

Student Research and Creativity Celebration April 21, 2007

## From the Provost

I wish to commend those students who have performed research projects under the guidance of our wonderful faculty mentors. They have participated in the highest levels of scholarship as together we strive to achieve academic excellence.

John Smarrelli Jr., Ph.D.

Provost and Vice President for Academic Affairs

## A WORD FROM THE DEAN OF ARTS AND SCIENCES

The literature on undergraduate research programs reveals a wide variety of benefits, including greater student interest in the field, a greater understanding of how problems are defined and approached (i.e., how to think like a scientist or psychologist or historian), greater student confidence in the ability to conduct research and a greater involvement in the learning process through active rather than passive learning.

Undergraduate students who engage in research report an increased awareness of how smaller pieces of knowledge contribute to a greater understanding of their disciplines, gains in problem solving and critical thinking skills and the ability to apply theoretical knowledge to real problems.

Today's showcase of undergraduate research and scholarly work at Le Moyne College underlines the achievements of our students, the dedication of their faculty mentors and the College's commitment to academic excellence! Thanks for joining us in this celebration of scholarship!

> Dr. Linda LeMura Dean of Arts and Sciences

## ABOUT LE MOYNE SCHOLARS DAY

Telcome to Le Moyne College Scholars Day 2007, a tradition which originated with the First Annual Undergraduate Research Symposium in 1998. Scholars Day celebrates the creative and scholarly accomplishments of students across all disciplines. We are so excited to have you share the work of these faculty-mentored student scholars! The importance of undergraduate research at Le Moyne is obvious when you see the outcomes for our students, including having their work published in scholarly journals, presenting the work both on campus and at professional meetings, producing art exhibitions and theatrical work and the enhanced post-graduate opportunities that are available to participating students. Join us in congratulating them as you spend the day with us!

> Dr. Brenda J. Kirby, Chair The Student Research Committee

## SCHEDULE OF EVENTS

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	Curtin Special Events Roo
00:00	Continental breakfast
9:15	Welcoming remarks
9:30	Blurred Vision: An Exploration into J.R.R. Tolkien's Religious Boundary-Blending in The Lord of the Rings Kerry Delduchetto, Religious Studies
9:45	It's Story Time: An Examination of College Students' Child-Directed Reading Techniques Michelle Perron, Psychology
0:00	The Effects of Campus Bars on Alcohol-Related Behaviors of College Students  James Brenchley, Psychology
0:15	Transracial Adoption and Identity Formation: An Exploration of White Parents Adopting Asian Children From Abroad Alysha Flynn, Sociology
0:30	Break
0:45	Integration of Alternative and Conventional Medicine for Diabetes Treatment Michelle Grasek, Biology
1:00	Decoherence and the Uncertainty Principle Adam Lemke, Physics
1:15	THE EFFECTS OF ANIMAL-ASSISTED THERAPY ON THE COMMUNICATION OF INDIVIDUALS WITH DISABILITIES: AN EXPLORATORY STUDY OF EQUINE-ASSISTED AND DOLPHIN-ASSISTED THERAPY Emily O'Hara, Psychology

- 11:30 Health Insurance as a Barrier To Providing Care Megan Oberle, Biology
- 11:45 The Theatrical Space as a forum for Social Justice: A close examination on the effectiveness of theatrical communication as a vehicle for social reform.

  Rozlynn Jakes-Johnson, English Literature
- 12:00 Announcement of art competition winners

#### 11:30 - 12:30 Poster Session

In the Blink of an Eye: Individual Difference Factors in Emotion-Induced Blindness

Deborah J DiSanto, Psychology

SHOX EXPRESSION IN EMBRYONIC CHICK LIMBS

Kevin Kent, Biology

Identification of Genes in Chlamydomonas reihnardtti Insertional mutants by Restriction Enzyme Site-Directed Amplification PCR Arsida Nocka, Biology

I'M Hungry: College Attitudes and Behaviors Toward Eating, Cooking and Shopping Stacey Parks, Psychology

CONTEXTUAL ASSESSMENT OF ODORANTS

Naomi Streeter, Psychology

I Second That Emotion: Encoder Race and Media Format Affect Emotion Perception Jennifer L. Welch, Psychology

Phonons in Yukawa Lattices

Patrick J. O'Brien, Physics

POLLUTANTS IN ONONDAGA LAKE: ALTERATIONS OF MAMMALIAN BONE METABOLISM AND NERVOUS SYSTEM FUNCTION Shanah Mastro, Biochemistry

An Investigation of DHEA Analogs with Indium Coupled Reactions Jacqueline A.F. Lull, Chemistry Jennifer Dabrowski, Chemistry

