their freshmen and sophomore years. All students at The University of the Incarnate Word must meet the requirement of successfully completing a Dimension of Wellness Course. Students receive classroom instruction on the importance of and how to enhance 6 dimensions of wellness including physical wellness. Students are required to participate in two structured 30 minutes of aerobic exercise sessions per week in class and 30 minutes per week outside of class. This pilot study will evaluate the impact of the Dimensions of Wellness class on the behavioral regulation of exercise to later determine how behavioral regulation predicts or influences actual exercise participation

#### Description of Methodology

Permission for the study was obtained from the University of the Incarnate Word Institutional Review Board. Data was collected from the university wellness students at the beginning (PRE) and end of the class (POST). All students voluntarily participated in the study and informed consent forms were obtained prior to data collection. There were 63 participants (45 females/18 males) with a mean age of 19.5 years-old. Ethnic composition was 35 Hispanics, 21 Caucasians, and 7 African-Americans. Grade classification consisted of 41 first year and 22 upper level students.

#### Findings and Conclusion

Significant PRE-and POST differences in identified regulation (P<.017) internal regulation (P<.008) and external regulation (P<.041) were found among students. Age was correlated POST with both amotivation (r= .321: P<.011) and introjected regulation (r= -.285: P<.024) with no significant differences between genders and races. Identified regulation was predicted (POST) by age (F= 2.8, SE=.219,  $R^2$ =.162, P<.008) and classification (F=2.8, SE=.043,  $R^2$ =.162, P<.025).

Students obtained higher scores in identified, internal, and external regulation of exercise following the wellness class. Age and class rank were related with interjected and amotivation regulation of exercise. Maturity factors of age and classification were important factors in predicting identified regulation. This study suggests that significant increases in student internal and identification regulation could be attributed to wellness class participation.

### CONNECTIONS BETWEEN NAMES OF NUMBERS AND STUDENT PERFORMANCE IN MATHEMATICS ACHIEVEMENT TESTS

Judith E. Beauford, Ph.D.

#### Purpose of Study

The purpose of this study is to investigate whether an intervention to mimic the Mandarin number naming system will have lasting benefit to English speaking children in their mathematics achievement.

#### Rationale and Significance

International comparisons of children show America far from the lead in mathematics and science. Improvement will come only as the teaching and learning of mathematics improves. Studies from the last decade and before have indicated a strong correlation between the level of explicitness used to name numbers and children's understanding of place value (Cotter, 2000; Fuson, Grandau, & Sugiyama, 2001). The few interventions that have been published have lasted only a few weeks with children in the first grade. This project has used longer interventions with English speaking students in kindergarten and prekindergarten in an effort to equalize the advantages language may give in mathematics learning.

#### **Description of Methodology**

From the fall of 2004 until recently, we worked in a private school in San Antonio, Texas, where we used the tens-and-ones scheme (26 = "two ten six") to name numbers in the full year in the pre-kindergarten class and for the first three months of the kindergarten class. During this time the children were introduced to the numbers from 1 to 100, using otherwise traditional methods and materials. No further intervention was given in the subsequent years. The results of the mathematics portion of the Stanford Achievement Test given in the spring of 2009 were compared between students who had experienced the intervention and those, new to the school, who had not. ANOVA and ANCOVA analysis, controlling for overall achievement levels, compared percentage correct within subcategories of Mathematical Concepts and Mathematical Problem Solving for students in grades 1 through 6.

#### Findings and Conclusion

In both the simple one way analysis of variance and the analysis of variance controlling for overall achievement, the children who had participated in the project scored significantly higher in the percentage correct in the subcategory of Number Sense with effect sizes at 10% for both analyses. The stronger effect sizes shown in analysis of co-variance indicate further that the children that attended Pre-Kindergarten at Saint Thomas More maintained an advantage through grade 6. The fact that this occurred under several different prekindergarten teachers gives credence to the results being related to curriculum in this school that is not available at other schools or at home. Over the years of the project the school has used differing curricula. The difference that has been consistent is the use of explicit numbers names in the early years of formal schooling.

#### AGAINST SEXISM: LESBIAN MASCULINITY IN BLACK FEMINIST THOUGHT

Dalia Bishop, McNair Scholar, and Julie Miller, Ph.D., McNair Mentor

#### Purpose of Study

This study was designed to evaluate how, using a Black feminist theoretical lens, masculine performance among same-sex loving Black women can be transgressive of heteronormativity and anti-sexist. Such analysis looks for if and how Black lesbians free themselves from hegemony, developing oppositional subject positions that do not reaffirm sexist gender and sexual roles through the use of masculine gender performance. This research criticized the notion of essential masculinity and put forth that Black feminist masculinity (or at least masculinity that is not relationally defined as dominant) denaturalizes "opposite" gender ordered relationships and challenges traditional White-feminist expectations of androgyny as singularly liberating.

#### Rationale and Significance

With the exception of a few recent studies that focus on the social organizing affects of gender presentation, I have found little research that examines lesbian gender among Black lesbians and the potential thereof for feminist agency. Most related research explores (White) butch and femme subject positions, particularly how the identities develop and how they relate to sexual orientation and gender, and some discuss alternative masculinities of which Black women and lesbians participate. While helpful, these analyses fall short of addressing the complexities of the intersectional oppression Black, female-bodied, lesbians experience and the legacy of non-androgynous-non-conforming gender expression within African American social history. In an effort to do so here, I begin with an online community of studs, a racially specific term used among same-sex loving Black women to denote masculine gender-scripted dress and behaviors.

#### **Description of Methodology**

I analyze the rhetoric studs use in two domains: definition/expectations of stud identity and attitudes toward gender that order their social communities, with particular emphasis on their ideological stance on stud-on-stud relationships, that is, studs who divert from typically stud-femme pairings to same-gender-presenting relationships. This research relies on and grants authority to self-defining narratives, recognizing that Black feminist thought originates in the traditional processes of actively sharing lived experiences and knowledge. These narratives are constituted from an online community of studs who use YouTube videos to explain, describe, and understand their community. It is valuable to analyze these video blogs because they reflect the process of meaning making and knowledge sharing that grounds Black feminist thought.

#### Findings and Conclusion

First, I present how studs within this community use particular masculine presentations to self-define, both emphasizing and challenging an essential masculinity constructed in relation to femininity. Then I outline the debate over stud-on-stud relationships discussing its radical subjectivity and its oppositional ideas of normative Black lesbian gender and sexuality. Finally, I conclude that studs can be anti-sexist while continually reaffirming and earning masculinity. It requires a self-identity and performance of masculinity that is not predicated on dominating others. It requires challenging the assumption that masculinity is only or best legitimized when others are relationally defined by it.

### ACADEMIC ENTITLEMENT IN FIRST-GENERATION AND NON-FIRST-GENERATION UNDERGRADUATES

Stefanie S. Boswell, Ph.D., and Emily M. Fischer, B.A.

#### Purpose of Study

This study explored differences in undergraduates' AE, specifically investigating differences by first-semester status (FSS), generational status (First Generation Student, FGS; Non-First Generation Student, NFGS), sex, and college classification. Moreover, this study investigated the viability of college self efficacy, ratings of degree of social network use, sex, FSS, and college classification as predictors of AE in FGS and NFGS groups.

#### Rationale and Significance

Articles in popular and scientific periodicals are noting an apparent rise in students' academic entitlement (AE) behaviors in higher education (e.g., demanding credit for incomplete or missing coursework, sending inappropriate e-mails to faculty, expressing anger regarding an unexpected grade). However, there is a dearth of empirical literature addressing this topic (Chowning & Campbell, 2009; Ciani, Summers, & Easter, 2008).

#### Description of Methodology

Participants were 312 students (58.5% FGS, 45.4% FSS, 62.6% Hispanic, 68.1% female) enrolled in undergraduate psychology courses. There were no significant differences in sex, ethnicity, or FSS between NFGS and FGS students. Participants completed a demographic questionnaire, Academic Entitlement Scale (Chowning & Campbell, 2009), College Self-Efficacy Inventory (Solberg, O'Brien, Villareal, Kennel, & Davis, 1993), and the empathic concern and perspective taking subscales of the Interpersonal Reactivity Index (Davis, 1983).

#### Findings and Conclusion

The overall ANOVA of AE was significant, F(18,293)=2.114, p=.006, and yielded a significant main effect for sex F(1,293)=14.352, p<.001, but not generational status, class, or FSS. The analysis also yielded a significant FSS by generational status interaction F(1,293)=4.945, p=.027, and a significant class by generational status interaction F(1,293)=3.537, p=.015. Backward regression analyses yielded different prediction models for AE in NFGS and FGS groups. Initially, all predictors were entered into the models. After each analysis, the predictor with the least significant beta weight was removed. Analyses continued until all predictors in the model were significant. For NFGS, the final prediction model for AE,  $R^2=.21$ , adjusted  $R^2=.178$ , F(5,122)=6.532, p<.001, included sex (G=.258, G=.002), FSS (G=-.287, G=.001), class (G=-.260, G=-.036), social network use rating (G=.223, G=.008), and course self-efficacy (G=-.289, G=.001). For FGS, the final prediction model for AE, G=.008, adjusted G=.008, G=.008, included age (G=.-1.54, G=.008) and course self-efficacy (G=-.183, G=.008).

Overall, males reported significantly higher AE than females. Among students who were not enrolled in their first semester, NFGS reported significantly higher AE than FGS. With regard to college class, NFGS freshman and juniors reported significantly higher AE than their FGS counterparts; however, among seniors, FGS students reported significantly more AE. With regard to predictors of AE, backward regression analyses yielded different models for FGS and NFGS. In NFGS, those reporting higher use of social networking tended to report more AE. Moreover, NFGS who reported higher self-efficacy for their college courses tended to report lower AE. However, these relationships did not exist in FGS. This may suggest that when compared to NFGS, AE is developed and maintained through different influences in FGS.

### BLOOD PRESSURE KNOWLEDGE AND SELF MANAGEMENT BEHAVIORS OF HISPANIC ADULTS DIAGNOSED WITH HYPERTENSION: A PILOT STUDY

Holly Cassells, Ph.D., Sara Kolb, Ph.D., Jennifer Cook, Ph.D., Yvonne Davila, MSN, Lee Ann Loftis, BSN, and Jeanette Armstrong, BSN

#### Purpose of Study

The purpose of this study is to identify the knowledge and behaviors related to control of blood pressure among community residing adults diagnosed with hypertension. The research questions that guided the study are: 1) What self-care actions do Hispanic adults take for the management of their hypertension?; and 2) What is the general knowledge about hypertension among Hispanic adults diagnosed with hypertension?

#### Rationale and Significance

Recent reports indicate that there is a burgeoning population of those with hypertension, estimated at as many as 73 million, or 1 in 3 Americans affected (Institute of Medicine, 2010). This silent disease causes significant morbidity, e.g. stroke, renal disease, blindness, and cardiovascular disease, which result in a huge economic burden on our health care system. The prevalence of high blood pressure is known to increase with age, and to be particularly high in minority populations, namely African Americans and Hispanic Americans. Mexican Americans elders, a large segment of the population served by the St. Philip de Jesus Health Ministry, were found to have a high prevalence of elevated systolic and diastolic blood pressure, and to have their hypertension less well controlled. In our initial analysis conducted in 2006-2007, 77% of 606 elders surveyed were taking medication for hypertension. Nevertheless, 64% of those participants continued to have blood pressures of 140/90 or greater.

#### Description of Methodology

For this descriptive survey study, a sample of clients was seen at home and administered a 39 item interviewer administered questionnaire in their preferred language. They were asked about demographics, hypertension knowledge, and their efforts to alter their lifestyle, including diet and activity.

#### Findings and Conclusion

The sample consisted of 21 Hispanic adults with a diagnosis of hypertension. Their ages ranged from 50 to 85 (X = 72), 91% were female and 52% had a language preference of Spanish. Overall, 52% owned a BP monitor and used it at home. While all SS had a BP card issued from the health ministry, only 2/3 reported their BP's to their physician. All SS were prescribed medication, with 95% currently taking their medications, and only 48% knew the names of their medications. Fifteen of the 21 reported they did not need to make dietary changes, and another 57% made no alterations in their activity levels. Knowledge about hypertension scores ranged from 36% to 100%, and was difficult to interpret because of the small sample size of this pilot, however, gaps in knowledge and behavior were present. Assessing Hispanic adults' knowledge and behavior related to hypertension is critical to planning targeted nursing interventions which assist clients to improve their blood pressure self-management. This pilot will assist in honing the assessment questionnaire and determining the aspects of self-management that will be useful to the Health Ministry's work with elders in the senior centers.

### PROMOTORAS DE SALUD: VALUE TO PROVIDING CULTURAL CONNECTION WITH THE COMMUNITY

Jennifer Cook, Ph.D., Holly Cassells, Ph.D., Sara Kolb, Ph.D., Yvonne Davila, MSN, and Lee Ann Loftis, RN, BSN, MSN

#### Purpose of Study

The purpose of introducing *Promotoras de Salud* (lay community health workers) into the partnership for health between the University of the Incarnate Word and St. Philip of Jesus parish is to extend the mission and goals of the *Ministerio de Salud* through collaboration and capacity building. One of the specific program objectives is that community members will develop skills needed to assume primary responsibility for addressing the health needs of the community.

The *promotora* role, implemented in 2000, was researched and developed by the faculty and students from the School of Nursing & Health Professions at the University of the Incarnate Word. The role development program, based on information from local and state level agencies, has been curriculum specific to the needs of the community of St. Philip of Jesus parish was developed. The research questions focus on evaluation of the purpose and effectiveness of the *promotora* program: 1) What are the types of health related services provided to the clients by the *promotoras*?; and 2) What are the perceptions of the clients about receiving services from the *promotoras*?

#### Rationale and Significance

*Promotoras* are indigenous lay healthcare workers in Hispanic communities who have the ability to bring cultural competence to formal healthcare services provided by allied health providers (Reinschmidt, Hunter, Fernandez, & Lacy-Martinez, 2006). Originating from the community served, the *promotoras* share the physical, ethnic, linguistic, cultural, and values. The addition of the *Promotoras* to the *Ministerio de Salud* has enriched the program and expanded the services offered. The *promotoras*, members of the community served, make home visits to assess the wellness status of the clients. The visits serve as a vital link between the community and the *Ministerio de Salud*.

