LE MOYNE | SCHOLARS DAY

APRIL 17, 2010 | 9 a.m. - 4:30 p.m.

JAMES COMMONS AND CURTIN SPECIAL EVENTS ROOM, CAMPUS CENTER
A Word from the Provost

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.

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

A Word from the Dean of Arts and Sciences

I wish to congratulate you all on your achievement in being here today. This event is a tribute to your talent, your curiosity, and the power of your imagination to broaden our knowledge about social, scientific, and literary issues and texts in exciting ways.

The world waits eagerly for a new generation of young adults equipped with the skills, energy, insight, and determination to grapple with and resolve complicated problems that pose unique challenges to the contemporary world. Le Moyne students, as they are represented here today, are poised to stand at the forefront of these efforts.

Julie Grossman, Ph.D.
Interim Dean of Arts and Sciences
Welcome to the 5th annual Le Moyne College Scholars Day, a tradition that originated with the Undergraduate Research Symposium in 1998. This year we are fortunate again to have the English Department’s Literature and Culture Conference participants included in this event, and we invite you to visit the Le Moyne College Annual Student Art Show at the Wilson Gallery in the Noreen Reale Falcon Library. We also welcome the addition to our day of a performance and post-performance discussion of three medieval plays starring Le Moyne theater students. Scholars Day 2010 celebrates the creative and scholarly accomplishments of students across all disciplines. We are so excited to have you share in 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 being accepted to a wide variety of post-graduate programs of study. We are happy to welcome the return of Le Moyne College graduate Clinton F. Smith ’09, who is currently pursuing his doctorate in History at the University of California at Santa Barbara on a full fellowship. Be sure to stay for lunch, when Clint will talk with us about his academic journey.

David Craig, Ph.D.
Chair of the Student Research Committee

Schedule of Events

Concurrent Sessions will run throughout the day.
Student Scholars research talks and poster session will be held in the Curtin Special Events Room.

Literature and Culture panel talks will be held in James Commons.
The medieval performances and post-performance discussion will be held on the lawn outside the W. Carroll Coyne Center for the Performing Arts. (In case of rain, activities will be moved inside to the Jesuit Théâtre).

The Le Moyne College Annual Student Art Show is in the Wilson Art Gallery at the Noreen Reale Falcone Library.

9 – 9:15 a.m.  Continental Breakfast

9:15 – 9:30 a.m.  Welcoming Remarks
Fred Pestello, Ph.D., President
Linda LeMura, Ph.D., Provost and Vice President for Academic Affairs
CONCURRENT SESSIONS

STUDENT SCHOLARS PRESENTATIONS AND POSTER SESSION

9:30 – 9:50 a.m.
“Self-Association, Conformational Ordering and Gelation of Pustulan, (1→6)-β-D-glucan”
Nicholas J. Stam, Biochemistry (Physics minor)

9:50 – 10:10 a.m.
“Truth through Fiction: The Role of Research in Historical Fiction”
Ashley O’Mara, English with a Concentration in Creative Writing

10:10 – 10:30 a.m.
“The Sacred Canopy and the Problem of Religious Separationism: Toward a Non-Traditional Accommodationist Supreme Court Jurisprudence”
Andrew Borelli, Political Science

10:30 – 10:50 a.m.
“The Role of the YY-1 Transcription Factor in Retinal Cell Regeneration”
Stephanie Kaiser, Biological Sciences

10:50 – 11:10 a.m.
“Cloud Computing”
Andrew Dawson, Business Administration with a Joint Degree in Information Systems and Applied Management Analysis

11:10 – 11:35 a.m.
“In Defense of the Morning Star”
Jason Palladino, Biological Sciences with a Concentration in Neurobiology

11:35 a.m. – 12:05 p.m.
“Mind Qube”
Joy Messerschmidt, Criminology and Crime and Justice Studies

LITERATURE AND CULTURE PRESENTATIONS

9:30 – 10:30 a.m.

Panel I: Drama and Theater
A. Fiona Barbour, “Modes of Narration in Oedipus the King and Agamemnon”
B. Kari Wertz, “Witchcraft: An Exercise in Duplicity”
C. Stephanie Whittemore, “Curses Were not Meant to Be Broken”
D. Alisha Espinosa: “The Fate of the Faithless”

10:30 – 11:30 a.m.

Panel II: Literature and the “Other”
A. Nathan Bongiovanni, “Proper Treatment of the Paddy: Jonathan Swift and the fíor Ghael”
B. Lessa Vernyi, “The Phenomenology of Love: Donne’s Dialectic Self-Conscious Wholeness through the Concept of the ‘Other’”
C. Anne Di Cosimo, “Examining Ireland in Two National Tales”

11:30 a.m. – 12:05 p.m.