Study of the Growth and Recovery of the Santa Elena Cloud Forest Reserve in Costa Rica through Analysis of Soils Jessica Curty, Biology

SOIL DEVELOPMENT AND FLORAL COLONIZATION ON RECENTLY EXPOSED LAND SURFACES IN SOUTHERN ICELAND

Jessica Curry, Biology

Annie Walker, Biology

#### 12:30 - 1:30 LUNCH

#### 1:30 - 2:30 Women and Politics Panel

Women's False Consciousness of Choice: An Exploration of Women's Reproductive Freedom as Applied to The Handmaid's Tale Alysha Flynn, Sociology

THE CAPITALISTIC RESTRAINTS ON THE THIRD-WAVE FEMINIST MOVEMENT: DO WOMEN REALLY WANT TO BE INSIDERS?

Brenton Howard, Political Science

Social Hostess or Social Advocate? First Ladies in the 21st Century

Carrie Maxian, Political Science

OPENING THE DOOR OF POLITICALLY ACTIVE WORK: THE MOVE AWAY FROM TRADITIONAL FORMS

Nadia Johnson, Political Science

- 2:30 THE LE MOYNE COLLEGE RECREATION CENTER: MEETING THE NEEDS AND WANTS OF THE STUDENTS
  Ashley Bartle, Business Administration
- 2:45 CROSS BRAND SELLING
  Meghan Carrick, Business Administration
- 3:00 STUDY OF COMPARATIVE ADVERTISING Thomas Elleman (Tommy), Business Administration
- 3:15 Influence of the Baby Boom Generation on Real Estate Laura M. Flynn, Business Administration/Marketing
- 3:30 Break
- 3:45 Market Potential for Holores Inc. Daniel McCarthy, Marketing
- 4:00 Onondaga Free Library Marketing Research Project Chantal Sparkes, Business Administration
- 4:15 THE SHIRE: FOOD AND DRINK FOR COLLEGE STUDENTS Nicholas Urda, Business Administration
- 4:30 News Consumption Among College Students in the Digital Age: Will Print Newspapers Soon Be Abandoned in Favor of Blogs, Podcasts and Web sites?

  Melissa Wright, Business Administration
- 4:45 The Family Series Based out of the Syracuse Symphony Orchestra Danielle Rappa, Business Marketing

# THE LE MOYNE COLLEGE RECREATION CENTER: MEETING THE NEEDS AND WANTS OF THE STUDENTS

Ashley Bartle, Business Administration with a concentration in Marketing

Faculty Mentor: Dr. David Moore
Department of Business Administration

#### **A**BSTRACT

I am conducting a marketing research project that will help to identify the ways in which the faculty at the recreation center can better meet the needs and wants of the student body. I will be surveying athletes as well as nonathletes, and those who use the recreation



center as well as those who do not use it. Topics to be covered include the weight room, pool, intramural sports program and whether there is any interest in fitness classes being offered. The goal of this project is to provide valuable information that will help to attract more students to the recreation center as well as help to increase participation in the intramural sports program.

Ashley Bartle is a senior Business Administration major with a concentration in Marketing. Due to her love of travel, upon graduation she plans to pursue a marketing career in the airline industry. She is grateful for the valuable experience that this marketing project has given her. It will help her to achieve her goals for her future in the marketing field.

# THE EFFECTS OF CAMPUS BARS ON ALCOHOL-RELATED BEHAVIORS OF COLLEGE STUDENTS

James Brenchley, Psychology

Faculty Mentor: Dr. William Holmes Department of Psychology

#### **ABSTRACT**

The impact of campus bars on alcohol-related behaviors of Le Moyne College students was studied. Alumni and students rated the likelihood that they would engage in each of eight alcohol-related experiences on Friday nights during which college sponsored



on-campus bars were available, and on Friday nights during which college sponsored on-campus bars were not available. The number of alcohol-related sanctions issued by the College on each of those weekends was also analyzed. The data suggest that campus bars do not generally enhance the incidence of college students' negative behaviors associated with alcohol use, and may in fact reduce it.

James Brenchley is a senior Psychology major. Next year he will be pursuing a doctorate in School Psychology. He would like to thank the many departments and individuals in the Le Moyne Community his study has relied on, but James would like to especially thank his brilliant mentor, Dr. William Holmes.

### CROSS BRAND SELLING

Meghan Carrick, Business Administration with a concentration in Marketing

Faculty Mentor: Dr. David Moore Department of Business Administration

#### **A**BSTRACT

Secondary data analysis on the subject of cross-brand selling resulted in a set of questions. These questions were administered to sales representatives at a Syracuse company in an effort to determine what could be done to encourage better utilization of cross-brand selling techniques within the firm.