#### Description of Methodology

For this descriptive study, a random sample of 15 clients seen via home visits, were interviewed by the Parish Nurse by telephone using a researcher developed questionnaire. The five question survey included questions about satisfaction with the number of and outcomes of the visits by the *promotora*, and the adequacy of the educational and motivational support provided to them. A final question inquired about additional services that might be provided by the *promotoras*. Surveys were analyzed for the frequency of "yes/no" responses and the types of comments made to the questions.

#### Findings and Conclusion

The overall response from these primarily Hispanic community residing senior citizens was positive about the services of the *promotoras* to assist them to individualize their health promotion and manage their chronic disease conditions. The visit from the *promotora* provides contact with the parish community, someone to talk with, and assistance with such tasks as making appointments with health care providers or accessing community resources. The interaction/visits by the *promotoras* to the community clients continue to be valued and appreciated. The mission of the *Ministerio de Salud* to these senior citizens is extended by the connections of the *promotoras* to the community.

#### DOES CLASS SCHEDULE IMPACT STUDENT OUTCOMES IN DEVELOPMENTAL MATH?

David S. Fike, Ph.D., and Renea Fike, Ed.D.

#### Purpose of Study

The purpose of this study is to examine the impact of class scheduling on student learning outcomes in developmental mathematics (e.g., Intermediate Algebra). Based upon information processing theory and the spacing effect on learning, this study's hypothesis is that student outcomes may be better in class sections that meet more frequently and with shorter duration. The primary research question is "Is class schedule (50 minutes 3 times a week, 75 minutes twice a week, 150 minutes once a week) associated with student learning outcomes in Intermediate Algebra?"

#### Rationale and Significance

Almost one-half of all students entering community colleges require remediation, and these students are less prepared in mathematics than in any other subject. Students who are inadequately prepared for college-level mathematics courses are assigned to developmental mathematics courses with the goal of remediation. Efforts to improve students' developmental math outcomes are needed.

Ormrod notes that "when too much information is presented too fast, students simply cannot store it all in long-term memory" and "spreading study time out over several occasions usually leads to better learning than massed practice". In considering cognitive load and its association with developmental math, an assessment of the impact of class scheduling on the performance of developmental math students is warranted.

#### Description of Methodology

This quantitative, retrospective study assesses learning outcomes for 3 groups (those meeting 3 times a week for 50 minutes, twice a week for 75 minutes, once a week for 150 minutes). Outcomes variables include Final Course Grade and Successful Completion (final grade A-C). Independent variables include Class Schedule, student-level variables (Age, Sex, Race, Semester Hours Attempted), and course section-level variables (Faculty Sex, Faculty Status, Faculty Degree, Section Size, Section Start Time, and Percent Minority). The sample consisted of 1318 students in 51 class sections of Intermediate Algebra in 2005 at a Texas community college. Single and multilevel regression models were developed to determine if student outcomes were associated with class schedule after controlling for covariates. Findings from the single-level and two-level models were compared.

#### Findings and Conclusion

Successful Completion was greatest for the students in 150 minute class sessions (51%), followed by those in 75 minute sessions (50%), followed by those in 50 minute sessions (43%). Mean Final Course Grades (on the 4-point scale) for students in 150 minute sessions, 75 minute sessions and 50 minute sessions were 2.41, 2.14, 1.93, respectively (p = .010). Single-level multiple and logistic regression models revealed that Class Schedule was not associated with Final Course Grade or Successful Completion. A two-level random-intercepts model was developed predicting Final Grade; the model suggests that Class Schedule is not associated with Final Grade. A two-level random-intercepts logistic model similarly revealed that Class Schedule was not associated with Successful Completion. These findings fail to support the research hypothesis. We find no evidence that providing a variety of class scheduling options will adversely impact student outcomes in Intermediate Algebra. Until more definitive research is conducted on the topic, providing a variety of class scheduling options may be the best approach to serving the needs of developmental mathematics students and their institutions.

### USE OF TEXT MESSAGING AS A TOOL TO INCREASE PHYSICAL ACTIVITY IN COLLEGE STUDENTS

Kathleen A. Goei, RN, Ph.D., Laura R. Munoz, RN, Ph.D., David S. Fike, Ph.D., Daniel G. Dominguez, Ph.D., Kevin LaFrance, Ph.D., Sharon M. Herbers, Ed.D., and Danielle M. Gunter, RN, MSN

#### Purpose of Study

The purpose of this study is to determine whether encouraging physical activity (PA) by text messaging causes college students to increase PA compared to those who receive no communication.

#### Rationale and Significance

Being overweight or obese is increasingly recognized as a risk factor for a host of overlapping chronic diseases. Obesity rates in the US have been steadily increasing in all age groups since the 1980's, due in part to a decline in PA (Hill, 2006). It has been documented that many college students do not meet minimum recommended levels of daily PA (Huang, 2003), and that this population is at risk for weight gain (Hodge, Jackson, & Sullivan, 1993; Megel et al, 1994). Previous studies of college students suggest that pedometer use incorporated into class participation requirements can positively influence weight loss (Jackson & Howton, 2008), but other methods to motivate young adults to engage in PA have had little study. The use of text messaging to encourage positive lifestyle changes is an emerging area of study (Gerber, et al, 2009). This study sought to determine if using text messaging in addition to pedometer use would increase PA in students enrolled in an undergraduate Wellness course.

#### Description of Methodology

A two-group, prospective, randomized, intervention-based design was used. Eligible participants were enrolled in Dimensions of Wellness, older than 18 years of age, and had a cell phone with unlimited texting capability. College athletes and students with serious health problems or disabling conditions were excluded. With an alpha = .05 and power of 80%, 99 students were needed in each group to detect the specified effect size. Actual sample size was 101 in intervention group, 99 in control group. Participants were issued a pedometer at the beginning of the study, and baseline physical data (height, body weight, BMI, & waist circumference) were collected. The intervention group received brief text messages 2-3 times per week which suggested exercising. At four week intervals, investigators went to each class to collect PA data. Physical data were collected again after 12 weeks. Analysis of data was done using percentages, means & standard deviations, chi square, T test, multiple regression modeling, correlations, ANOVA, and ANCOVA.

#### Findings and Conclusion

Of the 201 enrolled participants, 115 fulfilled study requirements and were included in data analysis. Total standardized steps over a ten-week period was  $431516 \pm 158854$  (mean  $\pm$  SD) for intervention group and  $452074 \pm 142397$  for control. This difference was not significant (p = .467). Adjusted total steps for resident students were 86112 steps higher than for commuter students, suggesting that residents had higher levels of PA (p=.003). The investigators concluded that text messaging was not effective in increasing PA when used in conjunction with pedometers as part of a Wellness course.

### THE CARDIOVASCULAR AND RENAL EFFECTS PRODUCED BY MICROINJECTION OF KAPPA OPIOID AGONIST, U-50448H, INTO THE MPA

Helmut B. Gottlieb, Ph.D., Roxana Afshar, B.S., Cynthia Franklin, B.S., and Glenn Toney, Ph.D.

#### Purpose of Study

The goal of these studies is to identify the CNS sites and neuropathways by which central kappa opioid systems modulate renal function in normal and cirrhotic rats.

#### Rationale and Significance

In certain pathophysiological states (e.g., cirrhoses with ascites), changes in the integrity of arterial circulation can lead to profound changes in renal excretion of fluid and electrolytes via the activation of neuronal and humoral mechanisms in the CNS and periphery. Chronic activation of these systems can produce hyponatremia, pulmonary congestion, and eventual death. The activation of central kappa opioids produce a marked water diuresis (an increase in urine flow without a concurrent increase in renal sodium excretion), which is different than traditional diuretics clinically used to date (which, enhance water and sodium excretion).

#### **Description of Methodology**

Rats anesthetized with urethane-chloralose were instrumented to record arterial blood pressure (ABP), heart rate (HR) and RSNA. Catheters were placed in a femoral vein for drug delivery and infusion of isotonic saline (55  $\mu$ l/min) and in the urinary bladder for urine collection. Urine was sampled during two 10 min control periods and during six 10 min period beginning 10 min after MPO microinjection of U-50, kappa opioid agonist, or vehicle.

#### Findings and Conclusion

The ability of MPO injection of U-50 increase RSNA and decrease sodium excretion without effecting cardiovascular function raises the possibility that MPO neurons could be an important substrate through which drugs targeting Kappa opioid receptors could selectively facilitate sodium excretion in sodium retaining diseases such as salt-sensitive hypertension, hepatic cirrhosis and chronic heart failure. This work was supported by SC2 HL104639.

#### LIFE AFTER DOOM - A DIAGNOSIS OF NORMAL PRESSURE HYDROCEPHALUS

Crystal S. Harvey, B.S., SPT, Casey R. Heath, B.S., SPT, Judith R. Gale, PT, DPT, MPH, OCS, and Caroline Goulet, B.S., M.S., Ph.D.

#### Purpose of Study

The purpose of this case report is to raise awareness of health professionals about Normal Pressure Hydrocephalus. Two case studies will be used to exemplify the impact of the disease and emphasize the importance of timely differential diagnosis by any health professionals with subsequent referral to a physician.

#### Rationale and Significance

Normal Pressure Hydrocephalus (NPH) is a medical condition commonly seen in the elderly involving enlargement of the lateral ventricles due to malabsorption of cerebrospinal fluid causing increased pressure on brain structures, resulting in gait disturbances, cognitive decline, and urinary incontinence. To this day, NPH is often misdiagnosed by healthcare professional as part of the normal aging process or for Alzheimer or Parkinson disease. In the US, approximately 375,000 people, and up to 6% of the nursing home population, are living with NPH misdiagnosed as dementia or Parkinson disease. Proper diagnosis is critical because NPH is reversible; there are treatments available for NPH that can have a profound impact on a person's functional abilities.

#### Description of Methodology

The first case describes a 74 year-old widow living independently taken to the hospital after having been found unconscious in her home. Upon admission she presented with uncontrolled diabetes, confusion and problems with balance and gait. The family reported a rapid decline in functional status. Following a short hospital stay, she was discharged to a skilled nursing facility, but made little to no functional progress and was eventually released to the care of her daughter who reported a steady decline in cognition and functional abilities over a 12-month period. Encouraged by a PT, the family returned to her physician with information about NPH and insisted upon further testing. A diagnosis of NPH was established by two spinal taps.

The second case study is about a 72 year-old female diagnosed with a cyst on the left side of the brain presenting very similarly to NPH. The patient complained of balance problems, substantial dizziness, and headaches that she had never had before; she reported recent falls. She presented with difficulty with writing, community ambulation, grocery shopping, urinary incontinence, and was unable to drive.

#### Findings and Conclusion

After the diagnosis of NPH had been established, both patients underwent shunting and rehabilitation. Both patients demonstrated major improvements in cognition and functional abilities and returned home functionally independent. Normal Pressure Hydrocephalus is an extremely debilitating condition that is reversible with accurate diagnosis and treatment. However, it is widely misdiagnosed or overlooked as part of the normal aging process. Physical therapists are in a prime position to recognize the pattern of symptoms and refer patients for proper diagnosis. In this instance, patient advocacy can potentially have a life-altering impact for someone who has been previously been given an irreversible diagnosis. It is thus critical for physical therapists as primary patient provided to have a greater awareness of this prevalent geriatric condition.

#### CONVERGENT MEDIA AND THE DECLINE OF THE AMERICAN NEWSPAPER

Valerie Kesner Greenberg, Ph.D., and Terry Bertling, B.A.

#### Purpose of Study

This study examines the ways in which the transition from older analog forms of communication to new media has influenced the decline of the American newspaper. How may we come to understand the decline in newspapers? Has 'Convergent Media' led the charge in this decline? What are some of the ways that traditional newspapers are using to reinvent themselves in order to survive?

#### Rationale and Significance

Technological changes have always affected the way we view our world, and thus interact with it. New media has changed the way Americans think, communicate, live and interact with each other. New media pushed aside older forms of analog and print information systems, giving its users more power and control over how they receive information. As new media evolved, it became more convergent, combining different forms of media into one all encompassing online digital utility: the Internet. Newspapers are struggling to stay alive with decreased circulation and advertising revenue down. According to figures from the Newspaper Association of America, print newspaper advertising fell by 30 percent for the first half of 2009. Since the late 1990's our culture has seen a radical transformation in its communication system. Older forms of analog media— televisions, radios, phonographs and the VCR have given way to digital (computer produced) 'new media'. According to Wind and Reibstein, the older analog model "deliver(ed) standardized content, in a discrete time and place, usually in a passive setting." The passive nature of the traditional media has given way to new media's ability to interact with its recipients. Convergent media consolidation has increasingly changed individuals into consumers who access, process, generate and communicate information at the local, national, and international levels. How will traditional newspapers survive this revolution?

#### **Description of Methodology**

Using primary research, surveys, and interviews with photographers, writers, graphic artists, web producers and the assistant managing editor of the *San Antonio Express News*, this work seeks to discover how convergent media (new media) affects print media and explores new ideas for saving the newspaper including creating an online presence to exploring new types of products to meet the needs of niche markets.

#### Findings and Conclusion

While many scholars theorize on how print products are changing, these reporters, writers, designers and editors experience it first hand on a daily basis. 100% of workers interviewed stated that they had observed major changes in both their work skills and the knowledge and skills necessary to succeed. Most have added blogs, twitter, social networks and websites as essentials to news reporting. Yet, traditional print papers reach 51 percent of all U.S. adults on a daily basis, making them the largest media in virtually every market. Newer ways of constructing newspapers including forming a digital presence on websites, discovering new niche markets that are more segmented than general newspaper markets, and revamping the newsroom and production sites with the latest digital equipment may save traditional newspapers.

### THE OPPOSING EFFECT OF IONIC STRENGTH ON BOVINE SERUM ALBUMIN AGGREGATION AT VARYING PH

Adeola O. Grillo, Ph.D., and Diep N. Nguyen, B.S.

#### Purpose of Study

To investigate the effect of pH and ionic strength on the stability of Bovine Serum Albumin (BSA) using statistical design of experiments (DoE).