Panel III: Utopian Literature
A. Brian Roache, “Yourtopia, Mytopia”
B. Molly Wilber, “Exploration and the Utopian Genre in the Renaissance”
12:05 – 1 p.m. Lunch

12:35 – 1 p.m. Guest Speaker
Clinton F. Smith (Le Moyne ’09)
Doctoral Student, History, University of California at Santa Barbara

Student Scholars Presentations and Poster Session

1 – 1:20 p.m.
“The Great Albany Fire of 1793: Rebellion or Revolution?”
Kayley Pilawa, History with a Concentration in Secondary Education

1:20 – 1:40 p.m.
“Investigating and Comparing the Phylogeography of Two Direct-Developing Marine Gastropods”
Aleksander Szymaniak, Biological Sciences

1:40 – 2 p.m.
“The Under-Aged Drinking Culture: Alternatives to Promoting Responsible Consumption”
Joshua Graves, Political Science

2 – 2:25 p.m.
“Development of FDA Control of Anti-Aging Cosmetics in the 21st Century”
Natasa Taseski, Chemistry

2:25 – 2:50 p.m.
“FABP-7 and its Role in Retinal Regeneration”
Michelle Zumpano, Biological Sciences

2:50 – 3:10 p.m.
“Oath of Vengeance: Massacre at Mountain Meadows”
Kathryn S. Hennigan, History

3:10 – 3:30 p.m.
“Prediction of Binding Sites on Nucleic Acid Binding Intrinsically Unstructured Proteins”
Russell Goodman, Biochemistry

Literature and Culture Presentations

1 – 2 p.m.
Panel IV: Narrative and Negotiation between Genders
A. Wyatt Morse, “‘She … in Adam Wrought Commisseration’: Eve’s Unlikely Heroism in Paradise Lost”
C. Rebecca Barrett, “Marriage in Virginia Woolf’s Fiction”

2 – 3 p.m.
Panel V: Literature and Gender
A. Rose Murphy, “The Wife of Bath: Chaucer Repeynting the Lion as a Victim and Pedagogue”
B. Lise Brown, “Gender and Property Ownership in Lanyer’s The Description of Cooke-Ham and Jonson’s To Penshurst”

12:05 – 1 p.m. Lunch

12:35 – 1 p.m. Guest Speaker
Clinton F. Smith (Le Moyne ’09)
Doctoral Student, History, University of California at Santa Barbara
3:30 – 4:30 p.m.  
**Poster Session**

“Searching for a New Way to be Church: Catholic Identity and Community in a Changing Social Institutional Environment”  
*Catherine Farrell, Sociology*

“An Exploration of the Relationship Between Onset of Menstruation on First Sexual Experiences and Sexual Behavior in Females”  
*Mary DePartout, Psychology*

“Effects of Consuming Onondaga Lake Water on the Heart and Serum Lipids of Young Adult Rats”  
*Eileen Micaroni, Biological Sciences*

“A Shorter Synthesis of Chiricanine A”  
*Nadia Orosz, Biochemistry  
Divina Oweis, Biochemistry*

“Self-association, Conformational Ordering and Gelation of Pustulan, (1→6)-β-D-glucan”  
*Nicholas J. Stam, Biochemistry (Physics minor)*

3:45 – 4:30 p.m.  
**Closing Reception**  
*Beer and Wine Bar*
MEDIEVAL PERFORMANCE AND DISCUSSION

1 - 2:30 p.m.
OLD SCHOOL: A PERFORMANCE OF
THREE MEDIEVAL PLAYS
Produced by Boot and Buskin

The Fall of Lucifer
God/Cherubim ......................... Patrick McHugh
Lucifer/Seraphim ..................... Alisha Espinosa
Lightbourne/Thrones ............... Jenna Crofoot
God/Cherubim ....................... Lauren Pisano
Lucifer/Seraphim .................... Tammy Kinney
Lightbourne/Thrones ............... Mike Kulha
Dominations ......................... Fiona Barbour
Principalities ....................... Dave Melchionne
Powers ............................... Terry LaCasse
Virtues ............................... Kim Pompo
Angels ............................... Alex Gherardi
Archangels ......................... Kelsey Moriarty

Meat Pie, Fruit Pie
A 15th century French farce, with slapstick comedy using real slapsticks
Rascal 1 .............................. Fiona Barbour
Rascal 2 .............................. Dave Melchionne
Baker ................................. Terry LaCasse
Baker's wife ......................... Kim Pompo

The Apple Tree
A 15th century Dutch moral comedy featuring
Death, the Devil, Lusty Youth and Reckless Living
Open Heart .......................... Alex Gherardi
Steadfast Faith ......................... Kelsey Moriarty
God ................................. Alisha Espinosa
Insatiable .......................... Patrick McHugh
Lusty Youth ......................... Jenna Crofoot
Reckless Living ...................... Mike Kulha
Death ................................. Tammy Kinney
Devil ............................... Lauren Pisano

