MISSION STATEMENT

Le Moyne College is a diverse learning community that strives for academic excellence in the Catholic and Jesuit tradition through its comprehensive programs rooted in the liberal arts and sciences. Its emphasis is on education of the whole person and on the search for meaning and value as integral parts of the intellectual life. Le Moyne College seeks to prepare its members for leadership and service in their personal and professional lives to promote a more just society.

LE MOYNE

Spirit. Inquiry. Leadership. Jesuit.

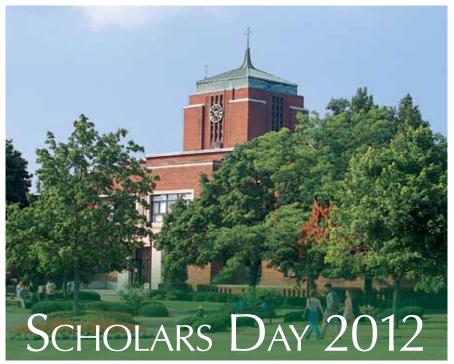
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Office of the Provost 1419 Salt Springs Road, Syracuse, NY 13214-1301 1-877-LEMOYNE (536-6963)









A Celebration of Student Scholarship and a Tribute to Earth Day

April 21, 2012 | 9 a.m. – 4:30 p.m.

James Commons and Curtin Special Events Room, Campus Center





April 21, 2012 | 9 a.m. - 4:30 p.m.

JAMES COMMONS AND CURTIN SPECIAL EVENTS ROOM, CAMPUS CENTER

Our featured speaker is Andrea Masselli '07, who will discuss the research she completed during her time at Le Moyne and its connection to her current work as a litigation attorney in Washington, D.C.

In celebration of Earth Day, we will close the program with a screening of the film *Sun Come Up*, introduced by Professor Mary MacDonald, Ph.D.

A Word from the President

Welcome to Scholars Day!

Thank you for joining us at Scholars Day 2012, one of Le Moyne's most significant annual celebrations. This day represents our highest aspirations and values as an academic institution. Today we stand in awe as those values are expressed by these impressive young scholars. Each one of them has honed a unique perspective on his or her academic discipline through careful thought and hard work. The long, challenging process of research and scholarship culminates now. It translates into shining success – a success in which our entire community takes great pride.

Our faculty have done their work; these students have learned very well. Today, others will learn from them. Our scholars have begun to understand what it means to pursue truth and to create new knowledge.

We know that the curiosity, drive and persistence of these scholars will serve them well in the future. Indeed, these qualities will serve all of society well. To the students, their families and their professors: Congratulations on your collective achievement. Thank you for inspiring us to continue striving for excellence in our own work here at Le Moyne College.

Fred P. Pestello, Ph.D. President

A Word from the Provost

The literature on undergraduate research reveals a wide variety of benefits, including greater student interest in the field, 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 greater involvement in the learning process through active rather than passive learning.

Undergraduate students who engage in research report an increased awareness of how small 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.

Linda M. LeMura, Ph.D. Provost and Vice President for Academic Affairs

A Word from the Dean of the School of Business

The success of any educational institution can be measured by the lifelong intellectual partnership forged between faculty and students. This commitment usually begins early in the student's academic career and, if properly nurtured over time, can result in the remarkable level of success achieved by Le Moyne College students participating in this year's Scholars Day program. While faculty are committed to developing the next generation of leaders in a wide variety of disciplines, students are equally engaged in leading the way to understanding the most pressing issues of our time. The relationship between student and faculty member represents the Ignatian pedagogical paradigm of context-experience-reflection-action, in which students have experiences in context and, in guided reflection, discuss the lessons learned from their individual experiences and those of their peers and colleagues.

Wally J. Elmer, Ph.D. Dean of the School of Business

A Word from the Interim Dean of Arts and Sciences

The 2012 Student Scholars Day is testimony to your creativity, your talent, your perseverance and your work ethic. Scholars Day is also a tribute to your faculty mentors and your families, all of whom are responsible for your being here today. This event marks an important milestone as you take charge of your education and move from being a student of chemistry, a student of political science or a student of creative writing to being a chemist, a political scientist or a writer. We at Le Moyne are blessed to be among the one percent of the world's population afforded the opportunity of a first-class education; your participation in this day shows that you take seriously the responsibility that comes with that blessing. Congratulations to all of you.

