

LE MOYNE

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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.



SCHOLARS DAY 2014

A Celebration of Student Scholarship

April 11, 2014 | 8:30 a.m. – 5 p.m.

James Commons and Curtin Special Events Room, Campus Center

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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.

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SCHOLARS DAY

FRIDAY, APRIL 11, 2014 | 8:30 A.M. – 5 P.M.

JAMES COMMONS AND CURTIN SPECIAL EVENTS ROOM,
CAMPUS CENTER

Our featured speaker, Eileen Micaroni Smith, is from North Bay, N.Y., and graduated *summa cum laude* from Le Moyne College with a Bachelor of Science in 2010. In addition to participating in musical and sports activities at Le Moyne, Eileen majored in biological sciences, minored in chemistry and physics, and became a member of Tri-Beta and Alpha Sigma Nu. Eileen engaged in three years of independent research under the mentorship of Dr. Beth B. Pritts exploring the effects of polluted Onondaga Lake water ingestion on mammalian physiology. She presented a poster of her research at The Endocrine Society annual meeting in Washington, D.C., in June 2009, completed Integral Honors and Departmental Honors theses, and was an honored recipient of The Medal for Scholarly Regional and Urban Applied Research. Eileen is currently in her fourth and final year of medical school at the University at Buffalo School of Medicine and Biomedical Sciences, and received a Dean's Letter of Commendation for academic performance in her second year. She is a member of the American Medical Association and the American Society of Anesthesiologists. Following graduation in May 2014, Eileen will begin residency and pursue a career in anesthesiology.

ABOUT LE MOYNE STUDENT SCHOLARS DAY

Welcome to the ninth-annual Le Moyne College Student Scholars Day, a tradition that originated with the Undergraduate Research Symposium in 1998. Scholars Day 2014 celebrates the research, entrepreneurial, and creative accomplishments of students from a variety of academic disciplines. We are excited that you are here to share in the work of these faculty-mentored student scholars who have traveled to archives and ecological sites, presented their work at regional and national meetings of professional organizations, published in scholarly journals, created artworks and theatrical productions, and been accepted to a number of post-graduate programs of study. Following in the tradition initiated four years ago, we are happy to welcome back Eileen Micaroni Smith '10 to deliver our lunchtime Student Scholar Alumni talk.

Jennifer Gurley, Ph.D.

*Associate Professor of English and Associate McDevitt Chair and
Director of Undergraduate Research*

FROM THE PRESIDENT

Welcome to Scholars Day.

Thank you for joining us at Scholars Day 2014, 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 members 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*

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*

FROM THE DEAN OF ARTS AND SCIENCES

The 2014 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.

*Christopher M. Jones, Ph.D.
Dean of Arts and Sciences*

FROM THE DEAN OF THE MADDEN SCHOOL OF BUSINESS

First, congratulations to the students and their faculty mentors on your achievements. Across all disciplines, academic research asks and answers the questions that propel civilization forward. At the Madden School of Business, we are fully aware that research is very often the catalyst for innovation. These explorations help solve the problems of our time and ensure that society does not become stagnant. Represented here today, we see the symbiotic relationship between academia and society, reminding us that without researchers and their work we stand still, we fail to evolve, and eventually we fall behind. Today we celebrate this relationship and, most of all, the Le Moyne students who are poised to become the innovators and leaders of tomorrow.

*Jim Joseph '83, MBA
Dean, Madden School of Business*

SCHEDULE OF EVENTS

8:30 – 9:15 A.M.	CONTINENTAL BREAKFAST
8:45 – 9 A.M.	WELCOMING REMARKS <i>Jennifer Gurley, Ph.D., associate professor of English</i> <i>Douglas Egerton, Ph.D., professor of history,</i> <i>2013 The Rev. Richard M. McKeon, S.J., Scholar of the Year</i>
9 A.M. – NOON	MORNING PRESENTATION SESSIONS
NOON – 1 P.M.	LUNCH
12:20 – 1 P.M.	GUEST SPEAKER <i>Eileen Micaroni Smith '10</i>
1 – 5 P.M.	AFTERNOON PRESENTATION SESSIONS
3:30 – 5 P.M.	POSTER SESSION