2:30 – 3:30 p.m.
Post-Performance Discussion
“Self-association, Conformational Ordering and Gelation of Pustulan, (1→6)-β-D-glucan” (Paper and Poster Session)
Nicholas J. Stam, Biochemistry (Physics minor)

Faculty Mentors: Arthur J. Stipanovic, Department of Chemistry and Director, Analytical and Technical Services, SUNY College of Environmental Science and Forestry; David J. Kiemle, Department of Chemistry, SUNY College of Environmental Science and Forestry

Abstract: The study sought to determine the aqueous conformational ordering steps of the polysaccharide pustulan, (1→6)-β-D-glucan, and subsequent intermolecular self-association, which results in gelation by the formation of microcrystalline junction zones. Polysaccharide gels have been recognized for their attractiveness as potential drug delivery vehicles. Ultimately, modulating the gelation properties of pustulan could offer a new drug delivery method: an engineered switchable gel.

Bio: Nick will be attending graduate school to pursue a doctorate and will eventually seek a university faculty position in order to start his own research group.

“Truth through Fiction: The Role of Research in Historical Fiction”
Ashley O’Mara, English with a Concentration in Creative Writing

Faculty Mentor: David Lloyd, Ph.D., English

Abstract: This project examines the unique challenges that research for historical fiction presents, as manifested by O’Mara’s honors thesis in fiction: a novel set in the cultural world of the Soviet Union, during the Khrushchev Thaw. In this presentation, the author will demonstrate how research has shaped her project. Also, via a reading from the novel itself, O’Mara will illustrate how research underscores the themes of her narrative: finding faith and forgiveness in making music.

Bio: Ashley O’Mara, a home-school graduate and an Onondaga Community College transfer student, is now an English–Creative Writing major in her first senior semester. Her writing has earned her multiple appearances in the Post-Standard, as well as the
Syracuse James Joyce Society’s 2009 “Nancy Duffy” Award. She extends her gratitude to her family, for appreciating her writing dependence; her friends and Professor Linda Pennisi, for receiving and strengthening her project; and Professor David Lloyd, for his support, and especially for matching her enthusiasm.

10:10 – 10:30 a.m.

“The Sacred Canopy and the Problem of Religious Separationism: Toward a Non-Traditional Accommodationist Supreme Court Jurisprudence”
Andrew Borelli, Political Science

Faculty Mentor: Susan M. Behuniak, Ph.D., Political Science

Abstract: In this paper, I examine the inconsistency of the three legal tests that the Supreme Court uses in religion clause cases. In examining specific cases that illustrate this jurisprudential inconsistency, I develop a new jurisprudence through Peter Berger’s sacred canopy theory. I apply this theory in a two-part “test” to establish consistency on past cases and to predict the outcome of Salazar v. Buono, a religion clause case recently argued before the Supreme Court.

Bio: Andrew Borelli is a senior political science major with a minor in Spanish. This coming fall, he will be pursuing a law degree with a concentration on elder care and trusts and estates. He would like to thank all those involved in making this honors project a success, especially his parents for their constant support and his mentor, Dr. Susan Behuniak, who has worked tirelessly with him for over a year in bringing this thesis to successful completion.
10:30 – 10:50 a.m.

“The Role of the YY-1 Transcription Factor in Retinal Cell Regeneration”
Stephanie Kaiser, Biological Sciences

Faculty Mentor: Patrick Yurco, Ph.D., Biological Sciences

Abstract: It is commonly known that in most adult vertebrates the central nervous system has a limited ability to regenerate cells and conduct cellular repair. However, previous studies have demonstrated that zebrafish retinas possess the ability to conduct cellular regeneration. Careful analysis of lesioned zebrafish retina gene array data indicated that the transcription factor Yin Yang-1 (YY-1) was significantly upregulated during regeneration of the retina. It is our goal to confirm the presence of the Yin Yang-1 transcription factor and investigate the role it may play in retinal regeneration.

Bio: Stephanie Kaiser is currently a junior with a major in biological sciences and a minor in chemistry and psychology. She would like to thank Dr. Yurco for his mentorship, encouragement and support.

10:50 – 11:10 a.m.

“Cloud Computing”
Andrew Dawson, Business Administration with a Joint Degree in Information Systems and Applied Management Analysis

Faculty Mentor: Martha Grabowski, Ph.D., Management Information Systems

Abstract: Cloud computing is one of the newest and most talked about information technologies of the future. Cloud computing represents a revolutionary way of delivering computer resources, doing business, and sharing information. These large-scale systems were created to allow people to compute information, store data, and run applications from remote locations. However, due to the complexity of these systems, there brings about a great deal of concerns that may hinder the emergence of these cloud systems. The major fear lies in the security of data and information in the cloud and how cloud vendors are going to address these security issues, which include access, encryption and availability.