#### Rationale and Significance

The effect of varying factors such as pH and ionic strength on the structure and stability of proteins are typically performed by varying one factor at a time (OFAT). The OFAT approach, however, cannot adequately determine interactions between different factors. A more accurate approach is the use of DoE which can determine if the effects of the factors are dependent on each other. Since both pH and ionic strength affect the conformation and stability of proteins by modulating electrostatic interactions, it is likely that the effects of these factors on protein stability are interdependent. To explore this relationship, the interaction between pH and ionic strength on protein stability was investigated for a model protein, BSA.

#### Description of Methodology

A central composite design was used for the study. pH was varied from 4 to 8 using a dual citrate/phosphate buffer system and the ionic strength was varied using 0 to 300 mM sodium chloride (NaCl), with triplicate center points of pH 6 and 150 mM NaCl to determine experimental variability. Protein stability was monitored by ultraviolet (UV) and fluorescence spectroscopy. The turbidity of 1 mg/ml BSA was monitored by UV spectroscopy at 320 nm and 60°C. The fluorescence emission spectra of 0.1 mg/ml BSA in the different solutions were obtained from 20°C to 90°C at 5°C intervals.

#### Findings and Conclusion

A major increase in turbidity was observed only at pH 4 in the presence of NaCl, at a higher rate in 300 mM NaCl compared to 150 mM NaCl. The fluorescence scans showed a blue-shift in the emission maximum with increasing temperature, indicative of protein aggregation. In the absence of NaCl, the transition temperatures (indicative of thermal stability) were highest at pH 6, followed by pH 8, and lowest at pH 4. At pH 4, increasing [NaCl] increased BSA aggregation while the opposite effect was observed at pH 8. In other words, increasing ionic strength destabilized BSA at low pH and stabilized BSA at high pH. At high pH, 300mM NaCl stabilized BSA to the extent of a reserved difference between pH 6 and pH 8. The results show the benefits of DoE in investigating the effect of varying factors on protein stability. This approach provides a more accurate picture of the interactions that may occur between different factors.

### A COMPARISON OF EXPERIENCED AND POTENTIAL U.S. MEDICAL TOURISTS' EXPECTATIONS OF FOREIGN HEALTHCARE FACILITY SERVICE QUALITY

Michael Guiry, Ph.D., Jeannie J. Scott, Ph.D., and David G. Vequist, Ph.D.

#### Purpose of Study

The purpose of the study is to compare the foreign healthcare facility service quality expectations of experienced U.S. medical tourists and potential U.S. medical tourists.

#### Rationale and Significance

Given the increasing number of U.S. medical tourists (Keckley & Underwood, 2009), as well as the importance of delivering high quality service from both a consumer point of view and a competitive perspective (Jyothis & Janardhanan, 2009; Lee & Spisto, 2007; Mueller & Kaufmann, 2001), it is important to investigate factors that may influence U.S. medical tourists' evaluation of medical tourism service quality. Past research on healthcare service quality (e.g., Bakar, Akgun, & Al Assaf, 2008; Duffy, Duffy, & Kilbourne, 2001; O'Connor, Trinh, & Shewchuck, 2000) suggests that an important factor to examine is U.S. medical tourists' expectations of foreign healthcare facility service quality. To date, the authors have not identified any studies that have compared the foreign healthcare facility service quality expectations of experienced U.S. medical tourists, i.e., consumers who have engaged in medical tourism, and potential U.S. medical tourists, i.e., consumers who have not engaged in medical tourism.

#### Description of Methodology

Data were collected via an online survey of a convenience sample of consumers, residing in the U.S., who had engaged in medical tourism or expressed an interest in doing so. A U.S.-based medical tourism facilitator provided the survey link to 3000 consumers in its database. Of those contacted, 1588 completed the survey (52.9 percent response rate). 219 of the respondents (13.8%) were experienced medical tourists while the balance of the sample was comprised of potential medical tourists. The expectations section of Babakus and Mangold's (1992) modified SERVQUAL scale ( $\alpha$  = .97), which consists of 15 expectation items representing all five dimensions of service quality, i.e., tangibles, reliability, responsiveness, assurance, and empathy, was used to measure experienced and potential U.S. medical tourists' expectations of medical tourism service quality. Independent samples t-tests were used to determine whether there were significant differences between experienced U.S. medical tourists and potential U.S. medical tourists' expectations of service quality, along the dimensions of service quality.

#### Findings and Conclusion

The results showed that for all five dimensions of service quality experienced medical tourists had significantly lower expectations than potential medical tourists (t > 1.96, p < .05 for all five comparisons). Experienced and potential U.S. medical tourists' expectations scores for the 15 SERVQUAL items were also compared using independent samples t-tests. Results showed that there were significant differences for 10 of the 15 items. For each of these items, potential U.S. medical tourists had significantly higher expectations than experienced U.S. medical tourists (t > 1.96, p < .05). Given the increasing number of U.S. medical tourism consumers and growing competition in the medical tourism industry, it is important for foreign medical tourism providers to not only understand U.S. medical tourists' expectations of service quality, but also to manage their expectations when developing and implementing marketing strategy. The research results revealed that medical tourists' expectations of service quality differed depending on whether or not they had experience being a medical tourist. Hence, managing medical tourists' expectations of service quality requires understanding their past experience being a medical tourist.

### THE IMPACT OF TENSION IN ABDOMINAL AND LUMBAR MUSCULATURE IN SWIMMERS ON VENTILATORY AND CARDIOVASCULAR FUNCTIONS

Timothy W. Henrich, Ph.D., Gregory Soukup, Ed.D., Heather Barton-Weston, M.S., and Bill Carleton, Ed.D.

#### Purpose of Study

Swimming performance is a product of the ability the athlete to consume oxygen for energy production by increasing the resistances on the propulsive surfaces to produce work, and decreasing resistances on the non-propulsive surfaces of the body to reduce drag. It has been proposed that the abdominal and erector spinae muscles contract during swimming to decrease drag on the swimmers' body to increase speed. However, these muscle groups' activities are critical to ventilatory function and it appears that this muscular activity could have a detrimental effect on the swimmers' ability to ventilate air and consume oxygen. The purpose of the study is to determine whether contracting these muscle groups has detrimental effects on the cardiorespiratory system.

#### Rationale and Significance

The problem of this study is whether contracting the abdominal and erector spinae muscles impairs cardiorespiratory functions. We hypothesized that contracting these muscle groups would negatively impact pulmonary functions and cause an increase in oxygen consumption indicating an unnecessary additional workload on the cardiovascular system.

#### <u>Description of Methodology</u>

Informed consent was obtained from 14 competitive swimmers to study the impact of contracted abdominal and erector spinae muscles on; Vital Capacity (VC), Maximal Ventilatory Volumes (MVV), Forced Vital Capacity (FVC1), Resting Oxygen Consumption (RVO2) and Resting Carbon Dioxide Production (VC02). Measurements were made under laboratory conditions in counter-balanced order under the two differing postural conditions that included Non-Contracted (NC) and Contracted (CC) abdominal and erector spinae muscles.

#### Findings and Conclusion

A one-way repeated measures analysis of variance revealed significant differences in respiratory and cardiovascular functions. VC decreased from (NC)  $5.21 \pm .27$  L and 111% of the predicted volume to (CC)  $4.17 \pm .26$  L and 89% of the predicted volume. This difference was significant (F< 6.77, p< .01: Omega Squared = 0.63). The MVV decreased from (NC)  $127 \pm 12.2$  l·min<sup>-1</sup> and 109% of the predicted volume to (CC)  $87.6 \pm 9.5$  l·min<sup>-1</sup> and 89% of the predicted volume. This difference was significant (F< 6.44, p<.01: Omega Squared = .62). FVC<sub>1</sub> decreased from (NC)  $5.0 \pm .27$  L and 109% of the predicted volume to (CC)  $4.1 \pm .24$  L and 86.6% of the predicted volume. The difference was significant (F< 7.96, p<.01: Omega Square = .70). The RVO<sub>2</sub> increased from (NC)  $.39 \pm .01$  l x m<sup>-1</sup> x kg<sup>-1</sup> to (CC)  $.52 \pm .03$  l x m<sup>-1</sup> x kg<sup>-1</sup>. This difference was significant (F< 14.75, p<.01: Omega Squared = .84). It was concluded that contracting the erector spinae and abdominal muscles caused significant decrements in pulmonary functions to the point of the subjects showed an asthmatic ventilatory responses shown by the decrements in percentages of predicted volumes. The muscular contractions also increased resting oxygen consumption. Both of these cardiorespiratory changes could adversely affect the performance of a competitive swimmer during maximal or sub maximal exercise.

#### WHEN GENTLE WOMEN TAKE A STAND

Sharon M. Herbers, Ed.D., and Elaine F. Buckley, M.A.

#### Purpose of Study

This study compares and contrasts the experiences of two women who participated in a workshop on school desegregation at Highlander Folk School (HFS) in 1955. Research questions include: a) what were the reactions of Rosa Parks and May Justus to the workshop experience and b) what factors led these private people to take public stands?

#### Rationale and Significance

The lives of two women of diverse backgrounds intersected in the context of this informal setting of interracial living and learning six months prior to the Montgomery Bus Boycott. If we can better understand the process of individual change within the context of adult learning experiences in the Civil Rights Movement, we may gain insight into the needs of contemporary learners who see a need for social change but assume, as Parks did initially, their actions will not make a difference.

#### **Description of Methodology**

Mezirow describes a transformative learning process that results in a fundamental shift in perceptions of self and the environment. Perspective transformation includes four central elements: experience, reflection, discussion, and action. Using qualitative methods of interpretive biography, this study describes the experience of Parks and Justus at HFS in their own words through the review of primary documents in collections, archives, and autobiographies. Reflections found in speeches, interviews, and letters, and ultimately their actions are examined. Common themes are identified.

#### Findings and Conclusion

Reactions: (Parks) had emotional response to the egalitarian interracial living experience, recognized personal bias, felt powerless to act in the oppressive environment of Montgomery. (Justus) established friendship with African American workshop facilitator; listened intently to experiences of black participants and felt empathy for black children entering white schools. Parks refuses to move to the back of the bus on December 1, 1955. Justus writes *A New Boy in School* to help children understand the process of integration. Factors that led to public stance: a) assumptions about interracial relationships challenged; b) personal relationships with other ethnic groups formed; c) supportive network of like minded individuals created; d) acted when confronted by flagrant injustice; e) possessed strong Faith; f) demonstrated moral courage in seemingly inconsequential decisions in daily life. The workshop at Highlander resulted in perspective transformations for both women which culminated in social action. Both were compelled to act when personal values, crystallized by heightened awareness, collided with societal norms that were no longer tolerable.

#### HOPE AND HEALING: PEACE BUILDING IN NORTHERN IRAQ BY MUSLIMS INSPIRED BY FETHULLAH GÜLEN

Sr. Martha A. Kirk, Th.D.

#### Purpose of Study

This exploratory research study sought to document if or how educational institutions and a hospital initiated by persons inspired by Fethullah Gülen, a Turkish Muslim author, were contributing to building stability and peace in northern Iraq where there has been violence for about thirty years. Research questions include: What are the perceptions and views of people in regard to moving out of cycles of vengeance and violence? How can groups distrusting each other and competing for resources learn cooperation? How is peace won?

#### Rationale and Significance

Examples of peace building could be models for other places where there is conflict. Sharing examples of Muslims who are leaders in peace building could help overcome some of the negative stereotypes and prejudices that are prevalent about Islam. People, and especially children, who have lost family members or have repeatedly seen violence around them are often traumatized, angry, and distrustful of others. They easily turn to revenge. They often have prejudice and hatred towards others.

#### **Description of Methodology**

While quantitative information was gathered, the emphasis was on gathering qualitative information through interviews. During the summer of 2010 sixty-one people were interviewed in the Erbil, Ankawa, and Suleimania areas of northern Iraq. Eight of the fifteen Fezalar Schools and the Sema Hospital were visited and there were opportunities to see services and have conversations with leaders, staff, and persons served. Families of students and graduates were visited. Information was obtained from government officials. This study gives stories of individuals and sample statements that reveal main themes and ideas.

#### Findings and Conclusion

The Fezalar Educational Institutions initiated by Muslims inspired by Gülen began schools to bring hope and healing in northern Iraq in 1994, just six years after over 100,000 Kurdish people and others had been killed in that region because they were considered a threat by the central Iraqi government. Though northern Iraq is often thought of as a Kurdish area, it is a complex mixture of Kurdish, Turkmen, Assyrian, and Arabic people. Desire to control the rich oil fields of Kirkuk over the years has brought tension among these groups. Repeatedly statements indicated that the fifteen schools and the hospital have substantially contributed to overcoming prejudice and hatred, building reconciliation and unity, developing communication and knowledge, and thus furthering stability and peace. Students are both taught and mentored in human values of respect for others, honesty, justice, interdependence, generosity, and service. They learn to appreciate persons of different cultures and religions. Sema Hospital personnel teach by example. These institutions are founded on and share Gülen's ideas that the real enemies in the world are ignorance and poverty. Humans are called to unite against these, not against other human beings. Weapons are said to win wars, but they do not win peace. As Gülen has repeatedly said winning the hearts and minds of our fellow human beings wins peace. The schools are helping to develop a critical mass of citizens with the desire, knowledge, and skills to build stable peaceful country.

### PROMOTION OF ADOLESCENT AND CHILD HEALTH IN SAN ANTONIO: A COMMUNITY ROUNDTABLE

Kevin G. LaFrance, Ph.D., Sharon M. Herbers, Ed.D., Laura R. Munoz, RN, Ph.D., Mary Elaine Jones, Ph.D., Jessica C. Kimmel, Ph.D., Ramona Ann Parker, Ph.D., and Daniel G. Dominguez, Ph.D.

#### Purpose of Study

The specific purpose of this research effort was to convene a roundtable of community partners interested in adolescent health issues in San Antonio, identify cross disciplinary research opportunities on adolescent health issues, align research priorities with participating community partners and publish a formal record of the roundtable proceedings for dissemination.

#### Rationale and Significance

The well being of the United States depends upon our ability to protect the health of children and youth. For example, findings from the 2003-2004 National Health and Nutrition Examination Survey estimated that 17% of children and adolescents ages 12 to 19 are overweight. Hispanic children and youth are considered at risk for several diseases conditions including type II diabetes, obesity-related cadiovascular disease, and asthma (Coleman, et al., 2005). These issues require focused and deliberate research attention to understand how to appropriately respond. Unfortunately, evidence suggests that health professionals and educators lack the necessary knowledge and skills to effectively address health promotion and disease prevention among adolescents (IOM, 2009). One way to mitigate this problem is to develop an effective and focused research agenda which brings together researchers, educators, and community representatives that offers a diverse prospective. By increasing the understanding of adolescent health issues, the development of appropriate interventions by health professionals and educators can be achieved.