SCHEDULE OF SESSIONS

MORNING SESSION

9 – 9:15 a.m.	“Google Glass: Authentication, Security, and Privacy” <i>Rebecca Wolf, Management and Leadership and Information Systems</i>
9:15 – 9:30 a.m.	“Magic Fano Planes” <i>Ben Miesner, Mathematics</i>
9:30 – 9:45 a.m.	“La Psicología de los Fantasmas: A Critical Examination of Latin American Espiritismo in the Framework of Modern Western Psychology” <i>Katy Perry, Psychology</i>
9:45 – 10 a.m.	“Comparative Genetic Population Structure of New York and Connecticut Freshwater Snails” <i>Anthony O'Brien, Biological Sciences, concentration in Health Professions</i>
10 – 10:15 a.m.	“LEGOmatics: Mathematics with LEGOs” <i>Megan Collins, Mathematics</i>
10:15 – 10:30 a.m.	“Arctic Shipping Patterns in the Bering Strait” <i>Dare DeGennaro, Business Analytics and Management Information Systems</i>

SCHEDULE OF SESSIONS

- 10:30 – 10:45 a.m. “Generation of Transgenic Zebrafish for the Study of Regeneration and Development of the Central Nervous System”
Andrew Tynon, Biological Sciences
- 10:45 – 11 a.m. “Effects of Manganese (Mn) Administration on Breathing”
Taylor Glaussen, Biological Sciences
- 11 – 11:15 a.m. “Testing the Utility of Existing Fish Microsatellites in Longear Sunfish (*Lepomis megalotis*)”
Patrick Curtin, Biological Sciences
- 11:15 – 11:30 a.m. “A Proclivity to Kill: Attitudes Toward Capital Punishment”
Michael Marrero, Sociology
- 11:30 – 11:45 a.m. “The Fat Lady, Kao, and Christ: A Study of Sacramentality in Salinger’s Fiction”
James Cochran, English and Religious Studies
- 11:45 a.m. – Noon “Mechanistic Studies of the Formation of Metal-Organic Frameworks”
Cody Webb Jr., Chemistry and Chemical Engineering

NOON – 1 P.M. LUNCH

- 12:20 – 1 P.M. *Guest Speaker Eileen Micaroni Smith '10*
Biological Sciences with minors in Chemistry and Physics
Eileen is currently a fourth-year medical student at the University at Buffalo School of Medicine and Biomedical Sciences

AFTERNOON SESSION

- 1 – 1:15 p.m. “Soil Carbon and Above Ground Biomass: The Connection Between Climate Change and Deforestation”
Morgan Nivison and Megan Wilckens, Environmental Science Systems
- 1:15 – 1:30 p.m. “Morning After Milton: A Reflection on a Study and Application of Adaptation Theory”
Laura Mitchell, English
- 1:30 – 1:45 p.m. “A Study of the Integration of Eastern and Western Medicine: A Literature Review of Challenges, Successes, and Forthcomings of Complementary and Alternative Medicine (CAM)”
Ashley Strazzezza, Biological Sciences (Physics Minor)