Bio: Andrew is graduating Le Moyne college with a bachelor’s degree in business administration, with a joint degree in information systems and applied management analysis. He is currently an intern at the Bank of New York Mellon where his work involves process reengineering, domestic and EMEA reporting, and software testing. He is involved in intramural sports at Le Moyne College. In his spare time, he enjoys spending time with his family, snowboarding and skydiving. After graduation in May, he plans on attending graduate school in pursuit of a master’s degree in computer information systems.
11:10 – 11:35 a.m.
“IN DEFENSE OF THE MORNING STAR”
Jason Palladino, Biological Sciences with a Concentration in Neurobiology
Faculty Mentor: Darryl Caterine, Ph.D., Religious Studies

Abstract: When observing religion throughout history, one can correlate gods from one religion to those of another; i.e. Greek Ares and Roman Mars, implying that the basis for the Roman gods was borrowed from Greek mythology. The Christian Lucifer can be directly correlated to the Roman Lucifer, one of personifications of Venus. By looking at the Venus’s significance in other religions and alchemy, one can deduce why Lucifer was transformed into the devil by early Christians.

Bio: Jason Palladino is a biological sciences major with a concentration in neurobiology and a minor in psychology. After graduation Jason plans on attending graduate school where he will study audiology. Jason would like to thank Professor Darryl Caterine for allowing him to study such an obscure and interesting topic.

11:35 a.m. – 12:05 p.m.
“MIND QUBE”
Joy Messerschmidt, Criminology and Crime and Justice Studies
Faculty Mentor: Elizabeth Hayes, Ph.D., English

Abstract: Mind Cube Theory hypothesizes that the mind takes on a constructive form from its ideas, and the mental forms sharpen the mind to focus on relevant details. This work could help enable artificial intelligence to develop emotional intelligence. I examine the psychological mechanics of how emotional intelligence develops in a way that could be developed for a computer software program in the future for space travel, emotional androids and smart houses, and other means that appeal to consumers and open a whole new field of science through a new philosophical understanding of human/android interaction.

Bio: Joy has been developing Mind Qube since freshman year and this summer. She has tried to answer the philosophical question of where intellectual history is derived from – and has answered it through the mechanics of Mind Qube. Through Mind Qube there are three possibilities of improvement in society: androids improved emotional intelligence, help security fighting cybercrime and understanding the learning process of consciousness.
“THE GREAT ALBANY FIRE OF 1793: REBELLION OR REVOLUTION?”
Kayley Pilawa, History with a Concentration in Secondary Education
Faculty Mentor: Douglas Egerton, Ph.D., History

Abstract: My presentation will critically look at the events surrounding a fire in Albany in 1793. Analyzed will be the time period, the events of the fire and reaction to the fire. Ultimately, this instance proves to be incredibly significant in American history as it is a snapshot of this highly revolutionary time period.

Bio: Kayley Pilawa is a senior majoring in history and will be graduating with a New York State Secondary Education Certification. Kayley hopes to find a teaching job and then go on to complete her master’s and doctorate in history. Kayley would like to thank her wonderful family and, of course, Dr. Egerton for helping her through this writing process.

1:20 – 1:40 p.m.

“INVESTIGATING AND COMPARING THE PHYLOGEOGRAPHY OF TWO DIRECT-DEVELOPING MARINE GASTROPODS”
Aleksander Szymaniak, Biological Sciences
Faculty Mentor: Devon B. Keeney, Ph.D., Biological Sciences

Abstract: Most species exhibit some degree of genetic differentiation among their populations and a continuing challenge is to identify the biological and geographic forces responsible. For this project, DNA sequence data was generated from two New Zealand intertidal snail species (genus Zeacumantus) and used to determine the phylogenetic architecture of each species. This allowed for identification of the most influential factors determining the evolution of these species, an increasingly important factor in contemporary science.

Bio: Aleksander is a senior dean's scholar biological sciences major with a passionate concentration in molecular biology. He is a member of Le Moyne's chapter of the Tri-Beta Biological Honors society as well as the Biochemistry Club. After extensive biomedical research training, Aleksander’s future research interests include pharmacogenomics, drug development, and the complex interplay between phylogenetics and pharmacotherapy. He cannot thank both Dr. Keeney and Dr. Mitchell enough for being critical advisors, intuitive mentors and, foremost, friends.
1:40 – 2 p.m.