#### Description of Methodology

In the spring of 2010 an inter-disciplinary team of UIW faculty was awarded an NIH EARDA grant to undertake a process for identifying research priorities focused on adolescent health. Taking a community-based partnership (CBPR) approach, the Collaborative Group organized a community-based roundtable conference. The roundtable event took the form of a one-day conference in which community members participated in dialoging, brainstorming and identifying of current adolescent health issues. Six invited content experts shared relevant information about current adolescent health issues both from the national and local perspective. The content experts were then followed by a brainstorming session in which community participants, representing students, parents, teachers and administrators from four local primary and secondary schools identified adolescent health issues from the community perspective. The responses to small group discussions facilitated by UIW faculty and the public forum were analyzed using a grounded theory approach. The proceedings of the roundtable were recorded and the information compiled in a publication of proceedings. This information is now being used to identify adolescent health research priorities and align faculty interest and expertise with community partners.

#### Findings and Conclusion

The roundtable initiative resulted in three primary outcomes. First, it identified a significant level of interest in adolescent health issues in our local community and identified viable collaborative partnerships between UIW faculty and community representatives. Second, the brainstorming process elucidated the issues that were most important to the community rather than focusing solely on academic research priorities. Finally, the effort allowed for an important initial discussion and the identification of a number of adolescent health related issues that can become the foundation for a broader community based research initiative.

#### NONLINEAR DIGITAL CONTROL OF CONTINUOUS UNCERTAIN SYSTEMS

Jeffrey K. Langston, B.S., and Michael T. Frye, Ph.D.

#### Purpose of Study

This study examines the problem of nonlinear digital control of a continuous or analog uncertain nonlinear system. These mixed digital-analog hybrid systems will have a mathematical equation that is uncertain in the continuous domain and will be controlled using digital controls only. Lyapunov stability theory will be used to prove that the system is controllable.

#### Rationale and Significance

Most electronic equipment has switched to the use of digital electronics because of the low prices of such equipment. Due to the prevalence of such digital controllers, the problem of controlling continuous (analog) systems through the use of digital controls is an important application area as more hybrid systems are implemented in electronic equipment to monitor such systems as braking on cars and power regulation on a nuclear reactor. The significance of this paper is that we require little information about the uncertain nonlinear equation in order to stabilize this system. This means that the control method proposed in this paper can be used on particular systems which are ill-defined or even understood based on certain assumptions.

#### **Description of Methodology**

We employ the idea of homogeneous system theory to develop a digital controller. Homogeneity is the mathematical property where a function scales with respect to a dilation and is one of the two properties which define a linear function, the other being additivity. Homogeneous functions are of interest due to their "linear-like" properties which allows for certain advantages in stabilizing homogeneous nonlinear equations. By taking advantage of homogeneous system theory, a digital state feedback controller employing a nonlinear controller can render a system globally asymptotically stable through the use of a scaling gain to dominate the nonlinear terms. The feedback domination design uses feedback to dominate, rather than cancel, the undesired nonlinearities. The nonlinear controller allows for negating the effects of nonlinear terms not previously accounted for due to the use of a linear digital control of continuous systems. This study uses two types of backstepping controller; one using a cancellation design to cancel out the nonlinearities and the other using a feedback domination design to dominate, rather that cancel, the undesired nonlinearities. It will be shown that the feedback domination design will have better performance.

#### Findings and Conclusion

We present in this study two controllers which are designed using different methods in order to attain stability of the given uncertain system. These controllers were also digitized in order to examine the performance of a digital controller trying to stabilize a nonlinear continuous system. As will be seen in the simulations of these controllers, the domination design method helps to stabilize the system much quicker. The cancellation method cancels the nonlinearities during the backstepping process. The domination process overwhelms these nonlinearities with higher order nonlinear terms in order to drive the system to the origin quickly.

### CAN WE TEACH SOCIAL JUSTICE THROUGH SOCIAL PSYCHOLOGY CURRICULUM? A PRELIMINARY STEP

Lisa K. Lockhart, Ph.D.

#### Purpose of Study

A preliminary study assessed Social Psychology students' pre-course (T1) and post-course (T2) knowledge of situational influences on behavior as well as their belief in a just world (T1 & T2). It was expected that participants' T2 knowledge scores would be significantly higher than their T1 scores, and that their just world scores would significantly decrease, suggesting both a greater understanding of situational factors as well as an application of this understanding to judgments about themselves and their social world.

#### Rationale and Significance

Social psychology attempts to present students with an awareness of situational influences on behavior, broadly defined. If this is the case, the question is: 1) is there a measurable difference in students' understanding of these situational influences over the course of the semester, and, if so, 2) are students' personal views and attributions for others' behavior affected by this knowledge? Past studies have demonstrated that teaching critical thinking improves students' critical thinking skills across a variety of domains (e.g., Angelo, 1995; Zohar & David, 2008). The present study is a preliminary step in a research program examining the effectiveness of teaching critical thinking couched in principles of social justice to increase students' understanding and application of social psychological concepts.

#### Description of Methodology

Participants (N = 36) were students in a 6-week summer (n = 15) and 15-week fall (n = 21) junior-level Social Psychology class. Participants completed the Just World Scale (Rubin & Peplau, 1975) on the first day of class (T1) and on the last day of class (T2) of the session/semester. They also completed a multiple-choice assessment of concepts central to social psychology, primarily focusing on situational determinants of behavior (e.g., the fundamental attribution error-FAE) at both T1 and at T2.

#### Findings and Conclusion

Paired *t*-tests were conducted assessing T1-T2 knowledge of social psychology concepts and T1-T2 Just World Scale scores. A significant difference between T1-T2 knowledge scores was observed [t(35) = 6.93, p < .001] indicating participants had higher T2 (M = 14.78, SD = 4.52) scores than T1 (M = 11.06, SD = 3.69) scores. A significant difference was also observed between participants' T1 (M = 53.42, SD = 9.24) and T2 (M = 50.67, SD = 8.80) Just World Scale scores [t(35) = 2.05, p < .05], indicating less belief in a just world post-course. This study provides preliminary support for the research questions; a measurable difference was observed in students' understanding of situational influences over the course of the semester, and students' self-reported personal views and attributions for others' behavior do appear to have changed from pre-test to post-test. Future investigation should include assessing brief (summer) Social Psychology classes that include a service component and full semester Social Psychology classes that do not, and assessing Just World Scale pre-post scores in non-psychology classes. It's possible that the effects observed are due to knowledge of *psychological* principles in general and that they are not specific to knowledge of *social psychological* principles, so testing a Chemistry or Math course, for example, may provide a useful comparison, in addition to other Psychology courses.

## HOW WE LET THEM DRIVE: DEVELOPING DASHBOARDS AND DELIVERING MULTIPLE YEARS OF NATIONAL SURVEY OF STUDENT ENGAGEMENT/FACULTY SURVEY OF STUDENT ENGAGEMENT (NSSE/FSSE) RESULTS

Robin E. Logan, MLIS, Earl Harmsen, MBA, and Michael Schulte, MAA

#### Purpose of Study

The purpose of the NSSE/FSSE dashboard project was to create an enhanced data delivery process significantly improving both the scope and use of information pertaining to the student and faculty engagement surveys at the University of the Incarnate Word (UIW). The three objectives were: 1) design a filterable and intuitive dashboard strategy allowing for the analysis of multiple survey iterations; 2) utilize benchmarking best practices allowing for comparisons amongst internal and external populations; and, 3) combine institutionally-defined NSSE subset with corresponding FSSE data creating a comprehensive crosswalk specifically designed for the needs of the university.

#### Rationale and Significance

The role of *Institutional Research* at UIW has evolved from primarily a data driven reporting unit to an active participant in structuring, analyzing, and integrating various data instruments to be used in the decision-making processes associated with UIW assessment and strategic planning efforts.

#### Description of Methodology

Microsoft Excel was chosen as the data storage instrument for survey data from the 2004, 2005, and 2008 iterations. Tableau was chosen to be the front-end visualization tool to integrate the data into interactive dashboards. Faculty members and other campus administrators participated in testing and refining this new process during its development phase resulting in improvements for usability and presentation, as well as scope, availability, timeliness, and currency/relevance. An additional goal for this project was to improve processing time for distributing new survey results to interested constituents. What had initially taken two months or longer to review and prepare previous years' data now occurred in two days, with the added value of instantaneous updates into developed dashboards, now familiar to constituents. From this point forward, the process of continuous review and improvement will ensure that future iterations will be processed with greater efficiency and accuracy.

#### Findings and Conclusion

All three objectives were met. First, a comprehensive interactive dashboard platform was designed and successfully implemented. Second, a three-tiered benchmarking process was used to indicate the longitudinal effectiveness of various institutional initiatives in an effort to reach certain Quality Enhancement Plan (QEP) goals. And finally, the NSSE and FSSE survey results were combined into a comparative analysis. Results of the project have effectively shown that innovative process improvement can maximize the accuracy, scope, and usefulness of information, while minimizing both the time and costs necessary for the analysis. The interactive dashboards allow for displaying results beneficial to specific campuses, and colleges/schools while controlling access and maintaining Family Educational Rights and Privacy Act (FERPA) standards. Because the ability to quickly identify significant differences or confirm direct correlations between student and faculty perceptions on student engagement became available, UIW QEP goals were clearly illustrated as either being met and unmet. Similar innovative processes are in development to enhance other longitudinal assessment projects.

### INTEGRATION OF SOCIAL NETWORKING IN AND OUTSIDE OF THE PHARMACY CLASSROOM

Marcos Oliveira, Ph.D., and David F. Maize, R.Ph., Ph.D.

#### Purpose of Study

We undertook this study in order to determine student perceptions on the use of social media tools in the classroom and to also identify some best practices in the use of social media in the classroom.

#### Rationale and Significance

Microblogging tools, such as text- and instant-messaging, are changing teaching practices both in- and out-side of today's classroom. In this digital age there is a need to identify innovative strategies to engage students in learning. There is a potential to significantly transform the classroom into an interactive environment using micro-blogging tools.

#### **Description of Methodology**

First year pharmacy students used microblogging in the fall semesters of 2009 and 2010 and the Spring of 2010. Twitter and Facebook were selected as microblogging tools to engage students in discussions inside and outside the classroom both synchronously and asynchronously. Students were told that the activity was optional and were given instructions on how to sign up for both Twitter and Facebook. For communication using either one of these tools, students or faculty could initiate or respond to any information posted. After each semester, the students were given a 10 question, online survey. The average response rate was 89%. The frequencies were calculated by Surveymonkey.

#### Findings and Conclusion

Most students (81.2%) have used social networking sites like Facebook; however, 80.2% of students had never used Twitter prior to this course. This did lead to a delay of about a week in the full implementation of Twitter. When compared to other communication forms, email edged out Twitter (38.6% vs. 33.7%, respectively) as the preferred method. Office visits with the instructor was preferred by 27.7% and phone communication was 0%. Over 70% of the students liked the use of Twitter as an instant means of communication with faculty outside of the class. Individual student comments underscore the need for faculty to be at the center of the communication and should always re-post a question with an answer so that all students following can fully understand the information. The characteristic that was most appreciated by students was the instant response to student questions by faculty, "anywhere and anytime". We were surprised that students were unfamiliar with Twitter. Instant in-class communication that interrupted lecture was not well received. Outside of class students were divided with regard to the method of communication, although about 30% preferred all methods except the telephone. Fall 2009, students used Twitter more consistently. However, in Spring 2010, the students had a more targeted preference for the use of Twitter, particularly right before examinations. Students are willing to incorporate microblogging as part of their activities and will utilize it in multiple forms. Outside of the classroom, microblogging was seen as an additional means of communication with email still being preferred while the telephone was not preferred at all. In class, students will benefit most from well-structured and focused activities that contribute to their learning as opposed to on-the-fly communications that students see as disruptive.

#### WORLD BANK TAX ADVICE AND INCLUSIVE DEVELOPMENT: LATEST FINDINGS

Michael J. McGuire, Ph.D., with Chrystal D. Alexander, Donnie L. Cromartie, Jesus Diaz, Angela R. Martinez, Andres J. Narvaez, Ayaka Ogawa, Martin Padron, Mauricio Sanchez, and Travis R. Wright

#### Purpose of Study

Solving the poverty and inequality problems that afflict Latin America requires an inclusive development process that benefits the poor as well as the rich. Taxation plays a crucial role in this endeavor. Regressive taxation that falls relatively heavily on the poor tends to slow the satisfaction of basic needs and reduce the participation of the poor in the development process. If, for example, the poor who are living on the margin of existence are taxed in order to build a new school, the poor children who attend the school may be less nourished and less able to learn. If, on the other hand, the wealthy are taxed to pay for the school, the poor children not only have better facilities, but they may also have the nourishment required to learn efficiently. Despite the advantages of progressive taxation, the World Bank "advises" Latin America to make regressive taxes the principal source of tax revenues, and it conditions the granting badly needed loans on following that advice. The immediate purpose of this project is to test empirically whether progressive taxation contributes to development through satisfying basic needs. The ultimate purpose is to change or to validate World Bank tax advice.

#### Rationale and Significance

Progressive taxation tends to make the development process more inclusive in at least three ways. First, it leaves more money in the pockets of the poor with which to purchase basic goods and services that enhance their productivity. Second, it creates an incentive for the poor to invest in their "human capital" by increasing the net returns to such investments. Third, it can increase tax revenues that governments use to supply more productivity-enhancing public goods and services to the poor. If the World Bank can be convinced to encourage progressive taxation, poverty and inequality throughout Latin America and other developing countries can be alleviated simply by incorporating the poor more fully into the development process.

#### Description of Methodology

Data is collected for 14 Latin American countries for the years 1980-2005. Proxy variables for the satisfaction of basic needs and tax progressivity are developed. A first equation explores the effects of tax progressivity and the satisfaction of basic needs on the level of national production through regression analysis. A second regression relates tax progressivity to the satisfaction of basic needs. The regression analyses are complemented with a flow chart showing the ways in which progressive taxation can affect the development process. Also, a table compares the tax progressivity of countries with above- and below-average satisfaction of basic needs.