Meghan Carrick is a senior, with a major in Business Administration and a concentration in Marketing. Upon graduation she plans on moving to Boston, Mass., to start a career in the field of marketing. After a few years she plans on going back to school to earn her master's degree in Business Administration.

# STUDY OF THE GROWTH AND RECOVERY OF THE SANTA ELENA CLOUD FOREST RESERVE IN COSTA RICA THROUGH ANALYSIS OF SOILS

Jessica Curry, Biology

Faculty Mentor: Dr. Lawrence Tanner Department of Biology

#### **A**BSTRACT

The Santa Elena Cloud Forest is a private reserve located in the highlands of western Costa Rica. It is characterized by high humidity and precipitation derived from clouds forming above and within the forest itself. Currently the cloud forest is encompassed with a reserve and is protected land; previously, however, much of the cloud forest was cut down to create grazing and farming land. In 1977 part of the cleared land was set aside and protected to allow reforestation without significant anthropogenic disturbance. Soil samples from the original primary forest, this younger secondary forest and the adjacent ranch land are being analyzed to compare the rate of forest soil recovery. This work may also create a basis for future research documenting how global warming might affect this delicate system.

# SOIL DEVELOPMENT AND FLORAL COLONIZATION ON RECENTLY EXPOSED LAND SURFACES IN SOUTHERN ICELAND

Jessica Curry, Biology Annie Walker, Biology

Faculty Mentor: Dr. Lawrence Tanner Department of Biology

#### **ABSTRACT**

In the last century, recession of outlet glaciers of the Vatnajökull ice sheet has exposed glacial ground moraine and outwash deposits to pedogenesis and floral colonization. In Skaftafell National Park, the Skaftafellsjökull has retreated over 1,000 meters in the last 75 years. leaving a broad proglacial plain interupted by recessional morainal ridges. Formation of very young soils on the glacially derived volcanic sediments (andic cryofluvents) comprises the accumulation of organic carbon in the uppermost soil layer and minor root turbation. Organic carbon content in this layer, as measured by Truspec analysis, ranges from a high of ~3 percent on older (60+ years), more heavily vegetated surfaces, to less than 0.5 percent on outwash surfaces less than 20 years old. The oldest land surfaces (more than 100 years) are almost completely vegetated, with mats of mosses up to 17 cm thick and birches averaging over one meter in height. Surfaces less than 65 years old are at most 75 percent vegetated, with moss thickness averaging ~6 cm. Surfaces that are 25 years old or less are at most 30 percent covered, with wooly willow dominating the shrub layer. The floral cover on the youngest surfaces is 5 percent or less, with moss and shrubs mainly on sheltered slopes. The nearby Svinafellsjökull has a history of recession interrupted in the late twentieth century by episodes of surging, and consequently, a more complex periglacial topography. No clear correlation exists between land surface age and soil carbon content for this glacier, possibly in part due to the effects of continued livestock grazing in this area.

# Blurred Vision: An Exploration into J.R.R. Tolkien's Religious Boundary-Blending in The Lord of the Rings

Kerry Delduchetto, Religious Studies

Faculty Mentor: Dr. Darryl Caterine Department of Religious Studies

#### **ABSTRACT**

The Lord of the Rings film trilogy, based on the novels by J.R.R. Tolkien, evoked strong criticism from American fundamentalist Protestants who disagreed with the "Christian film" label. They asked how the films could be called "Christian" when pagan ele-



ments (i.e., wizards and magic) were integral to the plot. Fundamentalist Protestants, being biblical literalists, want to set clear boundaries in Christianity – the more rigid the boundaries, the more social control they can wield. Creators and fans of *The Lord of the Rings*, on the other hand, revel in the blending of boundaries that are seen as pathways to experiences of transformation and transcendence. This paper deals with both boundary maintenance and boundary transgression.

Kerry Delduchetto is a senior Religious Studies major with minors in Elementary Education and Film. Upon graduation she'll be substitute teaching while deciding in what area to get a master's degree. She would like to thank the entire religion department as well as Dr. Julie Grossman for their constant encouragement. Lastly, she considers herself extremely fortunate to have had Dr. Darryl Caterine as her dedicated and exceptional mentor.

# In the Blink of an Eye: Individual Difference Factors in Emotion-Induced Blindness

Deborah J. DiSanto, Psychology

Faculty Mentor: Dr. Brenda Kirby Department of Psychology

#### ABSTRACT

Emotion-induced blindness (EIB) is a reduction in target identification accuracy after exposure to emotional distractors. We examined the role of personality characteristics in EIB in response to disturbing or erotic distractors. Neuroticism was negatively correlated with accuracy after disturbing distractors and extroversion was negatively correlated with accuracy after erotic distractors.