“The Under-Aged Drinking Culture: Alternatives to Promoting Responsible Consumption”
Joshua Graves, Political Science

Faculty Mentor: Delia Popescu, Ph.D., Political Science

Abstract: The 1984 Federal Uniform Drinking Age Act was intended to reduce the number of deaths resulting from drunk driving. However, its effectiveness in reducing the overall fatality rate is debatable. I use Millian philosophy, the American Prohibition and statistical evidence to argue that the decriminalization of under-aged alcohol consumption would decrease the number of fatalities resulting from under-aged overconsumption of alcohol with minimal, if any, negative effects.

Bio: Joshua Graves is a senior political science major graduating in May 2010. He is exploring graduate programs in public administration and public policy.

2 – 2:25 p.m.

“Development of FDA Control of Anti-Aging Cosmetics in the 21st Century”
Natasa Taseski, Chemistry

Faculty Mentor: Carmen Giunta, Ph.D., Chemistry and Physics

Abstract: The contradictory effects of the chemical components of anti-aging products will be exploited in order to explain why the FDA needs stronger regulation, while also pointing out the reasons why it has a close watch on products that can be classified as cosmeceuticals; representative chemicals found in anti-aging products causing controversy are AHA’s (alpha hydroxy acids). Will the FDA be able to withstand the pressures of cosmetic companies while securing the safety of the consumer? What is the future of the composition of anti-aging products?

Bio: Natasa Taseski is a senior at Le Moyne College and after a year of travel is planning on pursuing law school. Acknowledgment for support with the project is owed to Dr. Carmen Giunta who provided the guidance, patience and criticism needed to complete the project.
2:25 – 2:50 p.m.

**FABP-7 and Its Role in Retinal Regeneration**
Michelle Zumpano, Biological Sciences

Faculty Mentor: Patrick Yurco, Ph.D., Biological Sciences

**Abstract:** The purpose of this study is to examine the role of Fatty Acid Binding Protein -7 (FABP-7) in the regeneration of retinal cells in zebrafish (Danio rerio). Current research involves lesioning and collecting retinas at various time points and analyzing for FABP-7 expression. Results will aid in further understanding of the signaling mechanisms involved in retinal cell regeneration in zebrafish and may lead to the development of strategies for retinal repair in humans.

**Bio:** Michelle Zumpano is currently a junior majoring in the biological sciences. After graduating from Le Moyne, Michelle will continue her education so she can pursue a career in the health care field. She would like to thank Dr. Yurco for his mentorship, support and encouragement.

2:50 – 3:10 p.m.

**“Oath of Vengeance: Massacre at Mountain Meadows”**
Kathryn S. Hennigan, History

Faculty Mentor: Douglas Egerton, Ph.D., History

**Abstract:** My paper examines the historical significance of the September 11, 1857, Mountain Meadows Massacre in which 120 emigrant men, women and children were brutally murdered by leading members of the Church of Latter-day Saints. I analyze the factors leading up to the massacre (the persecutions the Saints experienced on their westward trek and the assassinations of their Prophets) and the indirect role church leader Brigham Young had in the affair. The photo is of the site of the massacre in Utah, courtesy of Kevin Delaney.

**Bio:** Kathryn S. Hennigan is a history major with a Latin minor. She hopes to pursue a graduate degree in museum studies. Kathryn would like to thank Dr. Douglas Egerton for his guidance and expertise and the Student Research Committee for generously funding her trip to Salt Lake City.
Abstract: The ability to predict the three-dimensional structure of a protein from its amino acid sequence is one of the biggest remaining questions in structural biology. For globular proteins, many successful algorithms for predicting protein structure have been based on sequence homology or sequence alignment. However, minimal attention has been placed on structure prediction for intrinsically unstructured proteins (IUPs). Our work is based on developing algorithms for predicting binding sites and secondary structure on IUPs.

Bio: Russell Goodman is a junior biochemistry major. He plans to attend graduate school to conduct research into protein structure prediction and design. Russell would like to thank Dr. Beaty for her guidance through this project over the previous two years.
Poster Session

“Searching for a New Way to be Church; Catholic Identity and Community in a Changing Social Institutional Environment”
Catherine Farrell, Sociology

Faculty Mentor: Matt Loveland, Ph.D., Sociology

Abstract: This study explores the issues of individual identity and organization within the Catholic Church. The recent closing and merging of Catholic parishes is causing structural changes to local parish life. The reconfiguration process has caused many lay Catholics to reconsider their religious identity as well as the authority of Church leaders. Through an ethnographic study of a Catholic diocese and its current reconfiguration process, this study strived to better understand the process and the outcomes of parish closures within the Catholic Church.

Bio: Catherine Farrell is a junior with a major in sociology and minors in anthropology and psychology. She plans on attending graduate school in sociology after graduating from Le Moyne. Catherine would like to thank Dr. Loveland for his support and for letting her work on this project with him.