#### Findings and Conclusion

The two regressions suggesting that tax progressivity increases production through satisfying basic needs are statistically significant at the 99 percent level of confidence. Also, countries with above average satisfaction of basic needs in 2005 had above average tax progressivity in prior years, and the differences are statistically significant. The policy recommendation is that the World Bank change its tax policy to one of pressuring developing countries to implement more progressive tax systems.

# SIMULATION IN INTERDISCIPLINARY EDUCATION REGARDING END OF LIFE CARE

Jeanette McNeill, RN, DrPH., Irene Gilliland, RN, CNS, ACHPN Bradi L. Frei, PharmD., and Jacquelyn Stovall, RN

# Purpose of Study

The purpose of this study was to describe the effect of a simulated death experience on health professional (pharmacy students) attitudes regarding EOL care.

# Rationale and Significance

Despite increased use of simulation in health care education, there is little research regarding its use in end of life (EOL) and interdisciplinary care. Research regarding the use of simulation in interdisciplinary education is needed to further address the IOM mandates related to health professional education. Few palliative and EOL courses are offered to health professional students, with even fewer utilizing an interdisciplinary approach. Smith-Stoner (2009) described using simulation to introduce students to the Silver hour (30 minutes before and after death) to develop EOL skills.

# Description of Methodology

In a descriptive design, 32, 3<sup>rd</sup> year pharmacy students were assessed during and after their participation in a simulated end stage renal patient death scenario using a high fidelity simulator. Students were divided into groups and assigned roles, including observer. Roles of some health professionals, including nurses, were played by faculty. Post -simulation, students participated in a reflective journaling about the simulation. With IRB approval, evaluation data were analyzed using content analysis. Jeffries (2005) framework for best practice in designing simulations was used to organize the students' comments. End of course evaluation, using Likert scale questions, gathered student perceptions of simulation in terms of realism, and meeting course objectives.

## Findings and Conclusion

Most students found the simulation to be realistic in that it provoked feelings of helplessness and memories of past death experiences; quantitative evaluation (n=19) revealed a rating of 4.3/5 for realism. In terms of analysis of their own behavior, most students indicated consideration of personal aspects-how they as a family member, or the ill person, should prepare for death, rather than in terms of behavior as a health professional. Finally, students remarked that the simulated death experience was useful to help health care professionals prepare for these difficult experiences. Limitations included that although the faculty group represented two disciplines, nursing and pharmacy, the student group lacked diversity, thus roles of nurses or other health professional had to be played by course faculty. The fact that students related their simulation experience to their future personal versus professional behavior as pharmacists needs further exploration, but could perhaps be influenced by directions in the reflection exercise. Further study of the use of simulation, and its effects on knowledge and attitudes on EOL care in interdisciplinary student groups is warranted.

# TO SAVE THE WORLD WITH A PHOTO ALBUM": THE THEOLOGY OF MOTHERHOOD AND MEMORY IN CONTEMPORARY SCRAPBOOKING DISCOURSES

Julie B. Miller, Th.D.

# Purpose of Study

This study examines the contemporary phenomenon of scrapbooking and in particular, a subset of scrapbookers who engage in "faithbooking." Research questions include the following: 1) How do women who engage in faithbooking describe their motivations; 2) How do faithbookers conceive of God's activity in their lives; and 3) What theological ideas are explicitly utilized in faithbooking?

## Rationale and Significance

With estimated sales of \$500 million in 2000 and \$2 billion in 2008, the scrapbooking industry has the potential to grow to \$10 billion in the next 10 years. While the modern scrapbooking trend has its roots in the 1980s, its historical roots go back to the parlor books and family albums of the early nineteenth century. As such, one can argue that this is not a temporary fad but rather a phenomenon with deep roots in American life and culture. Further, as nineteenth century memory books often incorporated religious themes, a significant group of contemporary scrapbookers include very explicit references to faith and religiosity in their works, and this form of scrapbooking has become known as "faithbooking." Women who engage in this activity generally use scripture quotes and inspirational journaling along with pictures to demonstrate how God is working in the lives of their family. The industry now also publishes Bible study guides, devotional materials, prayer books and similar products centered on faithbooking. Finally, the concept of "memory" and the importance of remembering is at the heart of Christian theology. Hence, faithbooking is a significant cultural phenomenon which gives insight into contemporary American women's religiosity.

# **Description of Methodology**

This work employs historical and theological methodology utilizing primary and secondary source materials. Scrapbooking websites, particularly that of Creative Memories, the arguable leader in faithbooking, are examined, along with scrapbooking blogs. Faithbooking bible studies and devotional materials are analyzed as are theological texts on memory and its importance in Christian theology. This work also engages scrapbooking materials themselves such as papers, stickers, diecuts, journaling pages, and other embellishments. Relevant secondary literature is also utilized.

# Findings and Conclusion

A distinct "theology of memory" is constructed in faithbooking discourses and materials. This theology of memory explicitly defines one of the jobs of the good mother as the historian and chronicler of her family's lives. As the founders of Creative Memories assert, faithbookers believe that "the Bible is very clear on the importance and power of remembering AND telling the Lord's praiseworthy deeds in our lives." The point of this religious type of remembering, however, is not merely to recall or to reenact. It is to remember in the sense of "bringing the past into the present with compelling power." In Christian theology as in faithbooking, memory is seen as an activity. It takes an act of will to remember, for it is so easy to forget, and to forget is to forsake. The good Christian mother, therefore, is responsible for helping her family to remember God, and she often does so through a scrapbook.

# IS THIS MY SHANGRI-LA? THE BHUTANESE REFUGEE RESETTLEMENT IN SAN ANTONIO, TEXAS

Lopita Nath, Ph.D.

# Purpose of Study

This study examines the Bhutanese refugee problem from its inception to the process of resettlement in San Antonio, Texas. Research questions include: a) Tracing the background history, what are the main challenges the refugees face in the camps in Nepal?; b) What have been their experiences in the process of resettlement made by the different organizations helping them?;d) How are these refugees negotiating the issues of cultural differences, citizenship and identity in the host country?

# Rationale and Significance

This research analyzes the intersection of social justice and human rights in the debate on the global refugee crisis. Bhutan, known as the last Shangri-la on earth with a policy of "Gross National Happiness", evicted 100,000 Bhutanese 'Lhotshampas' and denied repatriation. After 17 years in the refugee camps in Nepal and years of negotiations by the United Nation High Commissioner of Refugees (UNHCR) to repatriate the refugees back to Bhutan, third-country resettlement became the only solution. The US offered to host about 60,000 refugees in the coming years. A group of these refugees have been resettled in San Antonio, Texas since 2007. In the US they face three major challenges: 1) Their legal status in the USA; 2) Integration into American life and society; and 3) How to make a living and survive in a foreign country. The research examines the success of the resettlement program in fulfilling the hopes and aspirations of the refugees. The research also addresses the concerns and challenges faced by the refugees in San Antonio as regards to housing, jobs, education, social and cultural integration and preserving their identity in the new country. It also assesses the role and relationships of the different organizations involved in the work of resettlement of the refugees. The study will be significant to understand the impact of refugee presence on the San Antonio community.

# Description of Methodology

The research is based upon a combination of historical methodology utilizing primary and secondary source materials. Oral interviews and personal stories have also been utilized. Interviews have been conducted in the camps in Nepal, UNHCR office in Nepal, the resettlement housing in San Antonio, Texas, Catholic Charities and other organizations in Texas and the U.S. Contemporary materials like news articles have also been utilized.

## Findings and Conclusion

Resettlement of the refugees in San Antonio has been easier than most other cities in the US as San Antonio offers a very diverse and multi-cultural environment in which to integrate easily, both socially and culturally. It has been observed that living in camps have increased the resilience allowing them to easily adjust and cope with the changes of an alien environment in which they have been thrust, in most cases without any choice. This research has also explored the idea of home and identity in the context of the resettled Bhutanese refugees. Having lived for long in the refugee camps and now given a new lease of life and hope for a better future in the United States, most refugees are ambivalent about their home in Bhutan and are anxious to make a new life for themselves in their new Shangri-la.

# AGE AND ACTIVITY RELATED DIFFERENCES IN THE MECHANISMS UNDERLYING MAXIMAL POWER PRODUCTION IN YOUNG AND OLDER ADULTS

Ann H. Newstead, PT, Ph.D., Thomas Korff, Ph.D., Renate van Zandwijk, MS, and Jody L. Jensen, Ph.D.

# Purpose of Study

The purpose of this study was to examine the mechanisms underlying the interactions between aging, activity levels and maximal power production during a multi-joint lower limb task.

# Rationale and Significance

By the age of 75, approximately one in three men and one in two women engage in no physical activity beyond what is minimally necessary to participate in daily living. Yet, physical activity is key to maintaining health and physical independence. Maximum power production during complex motor tasks is a marker of neuromuscular function, and it declines with advanced aging. There is a need to extend the literature by defining a mechanism that contributes to the age- and activity-related differences in maximum power production during the performance of complex motor tasks.

# Description of Methodology

Forty healthy volunteers participated in the study. Based on their age, participants were divided into younger adults (YA, n=13,  $24.1 \pm 2.2$  years,  $1.73 \pm 0.08$  m,  $68.9 \pm 5.9$  kg) and older adults (n=27). The older adults were further subdivided into older active (OA, n=14,  $68.1 \pm 2.5$  years,  $1.73 \pm 0.11$  m,  $72.0 \pm 12.2$  kg) and older sedentary participants (OS, n=13,  $68.6 \pm 3.4$ years,  $1.71 \pm 0.09$  m,  $80.1 \pm 12.5$  kg). We used a modified inertial stationary cycle ergometer (Monarch 828E) to assess maximal cycling power. Participants cycled as fast and as forcefully as possible for 3-5 s. During the maximum power trials, reaction forces at the right pedal were collected at 1200 Hz using a custom-made pedal instrumented with two force transducers. To determine any differences across the three groups, we performed a MANOVA with group being the between-subject factor and follow up one-way ANOVAs for each dependent variable. In case of significance, post-hoc t-tests (Student Newman Keuls) were performed to specifically locate the differences. The type I error for all statistical tests was set to 0.05.

# Findings and Conclusion

Overall maximum power was significantly greater in YA compared to OS and OA. No differences were found between OA and OS. The analysis of joint powers revealed activity-related differences. OS produced less knee joint power contributions to overall pedal power than OA and YA (P<0.05). OS compensated by demonstrating increased hip and ankle power (P<0.05). Our results demonstrate that overall maximum power production during cycling is age-related while the way in which this task is constructed on a joint level is activity-related. These results highlight the importance of inter-muscular coordination and muscle-group specific interventions in the aging population.

# EXPLORING RESILIENCY, EMPOWERMENT, CONFLICT MANAGEMENT STYLES, AND INTERPERSONAL CONFLICT IN THE WORKPLACE AMONG NURSING STUDENTS

Eula W. Pines, BC, RN, PMHCNS, Ph.D., Maureen Rauschhuber, RN, Ph.D., Gary Norgan, RN, Ph.D., Jennifer Cook, RN, CNS, Ph.D., Leticia Canchola, RN, MSN, Cynthia Richardson, RN, MSN, and Mary Elaine Jones, RN, PNP, Ph.D.

# Purpose of Study

The purpose of this pilot study was is to describe student experiences of workplace conflict, explore interpretative habits influencing stress resiliency and perceptions of empowerment, and examine relationships of stress resiliency, psychological empowerment, and conflict management styles of 166 baccalaureate nursing students enrolled in a private Hispanic-serving university. Research Questions: 1) What is the relationship between the three interpretative habits (deficiency focusing, necessitating, and skill recognition) as measured by Thomas-Tymon Resiliency Profile (2003) and psychological empowerment of student nurses as measured by Spreitzer Psychological Empowerment Scale?; 2) Do the stress interpretive habits (deficiency focusing, necessitating, and skill recognition) as measured by the Thomas-Tymon Stress Resiliency Profile (2003) predict the conflict management style of student nurses as measured by the Thomas- Kilmann Conflict Mode Instrument?; 3) Is there a difference in the conflict management styles and selected characteristics of student nurses with their experience of horizontal violence as measured by the Thomas- Kilmann Conflict Mode Instrument?; 4) Do selected demographic characteristics (age, ethnicity, and level of nursing education) predict the conflict management style of student nurses as measured by the Thomas- Kilmann Conflict Mode Instrument?

# Rationale and Significance

Research demonstrates that nursing students react inappropriately to workplace conflict, which ultimately affects staff retention and the quality of health care. Evidence suggests nurse educators need to design primary prevention programs to prepare nursing students to engage in interpersonal conflict. To design such programs nurse educators must assess stress resiliency profiles, psychological empowerment traits, conflict management styles, and student experiences with violence in the workplace.

# Description of Methodology

A descriptive correlational study was conducted with 166 baccalaureate nursing students. Most participants were female, single, Hispanic and 25 years old. The data collection instruments were Stress Resiliency Profile (Thomas & Tymon), Psychological Empowerment Instrument (Spreitzer), Conflict Mode Instrument (Thomas & Kilman), and a demographic questionnaire. Four research questions were analyzed using descriptive and inferential statistics.

# Findings and Conclusion

Findings from this study suggest that ethnic heritage is not predictive of stress resiliency, empowerment, or styles of conflict management. One-third of the sample reported experiencing conflict in the workplace. Student nurses scored in the high range for focusing on their deficiencies or negatives instead of positives in a conflict situation; they scored above the 60<sup>th</sup> percentile for avoiding and accommodating behaviors to manage difficult situations and were less likely to use competing or collaborating strategies to manage conflict. Empowerment scores were significantly correlated with stress resiliency scores. High scores in empowerment had high scores in skill recognition, suggesting higher resilience; high scores in empowerment were related to high necessitating scores suggesting a predisposition to stress. The primary conclusions are that students are unprepared to engage in interpersonal conflict as they transition into the workplace. Nurse educators must design curricula to strengthen stress resiliency and psychological empowerment skills of nursing students to engage in workplace conflict.

## **OPORTUNIDADES: IS THE CASH TRANSFER ONLY AN INCENTIVE?**

Rosario Plascencia, McNair Scholar, and Nurşen A. Zanca, Ph.D., McNair Mentor

## Purpose of Study

The purpose of this quantitative research was to determine if OPORTUNIDADES' cash transfer directly impacts the weight for age and height for age of children under the age of five in Mexico.