SCHEDULE OF SESSIONS

- 1:45 – 2 p.m. “The Measure of a Society Is How Well It Treats Its Children: A Study of ADHD Medicalization and Effective Educational Policy”
Korleen Brady, Sociology (Certification in Childhood and Special Education)
- 2 – 2:15 p.m. “An Authentic Presence: Theoretical and Practical Methods to Resolve Faith-Based Conflicts for Christian Educators in High School Classrooms”
Marc Murdoch, English
- 2:15 – 2:30 p.m. “Google Glass in the Emergency Medical Field”
Nicholas Olin, Chemistry and Psychology
- 2:30 – 2:45 p.m. “The Games We Play: Objectification Behaviors of Female Athletes and Non-Athletes”
Sarah Connelly, Psychology
- 2:45 – 3 p.m. “Defining the Diversity of Botryococcus (Trebouxiophyceae, Chlorophyta)”
Afsah Chohan, Biological Sciences
- 3 – 3:15 p.m. “Literary Tropes and the Nature of Justice in Chaucer’s ‘Wife of Bath’”
Kristen Dombroski, English
- 3:15 – 3:30 p.m. “The Lucas Numbers and Other Gibonacci Sequences”
Jeremiah Southwick, Mathematics
- 3:45 – 4 p.m. “Examining Chloroplast Genomes in Order Sphaeropleales”
Daniel Sanchez, Biological Sciences
- 4 – 4:15 p.m. “GlassScapes: Virtualization in Google Glass”
*Michaella Steinruck,
Business Management and Leadership and Information Systems*
*Jean-Philippe Rancy,
Business Management and Leadership and Information Systems*
- 4:15 – 4:30 p.m. “Cayley Graphs: Separating the Wheat from the Chaff”
J.C. Eallonardo, Mathematics
- 4:30 – 4:45 p.m. “Prevalence of *Borrelia burgdorferi* in Ixodes Scapularis Ticks Collected at Le Moyne College”
Ryan Krahmer, Biological Sciences
- 4:45 – 5 p.m. “The Picture of Dorian Gray: A Study of Music and Theatrical Appreciation”
Natasia White, Psychology

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

9 – 9:15 a.m.

“GOOGLE GLASS: AUTHENTICATION, SECURITY, AND PRIVACY”

Rebecca Wolf, Management and Leadership and Information Systems and
McDevitt Undergraduate Scholar

Faculty Mentor: Dr. Martha Grabowski

Abstract: My research project focuses on the authentication, security, and privacy issues with immersive technology. The three types of immersive technologies that have been explored are Google Glass, EyeTap, and GlassUp. The research project was an extensive literature review and analysis. After reading and analyzing several articles conclusions and recommendations have been made about the authentication, security, and privacy issues with these immersive technologies.



Bio: Rebecca is a senior and a dual major in Management and Leadership and Information Systems. She is a member of the women’s volleyball team and Alpha Sigma Nu. Rebecca is graduating Summa Cum Laude, is a Purcell Scholar Recipient, and has a GPA of 3.92. After college Rebecca plans to work for General Electric, specifically in the Power and Water Division within their Information Technology Leadership Program.

9:15 – 9:30 a.m.

“MAGIC FANO PLANES”

Ben Miesner, Mathematics

Faculty Mentor: Dr. David Nash

Abstract: We extend the idea of the magic square to the Fano Plane, investigating whether or not the sums along each of the lines can ever be made to equal all of the others. Specifically, we will show that the Fano Plane is never magic. We will also show that, at most, four sum-lines can be considered for the Fano Plane to be magic. Finally, we see that it can never be magic in mod n .



Bio: Born and raised in Syracuse, Ben is a senior with a major in mathematics and minor in economics. He completed this research for his senior research project and presented the results at the 2014 Joint Mathematics Meetings in Baltimore, Md. In his free time, Ben enjoys working out, playing golf, and reading. Upon graduation in May, he plans to work as an intern at Sagemark Consulting in downtown Syracuse and continue to pursue his various interests.

9:30 – 9:45 a.m.

“LA PSICOLOGÍA DE LOS FANTASMAS: A CRITICAL EXAMINATION OF LATIN AMERICAN ESPIRITISMO IN THE FRAMEWORK OF MODERN WESTERN PSYCHOLOGY ”

Katy Perry, Psychology

Faculty Mentor: Dr. Darryl Caterine

Abstract: This thesis explores the potential relevance that Latino healing systems (Espiritismo, in particular) have for modern Western psychology. The intention of this thesis is both to shed cross-cultural awareness on the ever-growing Latino population in the United States, and to make a connection between the worldview of Espiritismo and explorations of the unconscious mind in humanistic/transpersonal psychology. This project focuses specifically on the work of William James and its rejection as “primitive” in modern psychology.

Bio: Katy is a senior majoring in psychology and minoring in both religious studies and philosophy. She is a Dean’s Scholar and a member of the Integral Honors Program. Katy plans to pursue a doctorate in clinical psychology. Her experiences studying in Guatemala are what inspired this project. She would like to thank Dr. Caterine for his endless support, guidance, and mentorship on this project and throughout her undergraduate career.



9:45 – 10 a.m.