Deborah DiSanto is a senior Psychology major. Upon graduation she plans on beginning a career working with troubled families and kids. She plans on pursuing her master's degree in social work at Syracuse University in the fall of 2008.

### STUDY OF COMPARATIVE ADVERTISING

Thomas Elleman (Tommy), Business Administration

Faculty Mentor: Dr. David Moore Department of Business Administration

#### **A**BSTRACT

A look into comparative advertising – exploring and defining what actually constitutes comparative advertising; what types of companies/industries use comparative advertising; and the objectives and motivations that go into a comparative advertising campaign. The



study will also attempt to gauge the effectiveness of comparative advertising as a marketing tool, highlighting specific campaigns. There will also be comparative analysis of several comparative advertising campaigns, offering first-hand insight on the subject.

Tommy Elleman is a senior Business major concentrating in Marketing with a Philosophy minor. After graduation, he will continue his career as a local business owner and a realtor with Cordelle Realty in Syracuse.

## Transracial Adoption and Identity Formation: An Exploration of White Parents Adopting Asian Children From Abroad

Alvsha Flynn, Sociology

Faculty Mentor: Dr. Farha Ternikar Department of Sociology

#### **ABSTRACT**

This paper is a theoretical study on transracial adoptees and their identity development. It will explore how transracial adoptees negotiate their conflicting ethnic, racial and cultural identities. It will investigate theories from social psychology on the self and identity to explore transracial adoptees' identities. This paper will build on qualitative studies on adoption from 1990 to 2006.

Alysha Flynn is a senior, majoring in Sociology with a double minor in Anthropology and Gender and Women's Studies. Upon graduation, she plans on working part time while taking a graduate course and applying to graduate programs in sociology.

## INFLUENCE OF THE BABY BOOM GENERATION ON REAL ESTATE

Laura M. Flynn, Business Administration/Marketing

Faculty Mentor: Dr. David Moore
Department of Business Administration

#### ABSTRACT

The project focuses on the impact of the very influential baby boom generation and how their approaching retirement is dictating where new home builders are gearing their advertising and floor plans, and how the existing market is being impacted by a desire for a different lifestyle.



Laura Flynn plans on continuing working as a sales and marketing representative for Ryan Homes, where she has been working for the past two years. She has high hopes to eventually move into management. She will be remaining in Syracuse, N.Y.

# Integration of Alternative and Conventional Medicine for Diabetes Treatment

Michelle Grasek, Biology

Faculty Mentor: Dr. Beth Pritts

Department of Biology

#### **A**BSTRACT

Complementary and alternative medicine (CAM) is becoming increasingly popular in the U.S. However, there is a lack of scientifically-based research on the efficacy of many CAM therapies. This generates a lack of trust in the safety and efficacy of CAM amongst many physicians and consumers. However, many types of CAM have been shown in research to produce physiological changes in test organisms. I have carried out three studies on the efficacy of bee pollen to treat diabetic rats, each of which have been funded by the Student Research Fund. The second part of my thesis, which was also funded by the Student Research Fund, is a survey on the receptiveness of allopathic physicians toward the use of CAM for the treatment of diabetes and its side effects. Physicians are in an important position to direct the sentiment of the general public toward or against CAM, because of their interaction with patients and the trust patients have in them. The survey sought to uncover by which methods, if any, physicians would like to learn more about CAM. The integration of CAM and conventional medicine for the treatment of diabetes is critical in order to provide patients with all available medical resources. However, increased CAM research carried out in a scientific manner is required in order to increase trust in CAM.

Michelle Grasek has applied to the New York Chiropractic College's Acupuncture and Herbal Medicine Program in Seneca Falls, N.Y. and hopes to hear back from them soon. If she's accepted, she will live in Romulus, N.Y. and attend New York Chiropractic College for the next three years while earning her master's degree in acupuncture.

# THE THEATRICAL SPACE AS A FORUM FOR SOCIAL JUSTICE: A CLOSE EXAMINATION ON THE EFFECTIVENESS OF THEATRICAL COMMUNICATION AS A VEHICLE FOR SOCIAL REFORM

Rozlynn Jakes-Johnson, English Literature

Mentor: Professor Anjalee Deshpande Nadkarni Performing Arts

#### ABSTRACT

"We don't want to romanticize the stories of these three women." These words were spoken by one of the founding co-collaborators of The Anarcha Project, a collaborative social justice performance piece that uses the medium of theatre to present scholarly research on marginalized communities. My participation in the project and point of inquiry in this presentation is to examine the effectiveness of performance in bridging the gap between social activism and action. How can the silenced voices of the oppressed be re-presented to a modern audience/ reader without further objectification when all that is available to the said receiver is the voice of the oppressor?