# Rationale and Significance

In 1997, Mexico created PROGRESA, now OPORTUNIDADES, a human development program that fights the cycle of poverty. The program invests in human capital by giving conditional cash transfers that are contingent on the satisfaction of the requirements of its three main components health, nutrition, and education. Skoufias (2005) found through a rigorous evaluation that OPORTUNIDADES has increased the linear growth and nutrition of children as well as increased the attendance of secondary school students. After reported success, many countries across the world are implementing social welfare programs that mimic OPORTUNIDADES. However, the component of the program that directly impacts the children's nutrition remains unclear. Under the components of health and nutrition, which are the primary focus of this research, the program has mandatory *platicas* "work shops" for the beneficiaries on hygiene, nutrition, and preventive health care, as well as a nutritional supplements and medical checkups. There is also the question of how the cash transfer affects the nutrition of the children. Each of these variables could be the primary reason for the increased nutrition seen in the children.

# <u>Description of Methodology</u>

There were two simple linear econometric models employed in this research with cross sectional data for the year 2005 for the 32 states of Mexico. The first model dealt with weight for age, while the second model dealt with height for age. Other socioeconomic factors were also included in the analysis. The study utilized SPSS (Statistical Package for Social Scientist) to run a multivariable regression analysis.

## Findings and Conclusion

The findings of this study cannot directly link the OPORTUNIDADES cash transfer to a decrease in underweight or under height children under the age of five in Mexico. The findings do support the theory of anthropometric John Komlos that Real GDP per Capita has a positive relationship with weight for age and height for age.

# A MUSICAL AND CULTURAL ANALYSIS OF NONDIEGETIC SOUNDTRACK ASPECTS IN THE 1995 BBC ADAPTATION OF PRIDE AND PREJUDICE

Ann-Marie Quiñones, McNair Scholar

# Purpose of Study

The purpose of this study was to analyze the soundtrack in the film adaptations of Jane Austen's novel *Pride and Prejudice*.

# Rationale and Significance

This study aims to understand the historical and social significance in the soundtrack of *Pride and Prejudice* as well as the role of sound in synthesizing the film's emotional depth and images as a means of communication with the audience. In conjunction with the plot and characters, the soundtrack can be a catalyst to allow audiences a distinct voyeuristic perspective on relationships. In particular, the nondiegetic sound - sound heard only by the audience - reveals information about characters' motivations and moods without the specific need for dialogue. A good soundtrack fills in the visual gaps by translating sound into raw emotion: joy, sorrow, worry, confusion, anger, and love. The emotions can become an imbedded, tangible, and palatable substance.

### Description of Methodology

This research primarily scrutinized the soundtrack of Carl Davis, the composer of the 1995 BBC/A&E film adaptation, and his use of the Beethoven septet model as well as the film's leitmotifs. This examination also explored the film's soundtrack in relation to its historical and social context in Regency English society. The research investigated the impact of the score on contemporary audiences.

# Findings and Conclusion

The researcher concluded that Davis' Beethoven model is heard in the soundtrack. The model and leitmotifs synthesizes the images and sound to enhance the development of the characters and engage the audiences' mind.

# EVOLUTION OF THE ANNUAL STUDENT ASSESSMENT AND PROGRESSION EXAM: A TOOL FOR MEASURING STUDENT COMPETENCY

Sushma Ramsinghani, Ph.D., Rebecca L. Brady PharmD., Helmut B. Gottlieb, Ph.D., Adeola O. Grillo, Ph.D., David F. Maize, Ph.D., Marcos A. Oliveira, Ph.D., John M. Tovar, PharmD., Amy Witte, PharmD., and Arcelia M. Johnson-Fannin, Pharm.D.

# Purpose of Study

The Annual Student Assessment and Progression (ASAP) exam is given at the professional P1 through P3 level to evaluate competency in student outcomes as described by the FSOP Student Outcomes Document. A new, case-based P3 ASAP exam was developed to simulate the NAPLEX (National Association of Boards of Pharmacy Licensure Exam) that pharmacy graduates must take successfully to become registered pharmacists. Low-scoring outcomes in the ASAP exam were used to identify areas of curriculum needing enhancement.

# Rationale and Significance

The ASAP exam is a comprehensive exam given at the professional P1 through P3 level to assess student learning, retention and application of knowledge in the pharmacy curriculum. Questions for each exam originate from courses taught up to that point in the curriculum and are mapped to an FSOP student outcome. A new, case-based P3 ASAP exam was developed that required application of knowledge from the pharmaceutical sciences and pharmacy practice fields to problem-solve. Such an exam would provide opportunities for the student to treat a patient in a holistic manner, especially where co-morbidities may be present. The case-based exam simulated real-life situations and provided a platform for students to practice their didactic learning in preparation for the advanced pharmacy practice experiences (APPE) and the licensing exam.

## Description of Methodology

The style and timeline for the P3 case-based ASAP exam was defined by the FSOP assessment committee. A high percentage of the FSOP faculty were able to participate in developing the exam. The pharmacy practice (PP) faculty wrote clinical cases based on the pharmacotherapeutic courses in the curriculum. The PP faculty also wrote pharmacotherapy, drug information, law, and management questions related to the cases. The pharmaceutical sciences (PS) faculty wrote science-related questions from pharmacology, medicinal chemistry, pharmaceutics, biochemistry etc. Each question was mapped to a FSOP student outcome. The cases and questions were validated by non-specialist PP faculty who answered the case-based questions. Modifications to cases and questions were then made based on their feedback. After the exam was administered to the students, each question was assigned a level of difficulty (low, medium or difficult) and discrimination (low, medium or high) based on overall student performance.

# Findings and Conclusion

A high first time success rate (95%) was observed in the P3 case-based exam. The adoption of the new case-based exam did not adversely affect the first-time success rate. About 80% of the questions were in the Easy-Moderate to Difficult-Moderate range. Questions that were analyzed as difficult were deemed to either require better question construction, and returned to the faculty for reviewing, or addressed information that was not effectively learned within the curriculum. This helped to identify professional outcomes and respective courses that would need enhanced instruction.

# IN-CLASS DISCUSSIONS OR ON-LINE ENHANCED DISCUSSIONS: DO THEY AFFECT EXAM SCORES?

Harold Rodinsky, Ph.D.

# Purpose of Study

The purpose of this research was to evaluate on-teaching tools in particular *on-line enhanced discussions* and compare that discussion paradigm with the *traditional in-class discussion* paradigm to determine the contribution, if any, of either of these paradigms on student quiz and exam scores. For this study an enhanced on-line discussion is one that includes a short topical video. After viewing the video, students commented on its contents in the context of their current course material.

# Rationale and Significance

For the last 10 years investigations about web-based enhancements to traditional in-class instructional models have increased (Bartini, 2008.) Analyses of the web-based components of blended and hybrid courses include: (a) using the web to teach everyday applications (Sherman, 1998), (b) discourse analysis of students chats (Wang, Newlin, & Tucker, 2001), (c) technology and pedagogy (Newlin, & Wang, 2002), and (d) electronic discussion boards (Bryant, 2005). Concurrently, educators are struggling with students' reluctance to participate in classroom discussions (Bryant, 2005), which may be related to the student's unfamiliarity with assigned course material (Burchfield & Sappington, 2000; Conner-Greene, 2005). One result of a student's failure to participate is insufficient academic performance (Voekle, 1995), while students' who participate achieve an academic advantage (Hutchinson & Beadle, 1992). Education is moving towards blended or hybrid instruction which combine web-based instruction with traditional inclass pedagogy (Graham, 2005.) Given student's reluctance to participate in class discussion this shift may be problematic as the opportunity to participate in classroom discussion will limited by the reduction in classroom exposure. This study looked at *enhanced on-line discussions*, available on the Blackboard<sup>®</sup>, and the effect on grades as compared to the traditional discussion model.

# Description of Methodology

Records (*N*=90) for students in psychology courses PSYC 2380 Biology and Behavior Spring 2009 (*N*=18) and Fall 2010 (N=29), PSYC 3376 Learning and Learning Lab, Spring 2009 (*N*=21) and Fall 2010 (N=22) were reviewed for discussion-participation points, and quiz and exam scores. Final grades for the categories 'participation total', 'quiz-score total', and 'exam score total' were taken from these records. Quizzes, in all classes had a total of 200 questions (10 quizzes with 20 questions.) Exams also totaled 200 questions (four exams with 50 questions each.) *Quiz* scores for PSYC 2380 *in-class discussion* were *M*=67.778, *S.D.*, 12.9776 and for the *enhanced on-line discussion M*=77.949, *S.D.*, 5.395. For PSYC 3472 in-class quiz means *M*=71.3357, *S.D.*, 9.339, and for *enhanced on-line M*=74.650, *S.D.*, 6.514. *Exam* scores for PSYC 2380 in-class discussion *M*=74.167, *S.D.*, 12.580, and for enhanced on-line discussion *M*=82.327, *S.D.*, 6.191. For PSYC 3462 exam scores for the in-class discussion *M*=78.2838, *S.D.*, 7.613 and for the enhanced on-line discussion *M*=80.0500, *S.D.*, 6.315. The 2 X 2 factorial using two levels of independent factors (in-class discussion and enhanced on-line discussion as independent variables) across two dependent variables, quiz and exam scores was analyzed (ANOVA).

#### Findings and Conclusion

For *in-class* discussion X quizzes F (1,39)= 94.820, p=.000, $\eta$ \_(p)^2= .530, for in-class discussion X exams, F (1,38)= 46.670, p=.000,  $\eta$ \_(p)^2=.357. For *enhanced on-line* discussions X quizzes, F (1, 38) = 20.834, p=.000, $\eta$ \_(p)^2= .199, and for the enhanced on-line discussions X exams F (1,50)= 22.615, p=.000, $\eta$ \_(p)^2= .212. *In-class discussion* and *enhanced on-line discussion* had a significant effect on quiz and exam scores. The difference in effect size suggests *in-class discussions* are slightly more powerful than *on-line enhanced discussion* forums.

## IS LATIN AMERICA READY FOR SERVANT LEADERSHIP?

Alberto Rubio-Sanchez, Ph.D., and Alicia Rodriguez-Rubio, Ph.D.

## Purpose of Study

In order to better understand the relationship between a national culture and an individual's leadership style, it is necessary to investigate the values that support them. Using the World Values Survey we looked at how cultural values in Latin American countries differ from the rest of the world. This variation in values may point toward a need for different leadership styles from those that have developed in a particular country. Research questions for this study include: 1) Are cultural values associated with Servant Leadership significantly different between Latin American nations and the rest of the world?; and 2) Are there Latin American countries which values point to the acceptance of Servant Leadership?

# Rationale and Significance

Leaders do not exist in a vacuum; they are immersed within not only a corporate culture, but a national culture as well. Schein (1980) argues that an essential aspect of culture is values and that membership in a particular culture is exhibited through endorsement of shared values. If work related values are significantly different among countries, then leadership values are also likely to differ (Alexashin & Blenkinsopp, 2005). The model of Servant Leadership first proposed by Greenleaf (1977) defines a servant leader as: "The servant-leader *is* servant first.... It begins with the natural feeling that one wants to serve, to serve *first*. Then conscious choice brings one to aspire to lead. That person is sharply different from one who is *leader* first.... The difference manifest itself in the care taken by the servant-first to make sure that other people's highest priority needs are being served. (p. 27). The importance of this study stems from the trend of foreign countries doing business in Latin America and the leadership style they must use to improve moral, retention and productivity levels.

## Description of Methodology

A series of descriptive statistical analyses were used to investigate the research questions comparing select Latin America countries to the U.S. Select data related to issues of leadership in the workplace were drawn from the fourth (38 variables) and fifth wave (7 variables) of the World Values Survey [8,311 respondents in 7 nationally representative subsamples in Latin American countries and the U.S.]. The first four variables, measuring the importance of friends, family leisure time and work in life, were measured employing a four point scale. Life Satisfaction was measured with a 10 point scale. Perceptions of how much freedom of choice and control individuals have in their life was also measured by a 10 point scale. Finally, the level of respect for individual rights was measured by a 4 point scale.

## Findings and Conclusion

The results show that, generally speaking, Latin American countries do not show characteristics that would make Servant Leadership a viable management style in the region. Overall, U.S. cultural values were much more welcoming of a participatory leadership style. Significant differences were found for all variables. Those variables measuring the importance of family, friends, leisure time and work in the respondents' lives found higher values for U.S. respondents than those in Latin American with the exception of leisure time. Respondents in Latin American had significantly greater life satisfaction than those in the U.S, but U.S. respondents felt they had significantly more freedom of choice and control in their lives and also believed that the level of respect for individuals was higher than their counterparts. As servant leadership emphasizes the importance of respect, personal relationships, freedom of choice, satisfaction with life, etc. U.S. respondents were more interested in these aspects of their lives than Latin American respondents. Furthermore respondents in the U.S. placed more importance on their work than respondents in Latin America.

# ENRICHING THE FUTURE: PRESENTING THE INHERITANCE OF CHRISTIAN SPIRITUALITY TO THE MILLENNIAL GENERATION

Sr. Eilish Ryan, Th.D.

# Purpose of Study

The purpose of this study is to apply Boyers' model of the scholarship of integration (1990) to identify promising practices for effectively teaching Christian spirituality to the Millennial generation (born 1979-1994). This interdisciplinary work examines scholarly literature related to the characteristics of the Millennials and recent material on contemporary Christian spirituality. Research questions include: a) What are the common characteristics of the Millennial generation? b) What are their perspectives on religion and spirituality? c) What insights are emerging in the scholarly literature related to Christian spirituality in the 21<sup>st</sup> century? d) Which of these themes provide the best practical guidance to those teaching Christian spirituality to the next generation?