J. Barron Boyd Jr., Ph.D. Interim Dean of Arts and Sciences

ABOUT LE MOYNE SCHOLARS DAY

Pelcome to the seventh annual Le Moyne College Scholars Day, a tradition that originated with the Undergraduate Research Symposium in 1998. Scholars Day 2012 celebrates the creative and scholarly accomplishments of students across all academic disciplines. We are excited that you are here to share in the work of these facultymentored student scholars.

The importance of undergraduate research at Le Moyne is seen in our students' achievements, including having their work published in scholarly journals, presenting it both on campus and at professional meetings, producing art exhibitions and theatrical work, and being accepted to a wide variety of post-graduate programs of study. Following in the tradition initiated two years ago, we are happy to welcome the return of a Le Moyne College graduate. Andrea Masselli '07 (sociology), will discuss the research she completed during her time at Le Moyne and its connection to her current work as a litigation attorney in Washington, D.C.

Jennifer Gurley, Ph.D. Chair of the Student Research Committee

SCHEDULE OF EVENTS

8:45 - 9:15 A.M. CONTINENTAL BREAKFAST

9:15 - 9:30 A.M. WELCOMING REMARKS

J.Barron Boyd Jr., Ph.D., interim dean of arts and sciences

9:30 A.M. - NOON MORNING PRESENTATION SESSIONS

Noon - 1 P.M. Lunch

12:20 - 1 P.M. GUEST SPEAKER

Andrea Masselli '07 Litigation Attorney

Arnold & Porter LLP, Washington, D.C.

1 – 3:30 P.M. AFTERNOON PRESENTATION SESSIONS

2:30 - 3:30 P.M. POSTER SESSIONS

3:30 - 4:30 P.M. EARTH DAY FILM: SUN COME UP

Introduced by Mary MacDonald, Ph.D., professor of religious studies

Closing Reception

(Beer and wine bar, hors d'oeuvres)

SCHEDULE OF SESSIONS

Morning Session

9:30 - 10 a.m.

"Dramatic Memoirs: Northern Amateur Theatres During Reconstruction"

Tyler Sperrazza

History and Theatre Arts

10 - 10:30 a.m.

"An Investigation into the Genetic Diversity of Chaetogaster Limnaei Limnaei in New York" Ionathan Hess

Biological Sciences with Minor in Psychology

10:30 - 11 a.m.

"The Other Creation: A Critical Analysis of the Popol Vuh and Genesis in Light of the Conquest"

Justin Sullivan

Philosophy and Visual and Performing Arts

11 - 11:30 a.m.

"Social Media Adoption in Extreme Emergency Events: Recommendations for an Integrated Disaster Management Framework"

Kathleen Calabro

Information Systems

11:30 a.m. - Noon

"Approaching the Infinite Through Aesthetic Experience"

Meg Giordano

Philosophy with Minors in History and English

Noon - 1 P.M. Lunch

12:20 – 1 P.M. Guest Speaker Andrea Masselli '07 (sociology)

Afternoon Session

1 - 1:30 p.m.

"Social Response to Disaster"

Patrick Flake

Information Systems and Marketing

1:30 - 2 p.m.

"From the Goddess to the Virgin of Guadalupe: An Examination of the Feminine Divine Evolution in Mexico"

Rose Murphy

English

2 - 2:30 p.m.

"Using Technology to Improve Customer Service in Retail Stores" Chelsea Maxwell

Marketing and Information Systems

2:30 - 3 p.m.

"Christian Women's Lives Influenced by a Muslim Dominated Society" Danna Sawalha Political Science and History with a Minor in Legal Studies

3 - 3:30 p.m.

"European Colonialism from a Perennialist Perspective" Alexander Shepard Religious Studies and Philosophy

2:30 - 3:30 P.M. POSTER SESSION

"The Human Animal Bond: Appreciating the Power of Animals to Change Lives" *Katherine Greene, Sociology*

"The Effects of Personality on Coping Strategies and Leisure Styles" Marissa Goyden, Psychology

"Hastening the Aging Process: Effects of Sucrose, Fructose, and High Fructose Corn Syrup on the Vitality of a Fibroblast Cell Culture"

Maureen McDonough, Biological Science (Pre-Health Concentration), with Minors in Chemistry and Psychology

"Odor Awareness Predicts the Importance of Odor in Mate Selection" Michelle Woodward, Psychology

"Synthetic Approach to Ferrocenyl Combretastatin A-4 Analogs" Samantha Vanacore, Chemistry

"Odor Descriptions are Influenced by both Grammatical and Natural Gender in Spanish Speakers" Amanda Wright, Psychology

"Pomegranate Supplements (Punica Granatum): Effects on Mammalian Hormones and Learning and Memory in Adult Female Rats" James Wanamaker, Biological Sciences

"Effect of Ultraviolet Light on the Accumulation of Reactive Oxygen Species in Fibroblasts" Deborah Hanchek, Biological Sciences

ABSTRACTS, FACULTY MENTORS, AND BIOGRAPHIES: STUDENT SCHOLARS RESEARCH AND POSTER PRESENTATIONS

9:30 - 10 a.m.