Rozlynn Jakes-Johnson is a positive skeptic whose post graduation plans remain tentative at the present time. She would like to thank Professor Anjalee Deshpande for this opportunity and encouragements.

### SHOX EXPRESSION IN EMBRYONIC CHICK LIMBS

Kevin Kent, Biology

Faculty Mentor: Dr. Theresa Beaty Department of Chemistry and Physics

#### **A**BSTRACT

Shox is expressed during early limb development and skeletogenesis of chick embryos. It exhibits highly specific expression patterns, which suggests it partakes in several distinct roles in limb development. It is expressed centrally in early limb buds and the proximal two thirds of later limbs. Gene expression is regulated by antagonistic signaling between retinoic acid in the promixal region of the limb and fibroblast growth factors at the distal portion of the limb know as the apical ridge. Interruptions in either of these signaling mechanisms can lead to failure of the extension of the limb. However, retinoic acid has been shown to regulate cellular differentiation and cell proliferation, both of which are functions of the shox gene. An embryonic chick limb model system was used. Baseline expression level of the shox gene was measured with primary culture cells from embryonic chick forelimbs. Retinoic acid was added to some cultures for varying time periods and at different concentrations. The effect of this treatment on shox gene expression was studied.

## DECOHERENCE AND THE UNCERTAINTY PRINCIPLE

Adam Lemke, Physics

Faculty Mentor: Dr. David Craig Department of Chemistry and Physics

#### **A**BSTRACT

We investigate the relation between decoherence and the uncertainty principle, both analytically and numerically, in some simple models of quantum measurement. In consistent histories, formulations of quantum theory probabilities may be consistently assigned only in sets of histories which decohere, i.e., in sets in which the interference among the various branches vanishes. Measurements may thus in part be construed as local processes which serve to destroy interference. We study numerically the extent to which the uncertainty principle may be interpreted as the failure of measurements of noncommuting observables to lead to decohering branches for some simple quantum measurement models.

# AN INVESTIGATION OF DHEA ANALOGS WITH INDIUM COUPLED REACTIONS

Jacqueline A.F. Lull, Chemistry Jennifer Dabrowski, Chemistry

Faculty Mentor: Dr. Joseph Mullins Department of Chemistry and Physics

#### **ABSTRACT**

The goal for this research was to develop analogues of DHEA (Dehydroepiandrostenedione) through indium coupled reactions. DHEA is steroid hormone produced from cholesterol in the adrenal cortex. It is a primary precursor of natural estrogens, and is the most abundant steroid in human blood stream. The aim of the project was to develop different analogues of DHEA which will still



retain its beneficial effects such as decreasing body fat without altering food intake, enhancing the immune system, suppressing spontaneous and carcinogen induced tumors, decreasing blood glucose levels and enhancing memory.

There were several key components to this research project. The first component of the research was investigating the reactivity of indium. The second component of the research was contributing to the growing trend in chemistry toward green chemistry. The final component of the research which was mentioned above was to perform coupling reactions with indium and DHEA.

Jacqueline Lull is a senior Chemistry major at Le Moyne College and currently works for Albany Molecular Research Inc. She will be attending Cornell University in the fall to pursue a master's degree in teaching. She plans to teach high school chemistry after graduating.

Jennifer A. Dabrowski is a senior Chemistry major and Math minor. She plans to attend graduate school in the fall to study organic synthesis in pursuit of her doctorate. She'd like to thank Le Moyne College for the many opportunities that have made this possible.

# POLLUTANTS IN ONONDAGA LAKE: ALTERATIONS OF MAMMALIAN BONE METABOLISM AND NERVOUS SYSTEMFUNCTION

Shanah Mastro, Biochemistry

Faculty Mentor: Dr. Beth Pritts Department of Biology

#### ABSTRACT

Onondaga Lake has a long history of industrial pollution. Despite numerous reports in the literature of adverse effects in aquatic organisms, no such information exists about mammals. Phosphorus plays an important role in mammalian nervous system function and bone metabolism. Elevated levels of



phosphorus can lead to decreased bone mass. Therefore, the purpose of the present study was to determine, in adult male and female rats, the effects of consumption of Onondaga Lake water on nervous system function using the Morris water maze and bone metabolism by determining levels of calcitonin, parathyroid hormone and/or osteocalcin with radioimmunoassay.

Shanah Mastro is a senior Biochemistry major with a minor in Psychology. Her research is being submitted for departmental honors in biological sciences. After graduation, Shanah plans to work as a laboratory technician and attend graduate school.

## MARKET POTENTIAL FOR HOLORES INC.

Daniel McCarthy, Marketing

Faculty Mentor: Dr. David Moore
Department of Business Administration

#### **ABSTRACT**

Discuss the market potential for Holores' patent pending products within the aerospace industry.