# Rationale and Significance

According to a 2010 Pew Research Center report, the Millennial generation differs significantly from the four previous generations. They are more educated, more ethnically and racially diverse, and exhibit different values, attitudes, behaviors, and lifestyles. They are the least overtly religious American generation in modern times. One-in-four (26%) are unaffiliated with any religion, of which only 37% say they are strongly affiliated. Only 18% attend religious services on a weekly basis. However, 41% of Millennials say they pray daily. The outcomes of focus groups conducted by Richard Sweeney of the New Jersey Institute of Technology (2005) concur with the Pew report. Millennials also differed significantly from their elders on 10 of 16 factors on a standard personality test (16PF). Among other scholars in the field of Christian Spirituality, Richard J. Woods (2006) outlined the characteristics of 21<sup>st</sup> century Christian spirituality, including: holistic, biblically grounded, developmentally oriented, life-affirming, socially proactive, and ecologically responsible. Understanding the Millennial generation is essential for presenting the Christian spiritual tradition and its current expression to them in a meaningful and accessible ways. Currently, there are few available introductory college level texts or course materials which combine scholarship in the academic field of Christian Spirituality and Christian tradition with contemporary culture and topics which address the realities of the Millennial generation.

## Description of Methodology

The initial methodology examines existing relevant research on the general characteristics of the Millennials (incl. Pew 2010, Sweeney 2006), on Millennials as students (incl. Wilson 2004, Oblinger 2003, Endean 1994) and on emerging themes in recent research on contemporary Christian spirituality both as lived experience and as an academic discipline, especially rising trends (incl. Cunningham 2006, Woods 2006, Downey 2003). The next phase of this study will correlate this information in order to identify teaching practices most suited for teaching Christian spirituality to the Millennial generation.

# Findings and Conclusion

The study to date indicates that the development of appropriate methodologies and presentation of the Christian spiritual tradition to Millennials needs to respond to the generation's characteristic behaviors and learning patterns. These include Millennials' expectation of personal choice, convenience, and customization; their preference for practicality, interactive technology, instant communication, and collaborative tasks; and their declining interest in books. The work is ongoing at this time.

# SMALL MOLECULE DISCOVERY: PHENYLALKYLAMINE-BENZENESULFONAMIDES AS 5-HT<sub>6</sub> RECEPTOR LIGANDS

Donald Sikazwe, Ph.D., Malgorzata Dukat, Ph.D., Bryan L. Roth, MD, Ph.D., and Richard A. Glennon, Ph.D.

# Purpose of Study

To investigate the binding conformation of phenylalkylamine-benzenesulfonamides relative to ergolines. The hypothesis tested was that: since sulfonamide-arylalkylamines bind to 5-HT<sub>6</sub> in an extended ergoline type of conformation, phenylethylamines and pyrroloethylamines bearing the appropriate substituents should also bind.

# Rationale and Significance

5-HT<sub>6</sub> is a GPCR (g-protein coupled receptor) found almost exclusively in the brain, whose biological role is still unclear. In order to probe this receptor's role in CNS disorders (Alzheimer's, schizophrenia, anxiety, convulsive, satiety, etc.) small molecules with selective activity (agonist or antagonist) at this receptor are desired. Because of the privileged location of 5-HT<sub>6</sub>, drugs targeting this receptor would lack peripheral side effects.

## Description of Methodology

Several compounds were rationally designed using structural information from reported ligands (Ro 04-6790, SB-271046, and MS-245), synthesized, characterized elementally and by NMR studies, and evaluated for activity at 5-HT<sub>6</sub> using in vitro binding affinity assays.

# Findings and Conclusion

We identified phenylethylamines and pyrroloethylamines as novel 5-HT $_6$  ligands. These simpler structures can serve as templates for generating even more ligands for this receptor. Phenylethylamines and pyrroloethylamines bind to 5-HT $_6$  receptors with reasonably high affinities. Since arylethylamines bind in the ergoline extended conformation, these compounds also bind with the same conformation.

# THE IMPACT OF A DIMENSION OF WELLNESS CLASS ON 1 ½ MILE RUN TIMES OF UNDERGRADUATE COLLEGE STUDENTS: A PILOT STUDY

Gregory Soukup, Ed.D., Timothy W. Henrich, Ph.D., and Heather Barton-Weston, M.S.

# Purpose of Study

The United States Department of Health and Human Services (2008) reported that regular moderate to vigorous levels of physical activity significantly improved the health of Americans and lowered their risks of developing several chronic diseases. The USDHHS recommends 60 minutes of moderate to vigorous aerobic physical activity every day. In 2008, the CDC revealed only 34.7% of adolescents reported being vigorously active at least one hour a day five days a week. The University of the Incarnate Word requires that undergraduate students take a Dimension of Wellness class as a requirement for graduation. At the beginning of the class, 71.5% of students self-reported having sedentary lifestyles. Students receive classroom instruction on physical, spiritual, occupational, social, emotional, and intellectual wellness. The curriculum emphasizes the improvement of the physical well-being of all students and provides structured aerobic exercise activities every class. Students are required to perform one hour of aerobic exercise per week in class, 30 minutes per week outside of class, and to maintain a pedometer log. The Dimension of Wellness class uses mile and a half run times; obtained at the beginning and end of the semester, to assess aerobic fitness levels of students.

### Rationale and Significance

The primary research question was to determine if the Dimension of Wellness course produced significant positive improvements in mile and a half run times at the end of a semester of instruction.

# Description of Methodology

Permission for the study was obtained from the Institutional Review Board at the University of the Incarnate Word and data were collected from 70 students (female-56/male-14) with an average age of 21. Pre and Post mile and a half times were collected three months apart. A T-test was used to determine pre and post differences and the level of significance was established at  $\underline{p}$  < .05.

# Findings and Conclusion

The average pre-test mile and a half run time of the students was 17 minutes and 29 seconds and the post-test run time mean was 16 minutes and 20 seconds. The students decreased their average mile and a half run times by 1 minute and 9 seconds. This is an improvement of 8.5% by the end of the semester. The difference in times was significant at the .000 level. The study suggests that the predominantly sedentary university students in the study significantly improved their mile and a half run times and aerobic fitness levels after just three months of regular structured aerobic physical activity in a wellness class. The researchers also infer that requiring one activity class a semester at the university level could significantly improve the health of a significant number of students during their university education.

# FASHION MERCHANDISING AND INTERIOR DESIGN CURRICULA CROSSOVER: INTEGRATING BRANDING AND SPATIAL STRATEGIES WITHIN BUILT ENVIRONMENTS

Cathryn M. Studak, Ph.D., and Laura Morthland, MIA

# Purpose of Study

The purpose of this paper was to present how situated learning pedagogy was used in the development of professional skills for students in both fashion merchandising and interior design programs. This approach focused on enhancing students' awareness of spatial and branding techniques relative to each field and across both fields in regard to the initial conception, product development/promotion, and subsequent interior design of a fictitious fashion retail environment.

# Rationale and Significance

Branding strategies must simultaneously communicate product quality, prestige, and customer service standards relative to both retailer format and market level. Without understanding the "business structure of retailing" the interior design student cannot process how space must be utilized in order to achieve brand image and profit goals. Without understanding the "business of space planning" merchandising students cannot successfully communicate how a brand's image must be represented within a built environment. In many universities throughout the country, academic departments house fashion and interior design programs together. But the programs maintain a teaching isolation without identifying common professional developmental needs. However, when retailing environments are concepted and ultimately built, it is a result of a collaborative effort among merchandisers, architects, and interior designers. Through the integration of select courses, universities can better prepare graduates with both brand management and spatial management skills.

# Description of Methodology

Situated learning has two fundamental principles: that knowledge is best presented in an "authentic context;" and that learning requires social interaction and collaboration. Based on initial collaborative work between the authors a three-part teaching strategy was developed. 1) Present terminology pertinent to both spatial and branding concepts and to organize terms that were germane to both fields, or were unique to one field or the other. 2) Develop a scripted "mall walk" for students to physically experience the terminology originally presented in a lecture series. 3) Develop a group project for students to create a retail environment that integrated responsibilities relative to each field (common ratio: three merchandising students to one interior design student). Student work was assessed by evaluations pertinent to each field's work responsibilities; presentation of the final group project by students to industry professionals (who critiqued both the project boards and the oral presentations made by students); and by the students themselves who assessed their learning experiences.

### Findings and Conclusion

Traditional grade assessments revealed an increased depth of thought and commitment to overall project completion. Student feedback was positive. Both interior design and merchandising students better comprehended the impact of branding strategies when developing a store interior that must integrate the shopping experience in regard to product layout, customer service, and sales peripherals. Students had to speak about their brand and store concept within a professional context. During the summary discussion (after student presentations) between the course instructors and the jurors, the most repeated comment was "the students sounded as professional as their projects looked." Situated learning pedagogy allowed the course instructors to better integrate collaborative behaviors acquired in their own industry experience with traditional classroom and studio teaching methods.

# THE RELATIONSHIP BETWEEN INFANT TEMPERAMENT, AGE, AND EEG ASYMMETRIES IN RESPONSE TO ATTRACTIVE AND UNATTRACTIVE FACES

Teresa Taylor-Partridge, Ph.D., and Judith H. Teresa Langlois, Ph.D.

# Purpose of Study

Research into infant preferences often relies on visual attention; however, infants attend to stimuli due to both liking and wariness. Because left frontal electroencephalogram (EEG) asymmetry is associated with approach motivation and right EEG asymmetry is associated with withdrawal motivation, EEG asymmetry may better measure motivation underlying attention. We previously found that infants show greater left than right frontal brain EEG asymmetry (approach) when viewing attractive compared to unattractive faces. In this study, we aim to address the following research question to further validate the use of EEG asymmetry as an index of infant motivation: Do individual differences in parent-rated temperament and infant age account for variability in infant approach/withdrawal motivation as measured by EEG asymmetry depending on face type?

## Rationale and Significance

Because infants who rate high in *Approach* by their parents are more interested in approaching new people, we expected Approach to positively correlate to left EEG asymmetry. This effect should be greater for attractive than unattractive faces, because attractive faces are preferred (e.g., Langlois et al., 1987). Age was included as a factor for exploratory purposes. This study contributes to construct validity and advances our understanding of EEG asymmetry as a measure of infant approach motivation when temperament and age are taken into account.

## Description of Methodology

We collected usable EEG and temperament data for 18 six- and 25 ten-month-olds. Parents completed the Infant Behavior Questionnaire-Revised (IBQ-R) to provide information on infant Approach tendencies defined by Gartstein and Rothbart (2003) as "Rapid approach, excitement, and positive anticipation of pleasurable activities" (p. 72). Infants viewed static images of five attractive and five unattractive faces while a Neuroscan system acquired EEG data from mid-frontal (F3, F4) sites referenced to the vertex (CZ). After applying a Fourier transform using 1-second epochs with 50% overlap, we calculated the asymmetry indices per condition as the log transform of average power density in the 6-9 Hz frequency range (i.e., infant alpha band) from left (F3) and right (F4) electrodes (LN[F4] – LN[F3]).

A repeated measures ANOVA with EEG Asymmetry index as within-subject variables (attractive vs. unattractive), age as the between subjects variable, and Approach as the covariate, uncovered a significant main effect for face-type—greater left asymmetry for attractive faces. Results were strongest for the two-way interaction between face type and Approach and also included a significant three-way interaction between face type, age, and Approach. Furthermore, we ran regression analyses with Approach as the predictor and EEG asymmetry as the dependent variable per face type and by age. Approach predicted EEG asymmetry for 10-month-olds in the attractive condition,  $R^2 = .20$ , F(1, 23) = 5.76, p = .03. Although not significant, a similar trend was apparent for unattractive faces and when 6-month-olds viewed attractive but not unattractive faces.

# Findings and Conclusion

Findings support two hypotheses: (a) infants are more motivated to approach attractive than unattractive faces, especially infants who are older and rate high in Approach; (b) EEG asymmetry captures approach motivation. These results highlight the importance of considering age and temperament when employing EEG asymmetries as an index of social evaluation.

# LEARNING OUTCOMES OF A CULTURALLY-FOCUSED FOOT CARE PROGRAM FOR MEXICAN AMERICAN ELDERS

Perla Zarate-Abbott, RN, MSN, Annette Etnyre, RN, MSN, CFCN, Lea Ann Loftis, RN, MSN, and Sara Kolb, RN, Ph.D.

# Purpose of Study

To describe the learning outcomes of a culturally-focused foot care program for Mexican American elders, many with diabetes, living in an economically disadvantaged area of San Antonio. The following research questions guided the study: 1) What are the learning outcomes of older Mexican Americans regarding foot care self-management practices following foot care education?; 2) Which new foot care self-management practices do older Mexican Americans report most frequently?

# Rationale and Significance

Current demographic trends toward an aging population and associated health issues such as diabetes, arthritis, peripheral arterial disease, dementia and loss of visual acuity hinder safe self-care of the feet and nails; however, care can be enhanced with appropriate education for individuals and care givers. Older Mexican Americans are soon to be the largest group of minority seniors in the US (Administration on Aging, 2009). Review of 156 individual records of predominantly Mexican American clients seen by this project's Foot Care Nurses shows that 85% have a medical diagnosis of hypertension, 64% have arthritis and 53% have diabetes. Foot health is important for all elderly to minimize risk for immobility and falls. Due to circulatory and neurological complications of diabetes, persons with diabetes have an increased risk of amputation (Centers for Disease Control, 2007). The risk of diabetes increases with age (American Diabetes Association, 2010). Mexican Americans have one of the highest rates of diabetes among the Hispanic subgroups, currently 11.9% (Centers for Disease Control and Prevention, 2007).

For Mexican Americans, challenges to health education and care include financial constraints, access to care, cultural factors, educational attainment, and language (The Office of Minority Health, 2009). Consideration for age, finances, and communication needs when health information is offered is vital for elders, as is family support (Bastable & Dart, 2008). In well-established Mexican American communities, researchers have found that culturally-tailored health interventions for diabetes are necessary for reception of information and adoption of self-management skills (Borges & Ostwald, 2008; Culica, Walton, & Prezio, 2007; Vincent, 2009). Serving an area with high rates of diabetes, the foot care nurses have created a culturally- tailored program to provide basic foot care, referrals, and foot care education for clients of the *Ministerio de Salud*.

## Description of Methodology

Review of existing year 2010 foot care records that contain data used for program evaluation and client assessment, without client identifying information. Manual count of reported learning topics as documented on records and descriptive statistics were used. During 2010, 89% of unduplicated client foot care records contained documentation in the area labeled "Patient identification of new knowledge".

## Findings and Conclusion

The most frequently mentioned new knowledge/skills included use of menthol vapor rub for toenail fungal infection (74, 47%); rationale for appropriate shoes and socks (60, 38%); how to do foot and ankle exercises (51, 32%), and keeping skin between toes dry (41, 26%). Identification of foot care knowledge and practices to maintain foot health is essential toward reducing risk of immobility, falls, and amputation. Further research is needed to monitor continuation of practices.