“COMPARATIVE GENETIC POPULATION STRUCTURE OF NEW YORK AND CONNECTICUT FRESHWATER SNAILS ”

Anthony O'Brien, Biological Sciences (Concentration in Health Professions)

Faculty Mentor: Dr. Devon Keeney

Abstract: My main objective was to study the genetic structure of two freshwater snail species (*Valvata tricarinata* and *Promenetus exacuus*) in New York and Connecticut by identifying differences in their DNA. This project explored how variations in life history traits could be responsible for the development of genetic differences among populations. To address this, I analyzed the COI gene in snails collected throughout Connecticut and New York and examined the geographic distribution of their genetic lineages.

Bio: Anthony is a senior majoring in biological sciences. He would like to give his sincerest thanks to Dr. Devon Keeney for his constant guidance and teaching to make this project run as smoothly as possible. He would also like to thank the Department of Biological Sciences, the Student Research Committee, and his friends and family for their support. Upon graduation, Anthony hopes to pursue graduate work in genetics and genomics of cancer.

10 – 10:15 a.m.

“LEGOMATICS: MATHEMATICS WITH LEGOS ”

Megan Collins, Mathematics

Faculty Mentor: Dr. Jonathan Needleman

Abstract: The project involves discovering which shapes I can build with the long thin LEGO pieces. I am working with a certain category of shapes used in a paper by Maria A. Axenovich in which all vertices of the shape are on the outside of the figure, lines do not intersect except at the vertices, and all shapes created inside the figure are triangles.

Bio: Megan is a senior mathematics major with an adolescent education concentration. She is also a captain of Le Moyne’s women’s lacrosse team. For the last four years, she has been successful in her academic and athletic endeavors and hopes to continue with this success. In the future, she hopes to teach secondary school math and coach lacrosse.



10:15 – 10:30 a.m.

“ARCTIC SHIPPING PATTERNS IN THE BERING STRAIT”

Dara DeGennaro, Business Analytics and Management Information Systems
and McDevitt Undergraduate Scholar

Faculty Mentor: Dr. Martha Grabowski

Abstract: An increase in vessel traffic is bringing up new issues in regard to Arctic shipping. In this study, an analysis was done on the changes in maritime shipping in the Bering Strait between 2009 and 2012 utilizing AIS data as input. The results that were found showed that shipping trends year to year were not significant; however, the variables ship type, year and direction were found to be related to one another.

Bio: Dara is a junior from Binghamton, N.Y., studying business analytics and information systems. She is involved in many clubs at Le Moyne and she is a captain of the women’s club basketball team. She plans to graduate from Le Moyne College in May 2015 and hopes to attend the Syracuse University iSchool for her graduate degree in information management. Dara wants to use her knowledge of analytics and information systems in the field of health care.



10:30–10:45 a.m.

“GENERATION OF TRANSGENIC ZEBRAFISH FOR THE STUDY OF REGENERATION AND DEVELOPMENT OF THE CENTRAL NERVOUS SYSTEM”

Andrew Tynon, Biological Sciences

Faculty Mentor: Dr. Patrick Yurco

Abstract: Our research is focused on studying the genetic mechanisms involved in development and regeneration of the retina. By generating transgenic zebrafish, we will better understand the function and expression patterns of certain developmentally critical genes, improving our knowledge of how the neural retina normally develops. Ultimately this could help determine how and perhaps why certain vertebrates, such as the zebrafish, are able to regenerate their nervous systems while humans cannot.



Bio: Andrew plans to graduate from Le Moyne College in the spring of 2016 with a bachelor's degree in biological sciences and minors in chemistry and psychology. Following graduation, he hopes to participate in an M.D./Ph.D. program in neuroscience. He would like to give a huge thank you to Dr. Yurco for being such a fantastic mentor and supporter. He would also like to thank the rest of the faculty members of the Department of Biological Sciences for their support.

10:45 – 11 a.m.