# IDENTIFICATION OF GENES IN CHLAMYDOMONAS REIHNARDTTI INSERTIONAL MUTANTS BY RESTRICTION ENZYME SITE-DIRECTED AMPLIFICATION PCR

Arsida Nocka, Biology

Faculty Mentor: Dr. Beth Mitchell Department of Biology

#### ABSTRACT

Most eukaryotic cells have hair-like extensions of the cytoskeleton known as cilia or flagella which function in cell motility or for moving fluids over the cell's surface. Research has shown that these appendages are composed of about 250 different and well-conserved polypeptides. Most flagella are composed of the highly ordered 9 + 2 arrangement of the microtubules. Mutations in the central pair appartatus have been associated with a disruption in flagellar motility. Many components of the central pair apparatus have been identified by using insertional mutants. Four *Chlamydomonas reinhardtii* insertional mutants were analyzed by Restriction Enzyme Site-Directed Amplification PCR, RESDA-PCR. This method was used to amplify regions of the flanking DNA. PCR products obtained were of a good quality that allowed direct sequencing. Amplified DNA sequences were obtained from only two mutants, H2 and 2G6, while no products were obtained from the other two mutant stains, 2H7 and 35G4.

Next year, Arsida Nocka will be attending graduate school in the cell and molecular biology field.

# HEALTH INSURANCE AS A BARRIER TO PROVIDING CARE

Megan Oberle, Biology

Faculty Mentor: Dr. Beth Pritts Department of Biology, Integral Honors

#### **ABSTRACT**

Studies have concluded that uninsured patients have poorer health and do not receive necessary health care. In addition, research indicates that some insurance patients receive limited coverage and have difficulty obtaining necessary health care, particularly preventative treatment. I examined the delivery of health care from the physicians' perspectives in terms of health insurance status and the possible interference with physician decision making. By using survey research methods, I surveyed 100 private family practice physicians in Syracuse, N.Y. From my literature review and quantitative and qualitative responses of my survey research, I determined ways in which health insurance status and policies interfere with physicians' care of their patients.

<sup>1</sup>Ayanian, John Z., MD, et. al. Unmet Health Needs of Uninsured Adults in the United States. *Journal of the American Medical Association* Vol. 284 No. 16, 2061-2069.

<sup>2</sup>Bodenherimer, Thomas S. and Kevin Grumbach. *Understanding Health Policy: A Clinical Approach* 4th Edition. (New York: Lange Medical Books, 2002.)

## PHONONS IN YUKAWA LATTICES

Patrick J. O'Brien, Physics

Faculty Mentor: Dr. Stamatios Kyrkos Department of Chemistry and Physics

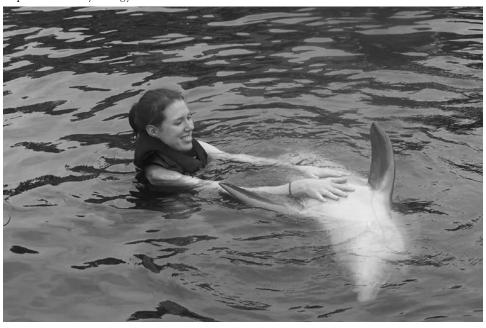
#### **ABSTRACT**

Yukawa systems are good representations of structures forming in dusty plasma and colloidal experiments. The theoretical work that has been done involves the understanding of the theoretical structure of phonon dispersion in Yukawa lattices. After calculating the phonon spectrum for 2D hexagonal Yukawa lattices, we have aimed to numerically calculate the phonon spectrum for a 3D Yukawa lattice.

# THE EFFECTS OF ANIMAL-ASSISTED THERAPY ON THE COMMUNICATION OF INDIVIDUALS WITH DISABILITIES: AN EXPLORATORY STUDY OF EQUINE-ASSISTED AND DOLPHIN-ASSISTED THERAPY

Emily O'Hara, Psychology

Faculty Mentor: Dr. Krystine Batcho Department of Psychology



#### **ABSTRACT**

Animal-assisted therapy has been a recent area of research that has interested many professionals involved in therapy of individuals with disabilities. This project examined the effects of animal-assisted therapy on the communication of individuals attending therapy sessions in equine- and dolphin-assisted therapy settings. The researcher unobtrusively recorded body language, nonverbal and speech communication of participants interacting with the horse or dolphin and the therapist. In addition to communication, this study researched concerns with animal-assisted therapy, including the relative risks involving the use of a large animal for therapy, the expenses of dolphin-assisted therapy and the decisions to use equine- and dolphin-assisted therapy over canine-assisted therapy.