## **DIRECTORY OF RESEARCHERS**

# Abelida, Joeresty, RN, BSN

CNS Student, Nursing, SNHP, UIW, j\_abelida@yahoo.com

#### Adams, Melinda K., Ph.D.

Associate Professor, Fashion Management, SIMD, UIW, madams@uiwtx.edu

## Afshar, Roxana, BS

Professional Degree Student, Pharmacy, FSOP, rafshar@student.uiwtx.edu

## Alexander, Chrystal D., McNair Scholar

Undergraduate Student, Economics, HEBSBA, UIW, perryman@student.uiwtx.edu

# Armstrong, Jeanette, BSN

CNS Student, Nursing, SNHP, UIW, jarmstro@student.uiwtx.edu

# Barton-Weston, Heather, M.S.

Instructor, Kinesiology, SNHP, UIW, bartonwe@uiwtx.edu

# Beauford, Judith E., Ph.D.

Doctoral Professor, Director of Doctoral Studies, DSED, UIW, beauford@uiwtx.edu

# Bertling, Terry, BA

Graduate Student, Communication Arts, SIMD, UIW, tbertling@express-news.net

#### Bishop, Dalia, McNair Scholar

Undergraduate Student, Cultural Studies, CHASS, UIW, debishop@uiwtx.edu

## Boswell, Stefanie S., Ph.D.

Assistant Professor, Psychology, CHASS, UIW, ssboswel@uiwtx.edu

# Brady, Rebecca L., PharmD

Assistant Professor, Pharmacy, FSOP, UIW, rbrady@uiwtx.edu

## Buckley, Elaine F., M.A.

Doctoral Student, Education, DSED, UIW, efbuckle@uiwtx.edu

#### Canchola, Leticia, RN, MSN

Instructor, Nursing, SNHP, UIW, Iconchol@uiwtx.edu

# Carleton, William, Ed.D.

Professor, Chair, Kinesiology, SNHP, UIW, carleton@uiwtx.edu

# Cassells, Holly, Ph.D.

Professor, Nursing, SNHP, UIW, cassells@uiwtx.edu

# Cook, Jennifer, RN, CNS, Ph.D.

Assistant Professor, Nursing, SNHP, UIW, cook@uiwtx.edu

# Cromartie, Donnie L.

Undergraduate Student, Latin American Economics Class, UIW, see listing: McGuire, Michael J.

# Davila, Yvonne, MSN

Instructor, Nursing, SNHP, UIW, yadavila@uiwtx.edu

#### Diaz, Jesus

Undergraduate Student, Latin American Economics Class, UIW, see listing: McGuire, Michael J.

#### Dominguez, Daniel G., Ph.D.

Associate Professor, Director, Health Care Administration, HEBSBA, UIW, domingue@uiwtx.edu

## Dukat, Malgorzata, Ph.D.

Associate Professor, Medicinal Chemistry, Virginia Commonwealth University, mdukat@vcu.edu

# Etnyre, Annette, RN, MSN, CFCN

Professor, Nursing, SNHP, UIW, etnyre@uiwtx.edu

#### Fike. David S., Ph.D.

Senior Research Statistician, SGS&R, UIW, dfike@uiwtx.edu

#### Fike, Renea, Ed.D.

Assistant Professor, Teacher Education, DSED, UIW, fike@uiwtx.edu

## Fischer, Emily M., B.A.

Student, Graduated 2010, UIW, email address unavailable

#### Franklin, Cynthia, B.S.

Technician, FSOP, UIW, email address unavailable

#### Frei, Bradi L., PharmD.

Assistant Professor, Pharmacy, FSOP, UIW, frei@uiwtx.edu

## Frye, Michael T., Ph.D.

Assistant Professor, Engineering, SMSE, UIW, mfrye@uiwtx.edu

# Gale, Judith R., PT, DPT, MPH, OCS

Associate Professor, Physical Therapy, Creighton University, judithgale@creighton.edu

## Gilliland, Irene, RN, CNS, ACHPN

Instructor, Nursing, SNHP, UIW, gillilan@uiwtx.edu

### Glennon, Richard A., Ph.D.

Professor, Chair, Medicinal Chemistry, Virginia Commonwealth University, glennon@vcu.edu

#### Goei, Kathleen A., RN, Ph.D.

Assistant Professor, Nursing, SNHP, UIW, goei@uiwtx.edu

# Gottlieb, Helmut B., Ph.D.

Assistant Professor, Pharmacy, FSOP, UIW and UTHSCSA, gottlieb@uiwtx.edu

# Goulet, Caroline, B.S., M.S., Ph.D.

Professor, Director of Physical Therapy, SNHP, UIW, goulet@uiwtx.edu

## Greenberg, Valerie Kesner, Ph.D.

Associate Professor, Communication Arts, CHASS, UIW, greenberg@uiwtx.edu

# Grillo, Adeola O., Ph.D.

Assistant Professor, Pharmacy, FSOP, UIW, grillo@uiwtx.edu

#### Guiry, Michael, Ph.D.

Associate Professor, Coordinator, Marketing, HEBSBA, UIW, guiry@uiwtx.edu

## Gunter, Danielle M., RN, MSN

Instructor, Nursing, SNHP, UIW, gunter@uiwtx.edu

# Harmsen, Earl, MBA

Instructor, Coordinator, Decision Science, HEBSBA, UIW, harmsen@uiwtx.edu

# Harvey, Crystal S., B.S., SPT

DPT Candidate, Creighton University, email address unavailable

### Heath, Casev R., B.S., SPT

DPT Candidate, Creighton University, email address unavailable

## Henrich, Timothy W., Ph.D.

Professor, Sports Management, Kinesiology, SNHP, UIW, henrich@uiwtx.edu

## Herbers, M. Sharon, Ed.D.

Assistant Professor, Education, DSED, UIW, herbers@uiwtx.edu

#### Jensen, Jody L., Ph.D.

Professor, Kinesiology and Health Education, College of Education, UTA, JLJ@mail.utexas.edu

#### Johnson-Fannin, Arcelia M., Pharm.D.

Founding Dean, Feik School of Pharmacy, UIW, johnsonf@uiwtx.edu

# Jones, Mary Elaine, RN, PNP, Ph.D.

Professor, Dunlap Chair, Nursing, SNHP, UIW, jones@uiwtx.edu

## Kimmel, Jessica C., Ph.D.

Professor, Education, DSED, UIW, kimmel@uiwtx.edu

#### Kirk, Sr. Martha Ann, Th.D.

Professor, Religious Studies, CHASS, UIW, kirk@uiwtx.edu

#### Kolb, Sara, RN, Ph.D.

Professor, Nursing, SNHP, UIW, kolb@uiwtx.edu

## Korff, Thomas, Ph.D.

Sr. Lecturer, Sports Medicine & Human Performance, Brunel University, thomas.korff@brunel.ac.uk

# LaFrance, Kevin G., Ph.D.

Associate Professor, Health Care Administration, HEBSBA, UIW, lafrance@uiwtx.edu

### Langlois, Judith H. Teresa, Ph.D.

Vice Provost, Seay Regents' Professor of Psychology, UTA, langlois@mailmaul.utexas.edu

# Langston, Jeffrey K., B.S.

Graduate Student, Research Statistics, SMSE, UIW, langston@uiwtx.edu

## Lewis. Paul. Ph.D.

Associate Professor, Philosophy, CHASS, UIW, pmlewis@uiwtx.edu

## Lockhart, Lisa K., Ph.D.

Associate Professor, Chair, Psychology, CHASS, UIW, lockhart@uiwtx.edu

## Loftis, Lee Ann, RN, BSN, MSN

Faith Community Nurse Ministerio de Salud, SNHP, Iloftis@uiwtx.edu

# Logan, Robin E., MLIS

Director of Institutional Research, UIW, rlogan@uiwtx.edu

#### Maize, David F., R.Ph., Ph.D.

Associate Dean of Academic Affairs, Associate Professor, Pharmacy, FSOP, UIW, maize@uiwtx.edu

## Martinez, Angela R.

Undergraduate Student, Latin American Economics Class, UIW, see listing: McGuire, Michael J.

# McGuire, Michael J., Ph.D.

Professor, Economics, HEBSBA, UIW, michaelm@uiwtx.edu

# McNeill, Jeanette, RN, DrPH

Professor, Nursing, SNHP, UIW, mcneill@uiwtx.edu

#### Miller, Julie B., Ph.D.

Chair, Associate Professor, Religious Studies, CHASS, UIW, miller@uiwtx.edu

## Morthland, Laura, MIA

Professor, Interior Design, Southern Illinois University, laurab@siu.edu

## Munoz, Laura R., RN, Ph.D.

Assistant Professor, Nursing, SNHP, UIW, Irmunoz@uiwtx.edu

#### Narvaez, Andres J.

Undergraduate Student, Latin American Economics Class, UIW, see listing: McGuire, Michael J.

#### Nath, Lopita, Ph.D.

Assistant Professor, History, CHASS, UIW, nath@uiwtx.edu

## Newstead, Ann H., PT, Ph.D.

Associate Professor, Director Clinical Ed., Physical Therapy, SNHP, UIW, newstead@uiwtx.edu

# Nguyen, Diep N., B.S.

Undergraduate Student, Graduated 2010, UIW, email address unavailable

# Norgan, Gary, RN, Ph.D.

Associate Professor, Nursing, SNHP, UIW, norgan@uiwtx.edu

# Ogawa, Ayaka

Undergraduate Student, Latin American Economics Class, UIW, see listing: McGuire, Michael J.

# Oliveira, Marcos A., Ph.D.

Associate Professor, Pharmacy, FSOP, UIW, oliveira@uiwtx.edu

## Padron, Martin

Undergraduate Student, Latin American Economics Class, UIW, see listing: McGuire, Michael J.

### Parker, Ramona Ann, Ph.D.

Instructor, Nursing and Health Professions, UIW, parker@uiwtx.edu

#### Pate, Sharon S., Ph.D.

Assistant Professor, Fashion Merchandising, University of Louisiana, Lafayette, pate@louisiana.edu

# Pines, Eula W., BC, RN, PMHCNS, Ph.D.

Associate Professor, Nursing, SNHP, UIW, pines@uiwtx.edu

## Plascencia, Rosario, McNair Scholar

Undergraduate Student, Business, HEBSBA, UIW, plascenc@uiwtx.edu

## Quiñones, Ann-Marie, McNair Scholar

Undergraduate Student, Music Education, CHASS, UIW, anguinon@uiwtx.edu

# Ramsinghani, Sushma, Ph.D.

Associate Professor, Assistant Dean, Chair, Pharmacy, FSOP, UIW, ramsingh@uiwtx.edu

#### Rauschhuber, Maureen, RN, Ph.D.

Associate Professor, Nursing, SNHP, UIW, rauschhu@uiwtx.edu

## Richardson, Cynthia, RN, MSN

Instructor, Nursing, SNHP, UIW, cyrichar@uiwtx.edu

## Rodinsky, Harold, Ph.D.

Assistant Professor, Psychology, CHASS, UIW, rodinsky@uiwtx.edu

# Rodriguez-Rubio, Alicia, Ph.D.

Instructor, Banking and Finance, HEBSBA, UIW, alrodri4@uiwtx.edu

# Roth, Bryan L., MD, Ph.D.

Michael Hooker Distinguished Professor of Pharm., UNC, Chapel Hill, bryan roth@med.unc.edu

## Rubio-Sanchez, Alberto, Ph.D.

Instructor, Marketing, HEBSBA, UIW, rubiosan@uiwtx.edu

#### Ryan, Sr. Eilish, Th.D.

Professor of Religious Studies, Director of Pastoral Institute, CHASS, UIW, eryan@uiwtx.edu

Sanchez, Mauricio

Undergraduate Student, Latin American Economics Class, UIW, see listing: McGuire, Michael J.

#### Schulte, Michael, MAA

Doctoral Student, Education, DSED, UIW, 114schulte@sbcglobal.net

### Scott, Brendon Dean, RN, BSN

CNS Student, Nursing, SNHP, UIW, bscott2@uiwtx.edu

## Scott, Jeannie J., Ph.D.

Assistant Dean, Associate Professor of Management, MBA Director, HEBSBA, UIW, scott@uiwtx.edu

## Sikazwe, Donald, Ph.D.

Assistant Professor, Pharmacy, FSOP, UIW, sikazwe@uiwtx.edu

# Soukup, Gregory J. Sr., Ed.D.

Assistant Professor, Kinesiology, SNHP, UIW, soukup@uiwtx.edu

# Stovall, Jacquelyn, RN

Clinical Instructor, HRCSM, UTHSCSA, reynaj@uthscsa.edu

# Studak, Cathryn M., Ph.D.

Associate Professor, Director of Fashion Management, SIMD, UIW, studak@uiwtx.edu

# Taylor-Partridge, Teresa, Ph.D.

Assistant Professor, Psychology, CHASS, UIW, tpartrid@uiwtx.edu

### Teachout, Mark S., Ph.D.

Associate Professor, Administration, HEBSBA, UIW, teachout@uiwtx.edu

#### Toney, Glenn M., Ph.D.

Associate Professor, Physiology, UTHSCSA, toney@uthscsa.edu

# Tovar, John M., PharmD.

Assistant Professor, Pharmacy, FSOP, UIW, jmtovar@uiwtx.edu

## van Zandwijk, Renate, M.S.

Doctoral Student, Kinesiology and Health Education, UTA, email address unavailable

## Veguist, David G., Ph.D.

Associate Professor, Management, HEBSBA, UIW, veguist@uiwtx.edu

# Witte, Amy, PharmD.

Assistant Professor, Pharmacy, FSOP, UIW, awitte@uiwtx.edu

#### Wright, Travis R.

Undergraduate Student, Latin American Economics Class, UIW, see listing: McGuire, Michael J.

## Zanca, Nurşen A., Ph.D.

Associate Professor, Coordinator, Economics, HEBSBA, UIW, zanca@uiwtx.edu

# Zarate-Abbott, Perla, RN, MSN

Faith Community Nurse Ministerio de Salud, SNHP, coffecup1959@msn.com

NOTES:



© 2011 All Rights Reserved