"Dramatic Memoirs: Northern Amateur Theatres During Reconstruction"

Tyler Sperrazza, History and Theatre Arts

Faculty Mentor: Douglas Egerton, Ph.D., history department

Abstract: This project explores the impact of amateur theater in the Northern states during the Reconstruction period following the American Civil War. It analyzes different amateur productions and seeks to unlock the pro-Republican propaganda contained within the plays. By using firsthand accounts of audience members, as well as election results, the study searches for a link between the plays and the number of votes cast for the Republican Party.



Bio: Tyler Sperrazza is a third-year history and theatre arts double major. He is a member of the Integral Honors Program and a Presidential Scholar. Tyler will be applying to graduate programs in the fall to continue his study of the American Civil War.

10 - 10:30 a.m.

"An Investigation into the Genetic Diversity of Chaetogaster Limnaei Limnaei in New York"

Jonathan Hess, Biological Sciences with Minor in Psychology

Faculty Mentor: Devon Keeney, Ph.D., biological sciences department

Abstract: The purposes of this investigation were to analyze the genetic structure of Chaetogaster limnaei limnaei, a freshwater oligochaete worm. Despite the prevalence of *C. l. limnaei* as a population, it has received limited investigation. This study utilizes the mitochondrial cytochrome oxidase I gene to compare the genetic diversity of this worm among geographic populations and host species.

Bio: Jonathan Hess extends a special thanks to Dr. Devon Keeney and the Le Moyne College biological sciences department for all the wonderful guidance.

10:30 - 11 a.m.

"THE OTHER CREATION': A CRITICAL ANALYSIS OF THE POPOL Vuh and Genesis in Light of the Conquest"

Justin Sullivan, Philosophy and Visual and Performing Arts

Faculty Mentors: Mario Sáenz, Ph.D., philosophy department and Matthew Chiorini, visual and performing arts department

Abstract: Using Enrique Dussel's concept of "the other" as a cornerstone, The Other Creation is a devised theatrical piece that dramatizes the Mayan creation story, the Popol Vuh, in juxtaposition with Genesis as an alternative way to comment on the Conquest of Guatemala.

Honors Program. Justin plans to attend Syracuse Univer-

sity next year to obtain his master's degree in higher education. He would like to thank the Student Research Committee, Dr. Elizabeth Hayes, Dr. Mario Sáenz and Mr. Matt Chiorini for all their help and support with this ambitious project.

Bio: Justin Sullivan is a theatre arts major in the Integral

11 - 11:30 a.m.

"SOCIAL MEDIA ADOPTION IN EXTREME EMERGENCY EVENTS: RECOMMENDATIONS FOR AN INTEGRATED DISASTER Management Framework"

Kathleen Calabro, Information Systems

Faculty Mentor: Martha Grabowski, Ph.D., information systems department

Abstract: Social media is being widely adopted as a vehicle for disseminating information and warnings during disasters and extreme events. Additionally, it is being harnessed in the response and relief efforts of emergency responders when dealing with imminent hazards and emergency management. It allows for new directional channels of communication to occur between individuals and agencies that were not possible with traditional forms of communica-



tion. However, due to inadequate security features and public availability, there is a heightened risk of exploitation that could result in even more destruction or risk of life. Inaccurate information and a lack of coordination among response organizations can reduce its effectiveness. Moreover, the absence of an integrated framework causes disparities and a lack of cohesion between the different components of disaster management. Although social media has been demonstrated to be beneficial in some historical cases where emergency management was

needed, weaknesses need to be addressed and information systems need to be improved before it can become heavily relied on as the mainstay of emergency management communications.

Bio: Kathleen Calabro is a senior pursuing her bachelor's degree in information systems. As a junior, she began studying for her master's degree in information management at Syracuse University.