“EFFECTS OF MANGANESE (Mn) ADMINISTRATION ON BREATHING”

Taylor Glaussen, Biological Sciences

Faculty Mentor: Dr. Lara DeRuisseau

Abstract: Mn is a trace element involved with biological functions including Mn Superoxide Dismutase (MnSOD) activity, an enzyme important for reducing oxidative species in the mitochondrion. Our aim is to see if increased Mn levels elevates the mouse's response to hypoxia as well as MnSOD levels. Barometric plethysmography techniques were used to measure the breathing of mice. Our results have implications for identifying the Mn status of animals during breathing investigations.



Bio: Taylor is a junior Biological Science major with a concentration in neurobiology and a minor in visual arts. Following graduation, Taylor plans on pursuing a doctoral degree in neuroscience. Taylor would like to thank Dr. DeRuisseau for all of her support and guidance throughout this project.

11 – 11:15 a.m.

“TESTING THE UTILITY OF EXISTING FISH MICROSATELLITES IN LONGEAR SUNFISH (*LEPOMIS MEGALOTIS*)”

Patrick Curtin, Biological Sciences

Faculty Mentor: Dr. Devon Keeney

Abstract: Microsatellites are tandemly repeated DNA units common within all organisms and are often used as genetic markers for population studies. The goal of this project is to test microsatellites developed in other fish species for their ability to amplify variable regions of DNA in Longear Sunfish (*Lepomis megalotis*). Successful markers will be used in future studies seeking to understand how physical barriers, such as dams, influence genetic divergence among populations of aquatic organisms.



Bio: Patrick is a junior at Le Moyne studying the biological sciences. He has been conditionally accepted as a member of the class of 2019 at SUNY Upstate Medical College in Syracuse. He has previously conducted research with the National Academies of Sciences. He would like to thank Dr. Keeney and the Department of Biological Sciences here at Le Moyne for this opportunity.

11:15 – 11:30 a.m.

“A PROCLIVITY TO KILL: ATTITUDES TOWARD CAPITAL PUNISHMENT ”

Michael Marrero, Sociology

Faculty Mentor: Dr. Jeffrey Chin

Abstract: This paper utilizes the cumulative General Social Survey (Smith et al. 2013) to explore the effects that various socio-demographic factors have on individuals' attitudes toward capital punishment. The current study suggests that two main factors – race and gender – are statistically significant indicators of whether or not an individual views capital punishment as an acceptable punishment for murder cases. I use standard multiple regression to explore potential relationships among these variables and discuss the implications of these results along with suggestions for further research.

Bio: Michael is a sociology major with a concentration in criminology and criminal justice. He is currently a member of Alpha Kappa Delta and Alpha Sigma Nu at Le Moyne College and participates in numerous on-campus organizations. Upon graduating from Le Moyne, Michael will be attending law school and plans to pursue a career in criminal law.

11:30 – 11:45 a.m.

“THE FAT LADY, KAO, AND CHRIST: A STUDY OF SACRAMENTALITY IN SALINGER’S FICTION”

James Cochran, English and Religious Studies

Faculty Mentor: Dr. Miles Taylor

Abstract: In this talk, I conceive of J.D. Salinger as a writer in the Catholic tradition. I examine how the Catholic sacramental worldview influences his unpublished correspondences and his fiction, specifically *Franny and Zooey* and *Raise High the Roof Beam, Carpenters*. In his personal life and fiction, Salinger, as a Catholic, finds God’s grace present throughout the world. For Salinger and his fictional Glass family, others are Christ.



Bio: James is a senior in the Integral Honors Program, majoring in English and religious studies. By the end of the spring semester, he will also have earned an advanced writing minor and departmental honors in information systems. Since June 2013, he has interned as a McDevitt Scholar in Information Systems. After graduation, he plans to enter a doctoral program in English with a focus on religion in 21st century American literature, possibly at Syracuse University.

11:45 – Noon

“MECHANISTIC STUDIES OF THE FORMATION OF METAL-ORGANIC FRAMEWORKS”

Cody Webb Jr., Chemistry and Chemical Engineering

Faculty Mentor: Dr. Anna O’Brien

Abstract: Research in metal-organic frameworks (MOFs) has become significant due to their application for hydrogen and “greenhouse” gas storage. The factors that influence the properties and structures of MOFs are not understood. Studying the mechanism of formation of these compounds will allow determination of these factors. The O’Leary International Travel Grant allowed me to participate in this study at the Elettra Synchrotron Facility in Trieste, Italy, in conjunction with TU Graz in Graz, Austria.