Emily O'Hara is a senior Psychology major looking to pursue a career in clinical psychology. She completed this project through Le Moyne's integral honors program with the wonderful guidance of her mentor, Dr. Krystine Batcho. Emily would like to thank her family for its tremendous support throughout this ambitious study.

# I'M HUNGRY: COLLEGE ATTITUDES AND BEHAVIORS TOWARD EATING, COOKING AND SHOPPING

Stacey Parks, Psychology

Faculty Mentor: Dr. Brenda Kirby Department of Psychology

#### **ABSTRACT**

A study was conducted to examine reported student behaviors related to eating and cooking, and to determine the motivations of a college student to go grocery shopping as well as perceptions of their motivations in choosing food items. A survey was completed by students of all years and majors at Le Moyne College. Research on motivations about food choice has identified that adults are most motivated by cost, while adolescents are most motivated by preference/taste. Canadian college students were most motivated by convenience. This research targeted U.S. college students and found, among other things, that they were equally motivated by cost and preference/taste.

Stacey Parks is a senior and will graduate with a bachelor's degree in Psychology. She plans to attend Le Moyne College to obtain dual certification in early and special education as well as a master's degree. Stacey has enjoyed the past three semesters that she has been involved in her research project and she has benefited from her collaboration with research advisor, Dr. Brenda Kirby.

# It's Story Time: An Examination of College Students' Child-Directed Reading Techniques

Michelle Perron, Psychology

Faculty Mentor: Dr. Monica R. Sylvia Department of Psychology

#### **ABSTRACT**

This study examined the child-directed reading techniques of new and returning Jumpstart mentors at Le Moyne College. Returning mentors used more prompts than new mentors; the majority of the comments involved referentials and procedurals. These results pro-



vide information for training students who participate in programs centered on the development of early-literacy skills.

Michelle F. Perron is a Psychology major. She plans to continue her education in a graduate program focusing on applied behavioral analysis and behavior modification.

# THE FAMILY SERIES – BASED OUT OF THE SYRACUSE SYMPHONY ORCHESTRA

Danielle Rappa, Business Marketing

Faculty Mentor: Dr. David Moore Department of Business/Administration

#### **ABSTRACT**

The research project that I am conducting will be based on the Syracuse Symphony Orchestra. I am gong to focus solely on its family series. The family series enables kids to enjoy music while with their families. It is a fun, educational and interactive musical



experience designed for children and their families. Children are introduced to the world of music through the symphony orchestra and create memories that will last a lifetime. I am going to evaluate certain aspects of the family series:

- 1. Their petting zoo: the instrument petting zoo is where the children have the option to come early and enjoy the ever popular instrument petting zoo. The kids can get fun, handson experience with the instruments of the orchestra here. This is located in the lobby of the Civic Center and lasts for only 45 minutes.
- 2. In relation to the family series, I want to focus on the product itself and be able to distinguish whether the day and age group are working for the families.

## Onondaga Free Library Marketing Research Project

Chantal Sparkes, Business Administration

Faculty Mentor: Dr. David Moore Department of Business Administration

#### **A**BSTRACT

For the honors project requirement, I will be executing a marketing research project for Onondaga Free Library (OFL), one of the member libraries of the Onondaga County Public Library (OCPL) system. The library is located in the Onondaga Hill area of Syracuse, N.Y.



The library will soon be expanding its physical size as well as its collection. There are many aspects of OFL that I will be examining and getting feedback from patrons about through a self-administered survey that will take place at the library. The results of the survey will help me make suggestions to the director of OFL, and as a result will help the director make educated decisions about how to better satisfy the patrons' wants and needs with the newly expanded library. Overall, what I want to help OFL accomplish in performing this marketing research is, as Betty Pratt Price puts it, "the three R's of libraries ... retain the patrons they have, recruit new patrons and regain lost patrons." <sup>1</sup>

<sup>1</sup>Booth, Jennifer. "The Library's Image: Does Your Library Have YOU Appeal?" Library Management. Bradford: 1993. Vol. 14, Iss. 2; pg. 11, 4 pgs.

Chantal Sparkes is a senior Business Administration major with a double concentration of Marketing and Applied Management Analysis. She is also currently working toward obtaining her Web technology certificate at Onondaga Community College. Upon obtaining both her degree from Le Moyne and certificate from OCC, she plans to obtain a job in marketing and/or Web design in the Syracuse area. After a few years, she plans on going back to school to receive her master's degree in Business Administration.

### CONTEXTUAL ASSESSMENT OF ODORANTS

Naomi Streeter, Psychology

Faculty Mentor: Dr. Theresa White Department of Psychology

#### **A**BSTRACT

Humans do not have strong abilities in the area of short-term odor memory. If other information is given that relates to the smells, then there is the possibility that odor memory may be enhanced. We investigated the influence of complex scenes and words on short-term memory for odors via congruent and incongruent exemplars that accompanied target odors. This was done to study the encoding of words, pictures and smells, and to look for possibilities of olfactory memory enhancement using these stimuli.