“An Exploration of the Relationship Between Onset of Menstruation on First Sexual Experiences and Sexual Behavior in Females”
Mary DePartout, Psychology

Faculty Mentor: Maria DiTullio, Ed.D., Psychology

Abstract: The purpose of my study is to determine the extent that the age at menarche (first menstrual period), along with other variables such as sexual orientation, ethnicity, religious affiliation and family constellation, impacts age at progressing levels of intimacy, including kissing, heavy petting, light petting and coitus (first experience of sexual intercourse), as well as the number of lifetime sexual partners in females.

Bio: Mary DePartout is a senior psychology major with a minor in philosophy. After her graduation in May, she plans to take one to two years off from school to travel and work, after which she will pursue a doctoral degree in the field of psychology. She would like to thank Dr. Maria DiTullio as well as Dr. Birgit Bryant and Dr. Monica Sylvia for all they’ve done!
“Effects of Consuming Onondaga Lake Water on the Heart and Serum Lipids of Young Adult Rats”
Eileen Micaroni, Biological Sciences

Faculty Mentor: Beth Pritts, D.P.M., Ph.D., Biological Sciences

Abstract: Onondaga Lake is a Superfund site. Many of its pollutants individually disrupt cardiac physiology, thus this study was performed to determine if the “cocktail” of pollutants found in the lake does the same. All protocols were approved by the Le Moyne IACAUC. Control rats drank deionized water while experimentals drank lake water, for either one or four weeks. Relative heart weight, heart protein content and serum lipid levels were determined. Findings were consistent with reports that males experience more adverse effects upon exposure to environmental toxins than females.

Bio: Eileen Micaroni is a senior biological sciences major with minors in chemistry and physics. Upon graduation, she will be attending the State University of New York at Buffalo School of Medicine and Biomedical Sciences. Eileen would like to thank her research mentor of three years, Dr. Beth Pritts, for allowing her the privilege and honor of working with and learning from an extraordinary scholar.

“A Shorter Synthesis of Chiricanine A”
Nadia Orosz, Biochemistry
Divina Oweis, Biochemistry

Faculty Mentor: Joseph Mullins, Ph.D., Chemistry and Physics

Abstract: Chiricanine A is a prenylated hydroxy stilbene that has been found to have many biological properties. It exhibits antifungal properties against Cladosporium cucumerinum and Aspergillus parasiticus. In addition, it has toxic properties against larvae of the yellow fever-transmitting mosquito Aedes aegypti1. This experiment focused on synthesizing this organic compound using a five-step method, instead of the eight-step method previously performed by Dr. Joseph Mullins and Jerod Leff. While improving this method and the yield obtained, a geranyl compound was also synthesized.

Bio: Nadia Orosz is a senior biochemistry major. This is her second semester working with Dr. Mullins. After college she plans on attending medical school. Divina Oweis is a junior biochemistry major. This is also her second semester with Dr. Mullins. She will be working with Dr. Mullins over the summer and throughout the following year. She also is planning on attending medical school in the future. They would both like to thank Dr. Mullins, who has been a wonderful mentor, and the Student Research Committee for the funding it provided.
A. “Modes of Narration in Agamemnon and Oedipus the King”
Fiona Barbour

My paper is about the different approaches to storytelling taken by Aeschylus and Sophocles in Agamemnon and Oedipus the King. My thesis is that Sophocles’ approach is more accessible to a modern audience than Aeschylus’ because of his use of dialogue as opposed to Aeschylus’ use of long, ornate speeches. While Aeschylus’ speeches are full of beautiful poetry, they generally do not advance the plot in a way that would engage or entertain a modern audience. Sophocles manages to have poetic speeches mixed into his dialogue, and his character and plot development benefit from that.

B. “Witchcraft: An Exercise in Duplicity”
Kari Wertz

The era of the English Renaissance was an age of change and discovery, notable for advances in science, literacy and art; but it was also an age marked by a more sinister phenomenon: the Witch Craze of the 1660s. Tolerance of apparent witchcraft during the Renaissance was very low. Surprisingly, however, the literature of the period does not accurately portray the negative societal disposition toward sorcery and witchcraft. In drama, witches were portrayed as instruments of power – they were acceptable as prophets or as tools of revenge; in reality accused witches were treated as devil-worshipping pariahs or, at the very least, healers. My argument will utilize Shakespeare’s plays Macbeth and The Tempest as the primary literary texts, as well as first-person accounts from Shakespeare's England, edited by R.E. Pritchard, among other sources. This paper will examine the discrepancy between the historical records and literary representations of the period.