Bio: Cody is a senior chemistry major. He has researched inorganic chemistry for the past year in collaboration with Dr. Karin Ruhlandt’s research group at Syracuse University with his advisor, Dr. O’Brien. His research focuses on organometallic chemistry and X-ray crystallography. He has presented his research at regional and national ACS conferences and recently travelled to Austria and Italy further broadening his research experience. He plans to pursue a Ph.D. in chemistry following his graduation.

12:30 – 1:15 p.m.

GUEST SPEAKER

Eileen Micaroni Smith

Our featured speaker, Eileen Micaroni Smith, is from North Bay, N.Y., and graduated *summa cum laude* from Le Moyne College with a Bachelor of Science in 2010. In addition to participating in musical and sports activities at Le Moyne, Eileen majored in biological sciences, minored in chemistry and physics, and became a member of Tri-Beta and Alpha Sigma Nu. Eileen engaged in three years of independent research under the mentorship of Dr. Beth B. Pritts exploring the effects of polluted Onondaga Lake water ingestion on mammalian physiology. She presented a poster of her research at The Endocrine Society annual meeting in Washington, D.C., in June 2009, completed Integral Honors and Departmental Honors theses, and was an honored recipient of The Medal for Scholarly Regional and Urban Applied Research. Eileen is currently in her fourth and final year of medical school at the University at Buffalo School of Medicine and Biomedical Sciences, and received a Dean's Letter of Commendation for academic performance in her second year. She is a member of the American Medical Association and the American Society of Anesthesiologists. Following graduation in May 2014, Eileen will begin residency and pursue a career in anesthesiology.

1 – 1:15 p.m.

“SOIL CARBON AND ABOVE GROUND BIOMASS: THE CONNECTION BETWEEN CLIMATE CHANGE AND DEFORESTATION”

Morgan Nivison and Megan Wilckens, Environmental Science Systems

Faculty Mentors: Dr. Lawrence Tanner

Abstract: Deforestation of tropical forests is thought to be a major contributor to climate change because it releases carbon to the atmosphere that was previously stored in the forest biomass and soils. Costa Rica, which was largely deforested during the twentieth century, has in recent decades encouraged reforestation of some farmlands. We are studying the rate at which reforestation restores carbon to the forest and soil, removing it from the atmosphere, by measuring the carbon content of soils and biomass of trees in mature forests and secondary forests of different ages.

Bio: Morgan is a junior from Aurora, N.Y. and is an environmental science systems major with an environmental studies minor. Upon graduation in the spring of 2015 Morgan plans to pursue a higher degree in geomorphology. Megan is a junior from Constantia, N.Y. and is an environmental science systems major. After graduation Megan intends to pursue a degree in conservation/restoration. Morgan and Megan would like to thank the Student Research Committee and Dr. Lawrence Tanner for allowing them to conduct their research.

4:45 – 5 p.m.

“MORNING AFTER MILTON: A REFLECTION ON A STUDY AND APPLICATION OF ADAPTATION THEORY”

Laura Mitchell, English

Faculty Mentor: Dr. Maura Brady

Abstract: For my Integral Honors thesis project, I have written and recorded a concept album based on several of John Milton’s poems about morning. My songs explore topics brought up in Milton’s works such as life and death, light and dark, inspiration and confusion, and how they raise questions about the power of nature over humans and the role God actually plays in the lives of humans.

Bio: Laura is a senior at Le Moyne. After graduation, she plans to pursue a career in the music industry.

1:30 – 1:45 p.m.

“A STUDY OF THE INTEGRATION OF EASTERN AND WESTERN MEDICINE: A LITERATURE REVIEW OF CHALLENGES, SUCCESSES, AND FORTHCOMINGS OF COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM)”

Ashley Strazzella, Biological Sciences (Physics Minor) and McDevitt Undergraduate Scholar

Faculty Mentor: Dr. Martha Grabowski

Abstract: This research paper is a collective review of the progression of Complementary and Alternative Medicine (CAM) over the past 30 years. A review of past, present and perspective future interactions between medicine of the Eastern and Western worlds was conducted. This research explores advancements in science and technology and the relationship between these two worlds, including the perceptions concerning the legitimacy of alternative therapies. Ultimately this research paper aimed to map the interactions of modern and traditional medicine throughout the past 30 years while assessing how changes of these interactions overtime will affect the new arising field we now call CAM. Information for this research was drawn from over 70 scholarly articles and personal interviews with professionals in the field.