11:30 a.m. - Noon

"Approaching the Infinite Through Aesthetic EXPERIENCE"

Meg Giordano, Philosophy with Minors in History and English

Faculty Mentors: Ludger Viefhues-Bailey, Ph.D., philosophy department, and Mario Sáenz, Ph.D., philosophy department

Abstract: What does it mean to experience something, either good or bad, that is significantly bigger than one's self, or even infinitely bigger than one's self? Spiritual experience might be defined as exploring the territory opened up by those questions. This project proposes that aesthetic experiences (that is, our experiences with art, or simply with what we encounter in the world around us through our senses) help us approach the less tangible domains of spirituality and the infinite with just as much enthusiasm as we might a thundering seaside or a smooth piece of jazz.

Bio: Meg Giordano is a junior at Le Moyne, majoring in philosophy with minors in history and English, and hopes to continue her philosophy studies in graduate school. She lives in East Syracuse with her husband and five children, who are home-schooled. Meg is particularly proud that the Giordano family currently has four members enrolled in college.

12:20 - 1 p.m.

GUEST SPEAKER

Andrea Masselli '07 (sociology)

Andrea Masselli is a litigation attorney at Arnold & Porter LLP in Washington, D.C. Her work focuses on white-collar defense and Foreign Corrupt Practices Act investigations. Ms. Masselli graduated magna cum laude from the Syracuse University College of Law, where she was elected to the Order of the Coif. She also earned her master's degree in public administration from the Maxwell School of Citizenship and Public Affairs. While at Syracuse University, Ms. Masselli was a member of the Law Review and earned her certificate in national security and counterterrorism. She earned her bachelor's degree in criminology and criminal justice from Le Moyne, from which she graduated summa cum laude.

1 – 1:30 p.m.

"SOCIAL RESPONSE TO DISASTER"

Patrick Flake, Information Systems and Marketing

Faculty Mentor: Martha Grabowski, Ph.D., information systems department

Abstract: Social media has changed the way the world communicates through sites such as Facebook, Twitter and MySpace. Yet, why is it that places such as emergency organization centers do not use this new technology to share important information during disasters? It seems that Twitter or Facebook could have a significant impact on the ability to spread important information to countless people, and could even have the potential to prevent countless lives from being lost.



Bio: Patrick Flake has accepted a position with Lockheed Martin in Baltimore, Md., and will start after graduation. He would like to thank his parents for all of their support and guidance through the years. Also, he would like to thank Dr. Grabowski for all the opportunities and guidance she has provided him during his time at Le Moyne.

1:30 – 2 p.m.

"From the Goddess to the Virgin of Guadalupe: An Examination of the Feminine Divine Evolution in Mexico"

Rose Murphy, English

Faculty Mentor: Orlando Ocampo, Ph.D., foreign languages and literatures department

Abstract: In Mexico, there exists an evolution of the feminine divine. This evolution commences with the goddess and, in many ways, ends with the goddess in contemporary times. Although this return to the goddess is significant, the Virgin Mary and the Virgin of Guadalupe also exist in this evolution. I am interested specifically in how the evolution occurred for each figure; that is, how each figure existed and exists in relation to the other feminine divine figures.



Bio: Rose Murphy is in the five-year bachelor's degree in English and master's degree in education program at Le Moyne. She plans on pursuing a career in teaching.

2 – 2:30 p.m.

"Using Technology to Improve Customer Service in Retail Stores"

Chelsea Maxwell, Marketing and Information Systems

Faculty Mentor: Martha Grabowski, Ph.D., information systems department

Abstract: This research was initiated by an innovative idea Chelsea had while working at Macy's. Throughout her experience as a sales associate, she came to the conclusion that if the image of the merchandise that was being scanned on the register appeared on the screen, this would make particular tasks easier for all sales associates. Different technological models, task-technology fit and technology acceptance models, as well as previous retail research conducted by experts, were reviewed to determine if there was



a market for an idea such as this. Through interviews with current employees at Macy's and the research that was conducted, Chelsea can confidently say that she believes there is a strong interest to implement this type of innovation and further research is definitely needed to pursue how it would happen.

Bio: Chelsea Maxwell is currently a senior at Le Moyne and will be graduating this May. Following commencement, she will continue to work toward her master's degree in information management at Syracuse University's School of Information Studies. Chelsea would like to thank Dr. Martha Grabowski for giving her the opportunity to do research this semester and would also like to thank her family and friends for the support she received throughout the duration of her project.

2:30 – 3 p.m.