C. “Curses were not Meant to be Broken”
Stephanie Whittemore

This essay analyzes two Greek tragedies, Oedipus Rex and Agamemnon, focusing on the ideas of cursed fate and destiny in each work. In both plays the main families’ lives are predetermined and they cannot break out of their destinies regardless of what they try. The families try to change their fates by intervening in prophecy and granting undeserved power, respectively. Both families learn, or consequently fail to learn, that it is not possible to interfere with destiny in order to alter the unwanted future.
D. “The Fate of the Faithless”
Alisha Espinosa

Why is ancient Greek drama studied today? For the most part, the characters are not compelling. The plots are unoriginal and based on myths that can be read and studied in other texts. The poetics of the text have great merit, but can only be greatly appreciated when read in Greek. The reason ancient Greek drama is studied today is because of the insight it gives us into religion.

Panel II: Literature and the “Other”

A. “Proper Treatment of the Paddy: Jonathan Swift and the féor Ghael”
Nathan Bongiovanni

Ireland's tumultuous and complex history had, by the 18th century, given rise to several subcultures. Each of these, differentiated by religion or ancestry, would muddle and obscure the idea of a national Irish identity for years to come. The two most prominent Irish subcultures in the 18th century were that of the native Irish, the féor Ghael, and the Anglo-Irish, the descendents of the Protestant Ascendancy who had effectively replaced the Catholic landed class in Ireland. This paper argues that Anglo-Irish identity was prone to crisis, torn between the desire to be seen as Irish in Ireland, but valued as British by the English, as exemplified in the pamphlets of Jonathan Swift. Swift's writings firmly position the Anglo-Irish as equivalents to English subjects, while at the same time positioning the natives as second-class, third-rate subjects.

B. “The Phenomenology of Love: Donne’s Dialectic”
Lessa Vernyi

In 1807, Hegel proposed that self-consciousness is a communal phenomenon. In *Phenomenology of Spirit*, Hegel concluded that one is not conscious of the self until one is conscious of and recognized by the other. Donne's poetry echoes this dynamic; being commonly comprised of the speaker, the speaker’s beloved, and the need for unity with the beloved, Donne's dialectic is manifested through love. This is parallel to Hegel's dialectic of the thesis, antithesis, and synthesis. “A Valediction of Weeping” and “Holy Sonnet XIV” are excellent examples of this notion; the thesis is analogous to the lover, the antithesis to the beloved, and the synthesis symbolizes the union between the two.
C. “Examining Ireland in Two National Tales”
Anne DiCosimo

Maria Edgeworth’s *Castle Rackrent* and Sydney Owenson’s *The Wild Irish Girl* both attempt to portray Ireland in different ways to an English audience. Edgeworth, who was Anglo-Irish, thought that the Native Irish needed to be taken care of, and that is evident in her portrayal of Thady. While trying to contain him throughout her novel, however, she unintentionally makes him a threatening (and unreliable) character. Owenson, on the other hand, presents the Irish in a completely different way. She uses exaggerated stereotypes in order to perform/enact the role of the Native Irish. She has the “editor” quote outside sources in order to emphasize/legitimize what she is trying to say about the Irish.

Panel III: Utopian Literature

A. “Yourtopia. Mytopia.”
Brian Roache

*The Isle of Pines*, by Henry Neville, is often included in lists of both utopian and dystopian literature. Upon further investigation of the story, along with some definitions of utopia and dystopia it seems that the book may not actually be either. Comparing the opinions of some authors both on *The Isle of Pines* and the nature of utopia and dystopia in general, as well as looking at some definitions of concepts involved in utopian and dystopian works, it seems as if *The Isle of Pines* may just be an amusing novel with some underlying messages to a closed minded English society.

B. “Exploration and the Utopian Genre in the Renaissance”
Molly Wilber

This paper addresses the question of how exploration during the Renaissance influenced the literature of the time. The paper studies the connection between travel literature and the utopian genre by comparing Francis Bacon’s *New Atlantis* with Hakluyt’s *Voyages and Discoveries*. By highlighting the similarities in the theme and structure of Bacon’s novel with the travel narratives my paper concludes that authors who wrote utopian stories often borrowed specifically from travel narratives. Without the historical context of exploration, the utopian genre would not have existed in the form that it did in the Renaissance.
Panel IV: Narrative and Negotiation between Genders

A. “‘She … in Adam Wrought Commiseration’: Eve’s Unlikely Heroism in Paradise Lost”
Wyatt Morse

Within this paper I have addressed the critical claim that John Milton is misogynistic and, like the previous Christian tradition, blames Eve completely for the fall of man in his epic poem, Paradise Lost. Of course, Milton’s view, it could be argued, is generally patriarchal, but this neither requires nor allows us to disregard important parts of Milton’s argument that diverge from patriarchal convention. Eve, through her offered sacrifice at the end of Book Ten, rescues Adam from the depths of hopelessness and recreates a stronger and more tempered love in Adam’s heart; through her action Eve acts as a type of Christ for Milton.