Naomi Streeter is a senior Psychology major. Next fall she plans on attending graduate school, pursuing her doctoral degree in Cognitive Neuroscience/Experimental Psychology.

### THE SHIRE: FOOD AND DRINK FOR COLLEGE STUDENTS

Nicholas Urda, Business Administration

Faculty Mentor: Dr. David Moore Department of Business Administration

#### ABSTRACT

Through market research, I am exploring what would please senior and junior students at the establishment in the future. I am working with the owner and finding out specific information. It was a pleasure doing this, especially when one considers how much the establishment has done for the Le Moyne tradition of Dolphy Day this year.



Nicholas Urda is a senior who is majoring in Business Administration with a concentration in Marketing and a minor in History. He is planning on finding a job in Syracuse, New York City or Miami. It was a pleasure working with Dr. Moore on this project, and thank you for all your help!

# I Second That Emotion: Encoder Race and Media Format Affect Emotion Perception

Jennifer L. Welch, Psychology

Faculty Mentor: Dr. Brenda J. Kirby Department of Psychology

#### **ABSTRACT**

Significance of situational context (movie clips or still frames), emotional expression (anger, happy, sad) and encoder race (African American, White, Latino, Asian) were examined to determine their effects on strength of perceived emotional expression. Context was minimally important, while encoder race resulted in varied perceptions of the different exhibited emotions.

Jennifer Welch will graduate in May 2007 with a bachelor's degree in Psychology and a minor in Industrial Relations and Human Resource Management. She will be exploring graduate programs in Industrial/Organizational Psychology while taking a year off from school.

# News Consumption Among College Students in the Digital Age: Will Print Newspapers Soon Be Abandoned in Favor of Blogs, Podcasts and Web sites?

Melissa Wright, Business Administration

Faculty Mentor: Dr. David Moore Department of Business Administration

#### **ABSTRACT**

As our society, and in particular the college generation, grows increasingly dependent on technology and the Internet for all aspects of our daily lives, it appears that traditional forms of media are in danger of extinction. This is especially true for print newspapers, as



readership and circulation have been declining for years, and new threats in the form of news Web sites and weblogs have emerged. Are the media's claims of the certain death of newspapers merited, or merely an over-exaggeration? How do the news consumption habits of the Le Moyne student body weigh against the rest of the nation, and what are the implications of these habits on the state of local news?

Melissa Wright is a senior Business Administration major with a concentration in Marketing and an MIS minor. Upon graduation she plans to relocate to New York City to enter into a marketing research career. She hopes to eventually pursue her master's degree in this field.

# STUDENT PANEL ON "WOMEN AND POLITICS"

Faculty Mentor: Dr. Susan Behuniak Department of Political Science

#### **ABSTRACT**

These papers were written as part of the Women and Politics course (PSC 312/GWS 312/HST 344) offered during the fall of 2006. The papers are connected by the theme of questioning "politics as usual." To do this, the authors examined how the meanings of political concepts and terms change when the focus is shifted from men to women.



**Alysha J. Flynn:** Women's False Consciousness of Choice: An Exploration of Women's Reproductive Freedom as Applied to *The Handmaid*'s *Tale* 

Alysha Flynn is a senior, majoring in Sociology with a double minor in Anthropology and Gender and Women's Studies. Upon graduation, she plans on working part time while taking a graduate course and applying to graduate programs in Sociology.



**Brenton R. Howard:** The Capitalistic Restraints on the Third-Wave Feminist Movement: Do Women Really Want to Be Insiders?

Brenton Howard is a Political Science major and member of the class of 2008. He is also pursuing a dual certification in Adolescent and Special Education. He is from Oxford, N.Y. He plans to attend graduate school to finish the requirements for teacher certification and hopefully find a job.

**Carrie Maxian:** Social Hostess or Social Advocate? First Ladies in the 21st Century

Carrie Maxian is a Political Science major, with a Gender and Women's Studies minor. She is a member of the class of 2007 and is planning to enter the world of nonprofit organizations after she graduates.



**Nadia Johnson:** Opening the Door of Politically Active Work: The Move Away From Traditional Forms

Nadia Johnson is a Political Science major with a Gender and Women's Studies minor. She is a member of the class of 2007 and is from Norwich, N.Y. Nadia plans to attend graduate school in the near future, with plans of pursuing a career in Public Relations. Nadia has presented this paper at the 2007 Eastern Sociology Conference this past March in Philadelphia.