"Christian Women's Lives Influenced by a Muslim Dominated Society"

Danna Sawalha, Political Science and History with a Minor in Legal Studies

Faculty Mentor: Holly Rine, Ph.D., history department

Abstract: This paper focuses on the lifestyle of those who live in the Middle East, predominantly Christian women. Focusing on the specific country of Jordan, I have conducted personal interviews with Christian women who were born and raised there. Jordan, like many of the Middle Eastern countries, has a majority population of Muslims. Therefore through the use of personal interviews and scholarly works, I have proven that the lives of Christian women have been strongly influenced by their society through their education and their whole lifestyle



in general. Even today countries such as Jordan and Egypt are governed by Islamic law. Dating back to the Ottoman Empire, a Muslim-dominated society has had great influence over everyone, regardless of their particular religion. This has been especially analyzed in the paper by using the works of Avigdor Levy and Bernard Lewis. The concept of Orientalism has also played a role in this paper with the help of historian Edward Said.

Bio: Danna Sawalha is a resident of Baldwinsville, N.Y. She is a senior at Le Moyne with a double major in political science and history and a minor in legal studies. She will be attending law school in the fall, but has not made a final decision as to which one. She hopes to one day become a criminal attorney.

3 - 3:30 p.m.

"EUROPEAN COLONIALISM FROM A PERENNIALIST PERSPECTIVE" Alexander Shepard, Religious Studies and Philosophy

Faculty Mentor: Mary Macdonald, Ph.D., religious studies department

Abstract: The interaction between the Colonial settlers and the Native Americans is usually interpreted from a Marxist perspective. The different economic systems are generally studied to explain the conflict. The distinct differences between the Native American mindset and the European settlers mindset have not been very well established.

Bio: Alexander Shepard is a junior and double major in religious studies and philosophy. After graduation he plans to attend graduate school in the field of religious philosophy. His work for Scholars Day is made possible primarily through the help of his mentor, Mary Macdonald.

2:30 - 3:30 p.m.

POSTER SESSION

"The Human Animal Bond: Appreciating the power of animals to change lives"

Katherine Greene, Sociology

Faculty Mentor: Frank Ridzi, Ph.D., sociology department

Abstract: For my independent research class I chose to conduct a literature review on the human animal bond. I looked closely at ARISE at the Farm's 21 Day Challenge and the power of horses to heal. By putting three children on horses for 21 days straight, we were able to record the children's behaviors and see firsthand the human animal bond come to life.



Bio: Katherine Greene is excited to be graduating in May, although it will be bittersweet to leave the Heights. She plans on pursuing a career where she can combine her love of animals and helping people. She would like to thank Dr. Ridzi for working with her and believing in her, her parents for their support the past four years, and everyone at ARISE at the Farm.

"The Effects of Personality on Coping Strategies and Leisure Styles"

Marissa Goyden, Psychology

Faculty Mentor: Brenda Kirby, Ph.D., psychology department

Abstract: This study looks at aspects of personality as they apply to coping and leisure mechanisms in regard to daily stressors of university students. Studies have claimed that people may react to stress based on various personality traits they possess (Bartley & Roesh, 2011). My goal is to assess participants' personalities, compare them to their leisure styles and coping strategies and then look for certain personality characteristics that are indicative of these mechanisms.



Bio: Marissa Goyden is a junior and has just finished collecting data for her project. She aspires to be a counseling psychologist and is a member of Le Moyne's chapter of Psi Chi, the international honor society in psychology. In the fall she will be working on a paper and a poster to present at a national conference in May 2013.

"Hastening the Aging Process: Effects of Sucrose, Fructose, and High Fructose Corn Syrup on the Vitality of a Fibroblast Cell Culture"

Maureen McDonough, Biological Science with Minors in Chemistry and Psychology

Faculty Mentor: Theresa Beaty, Ph.D., chemistry department

Abstract: Sugar consumption, although considered by some to be harmless, can actually be quite detrimental to the overall health of an individual. This project explores the effects of sucrose, fructose, and high fructose corn syrup consumption on a mouse fibroblast cell layer to determine if exposure, in excess, increases the rate of aging within the cells. Careful analysis of cell morphology as well as production of reactive oxidative species, which are closely associated with the aging process, will lead to an observation of sugar's effect on aging. It is our goal to investigate the harmful effect of processed sugar consumption and the role it may play in exacerbating the aging process.



Bio: Maureen McDonough is currently a senior biological sciences major with minors in chemistry and psychology. She is a member of Le Moyne College chapter of Tri-Beta, the international biology honor society, and a member of the swim team. She will be pursuing her Doctor of Physical Therapy in the fall. She would like to thank Dr. Beaty for her patience, guidance and contributions to this project over the last year.