Jessica Bresadola

This paper illustrates the role of African-American women in comparison to African-American men in Alice Walker’s literature, You Can’t Keep a Good Woman Down and The Color Purple. As a result of American slavery, African-American men have been emasculated by whites. In response, they abuse African-American women. This is able to perpetuate because of a lack of Walker’s African-American characters taking action against this and because of their portrayal by whites in the pornography industry. In these texts, Walker demonstrates two responses: the rise of the African-American woman against abuse and African-American women choosing lesbian relationships as an alternative.

C. “Marriage in Virginia Woolf’s Fiction”
Rebecca Barrett

How did Virginia Woolf feel about marriage? When Woolf began writing, I don’t believe she even knew the answer to this question. In her works, marriage is analogous to a riddle that she attempts to decipher throughout her texts. Writers in the Victorian Age became crucial to ending the depiction of women as “Madonnas” or “whores.” In the mid-19th century, “The Woman Question” appeared in an attempt to solve the problem of how to classify women. This paper argues that Virginia Woolf’s response to marriage serves the purpose of elevating a woman’s status so that Woman is not an outcast. By analyzing Woolf’s younger female characters, I suggest that Woolf’s search for a better solution outside of marriage becomes apparent.
Panel V: Literature and Gender

A. “The Wife of Bath’: Chaucer Repeynting the Lion as a Victim and Pedagogue”
Rose Murphy

In Chaucer’s “Wife of Bath Prologue,” the narrator Alisoun is undoubtedly manipulative. However, it is evident that she is a product of her greedy environment and has had no choice but to marry for wealth. Alisoun employs an Aesopian metaphor, comparing women to a painted lion in a painting. She inquires, “Who painted the lion?” Alisoun believes men have only ever portrayed women, making all portrayals inaccurate. Through her tale, Alisoun portrays the women as educators and people of high moral standards. Instead of killing the rapist knight, the women seek to teach him. He learns that one does not acquire high morals from his or her’s status. Thus, Chaucer allows the Wife of Bath to “repent” herself as a woman of commendable morals through her tale, directly disproving her stereotypical manipulative character in the prologue.

B. “Gender and Property Ownership in Lanyer’s ‘The Description of Cooke-Ham’ and Jonson’s ‘To Penshurst’”
Lise Brown

In Renaissance England, Aemilia Lanyer and Ben Jonson both wrote “country house poems” praising their wealthy patrons. Importantly, the poets each had a very different relationship to the places about which they were writing. Women could not own property, so it makes sense that Lanyer’s poem, The Description of Cooke-ham, has a definite sense of loss and disconnect in regards to that estate. Meanwhile, Jonson’s To Penshurst displays the author’s sense of ownership of the land and house, despite the fact that neither belongs to him. These differences are significant to the poems, and they are reflective of the gender norms of the time.

C. “The Power of Medieval Women”
Chelsea Knapp

Throughout the medieval time period, women were stereotypically viewed as inferior to men; however, many pieces of literature give women a peculiar power over men. Grendel’s mother in Beowulf is a fictitious demon who exhibited power through a maternal rage over the death of her son. Surprisingly, Queen Elizabeth I, a historical figure, can be related to Grendel’s mother because she conveyed herself as masculine in her speech to the troops at Tilbury. Contrary to the exhibition of forceful power, the maidens in Lanval and the women in “They Flee from Me” were portrayed as seductively powerful.
Panel VI: (Auto)Biography and Society in Literature

A. “Herr God, Herr Lucifer”: Violence in Plath’s Internal and External Worlds.
Leo Qaqish

The essay presents an alternative interpretation of the violent content and tone of Sylvia Plath’s later poems, specifically, “Daddy” and “Lady Lazarus,” both written a year before their author’s suicide. Contrary to some literary criticism, the essay argues that the literary tendency to see Plath’s violent works solely as the product of her disturbed mind falls short of fully understanding their true complexity. Such an approach neglects the fact that the poems, which do indeed display many autobiographical characteristics, are largely and consistently concerned with themes of violence within society, especially Nazi violence. It also neglects the conflict between the internal and the external violence that appears in the works.

B. “Motives behind Marriage”
Lejla Custin

The marriage between John and Anne Donne was unique in that the motive behind their marriage differed from the motives that individuals during 17th and 18th century England had for marriage. These differences include the ideas that John and Anne Donne did not partake in an arranged marriage, they did not marry for procreation, and their intimate connection was not their primary motive for marriage. Furthermore, the paper discusses possible reasons behind Izaak Walton’s description of Donne’s marriage as the “remarkable error” of his life. The main stress for this is Walton’s decision to use his personal standing, both when it comes to his social standing and his personal marital standing.
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.