"Odor Awareness Predicts the Importance of Odor in Mate Selection" $\,$

Michelle Woodward, Psychology

Faculty Mentor: Theresa White, Ph.D., psychology department

Abstract: A survey study was conducted that examined odor importance in mate selection in heterosexual individuals and proposed odor awareness as a mechanism for its relevance. Data revealed that odor awareness was strongly related to odor importance in mate selection, and that women were more aware of odors than men.



Bio: Michelle Woodward is a senior majoring in psychology.

After graduation Michelle plans on attending graduate school where she will pursue her master's degree in marriage and family therapy. Michelle

where she will pursue her master's degree in marriage and family therapy. Michelle would like to thank her wonderful family and, of course, Dr. White for helping her through this process.

"Synthetic Approach to Ferrocenyl Combretastatin A-4 Analogs"

Samantha Vanacore, Chemistry

Faculty Mentor: Joseph Mullins, Ph.D., chemistry department

Abstract: The goal of this research project was to synthesize a Combretastatin A-4 ferrocenyl analog by substituting one of the aromatic rings on the original structure with a ferrocenyl derivative. Combrestastatin A-4 and ferrocene derivatives have been individually researched to show anti-cancerous properties and have also been tested for biological activity. However, there has yet to be a study on the combination of a Combrestastin A-4 ferrecenyl analog.



Bio: Samantha Vanacore is a senior at Le Moyne College who will graduate in May with a bachelor's degree in chemistry. Samantha would like to acknowledge Dr. Joseph Mullins for being her mentor in research as well as Julie Angiulo and Phung Tran for assisting her.

"ODOR DESCRIPTIONS ARE INFLUENCED BY BOTH GRAMMATICAL AND NATURAL GENDER IN SPANISH SPEAKERS" Amanda Wright, Psychology

Faculty Mentor: Theresa White, Ph.D., psychology department

Abstract: The purpose of this research was to explore the influence that grammatical gender and natural gender have on an individual's perception of odors. It was hypothesized that native speakers of Spanish, a language with grammatical gender, would describe smells in a way that was consistent with the grammatical gender of the smell, while English speakers would consistently apply natural gender.



Bio: Amanda Wright is graduating with a bachelor's degree in psychology this May. She plans to attend graduate school for speech language pathology next year.

"Pomegranate Supplements (Punica Granatum): Effects on Mammalian Hormones and Learning and Memory in Adult Female Rats"

James Wanamaker, Biological Sciences

Faculty Mentor: Beth Pritts, Ph.D., biological sciences department

Abstract: Pomegranates have been used therapeutically since biblical times; recently, manufacturers claim pomegranate supplements may prevent cancer, cardiovascular diseases and thyroid dysfunction. The Food and Drug Administration does not regulate any dietary supplements; therefore, the purpose of this research was to evaluate the



effects of pomegranate supplements on mammalian physiology and behavior in an attempt to ascertain the validity of the suggested health benefits.

Bio: James Wanamaker is a senior majoring in biological sciences and will attend the State University of New York at Buffalo School of Dental Medicine next year.

"Effect of Ultraviolet Light on the Accumulation of Reactive Oxygen Species in Dibroblasts"

Deborah Hanchek, Biological Sciences with a Minor in Chemistry

Faculty Mentor: Theresa Beaty, Ph.D., chemistry department

Abstract: It is common knowledge that increased exposure to sunlight in the form of ultraviolet radiation can lead to photoaging and carcinoma. However, exposure to this radiation also has the potential to generate free radicals and reactive oxygen species (ROS). Previous research has shown such radicals result in cellular oxidative stress contributing to an accelerated aging process. This project looked at determining a correlation between ultraviolet light exposure of 302nm, the wavelength of radiation reaching the surface of the earth, and the accumulation of ROS at the cellular level.



Bio: Deborah Hanchek is a senior biological sciences major with a minor in chemistry; she is a member of the Le Moyne chapter of Beta Beta, the national honor society in biology, and Alpha Sigma Nu, the honor society of Jesuit colleges and universities. After graduation Deborah plans to attend medical school. She would like to thank Dr. Beaty for her mentorship, guidance and unwavering support, and for allowing her to do research this year.

This Scholars Day celebration is sponsored by the Student Research Committee and the Office of the Provost and Academic Vice President of Le Moyne College.