Bio: Ashley is a senior at Le Moyne, graduating this spring with a major in biological sciences and a minor in physics. She plans on attending graduate school to study medicine in the fall of 2015. Meanwhile she will be traveling to India to study with practicing Ayurvedic medical professionals. She hopes to go on to have an impact in the world of medicine and natural healing.

1:45 – 2 p.m.

“THE MEASURE OF A SOCIETY IS HOW WELL IT TREATS ITS CHILDREN: A STUDY OF ADHD MEDICALIZATION AND EFFECTIVE EDUCATIONAL POLICY”

Korleen Brady, Sociology and Childhood/Special Education

Faculty Mentor: Dr. Frances Pestello

Abstract: The project investigates Attention Deficit/Hyperactivity Disorder in modern American society and the sociological impact of medicalization. ADHD is an increasing issue in the United States and, while it’s currently being addressed through medication, a more thorough response from the educational system is required. A content analysis of educational textbooks addresses what strategies teachers can use to improve their classrooms for students with ADHD.

Bio: Korleen is a sociology major with a concentration in childhood and special education. She is the vice president of the Le Moyne College chapter of Amnesty International, a Sociology Club member, and a resident advisor. She was honored as Le Moyne College’s Outstanding Student Teacher, and will graduate in May as a member of the Integral Honors Program. After graduation, she plans to pursue a master’s degree in special education and teach in an inner-city school.



2 – 2:15 p.m.

“AN AUTHENTIC PRESENCE: THEORETICAL AND PRACTICAL METHODS TO RESOLVE FAITH-BASED CONFLICTS FOR CHRISTIAN EDUCATORS IN HIGH SCHOOL CLASSROOMS ”

Marc Murdoch, English

Faculty Mentors: Dr. Diane Zigo, Dr. Elizabeth Hayes, and Dr. Lauri Bousquet

Abstract: This thesis discusses how being a teacher while adhering to the Christian faith affects teaching motivations and pedagogy in high school classrooms. It also examines, compares and evaluates how these different motivations affect pedagogical decisions that a Christian educator may use to resolve conflicts as they arise. By linking established educational theory with modern pedagogical actions, this work begins to bridge the gap in research between theory and practice.

Bio: Marc is a senior English major who wishes to make a career in publishing post-graduation. His minors in advanced writing, communication, and theatre arts, along with progress with the Integral Honors Program, have allowed him to see the connections between writing and the world. In his free time, Marc is often helping classmates as a tutor, writing for *The Dolphin*, or volunteering for Spark: A Creative.

2:15 – 2:30 p.m.

“GOOGLE GLASS IN THE EMERGENCY MEDICAL FIELD”

Nicholas Olin, Chemistry and Psychology and McDevitt Undergraduate Scholar

Faculty Mentor: Dr. Martha Grabowski

Abstract: The potential application of Google Glass in the field of emergency medicine was explored by interviewing individuals who work in the field. Potential uses and concerns were taken into account. Physicians and nurses working in emergency departments and EMTs were interviewed. The information from each interview was pooled and analyzed. Conclusions and recommendations were made based on the data gathered.



Bio: Nicholas is from Rochester, N.Y. He is a graduate of McQuaid Jesuit High School and is currently a sophomore at Le Moyne College. He is majoring in chemistry and psychology and is an Integral Honors student. Nick plans on attending medical school following the completion of his undergraduate studies.

2:30 – 2:45 p.m.

“THE GAMES WE PLAY: OBJECTIFICATION BEHAVIORS OF FEMALE ATHLETES AND NON-ATHLETES”

Sarah Connelly, Psychology

Faculty Mentor: Dr. Monica Sylvia

Abstract: Objectification behaviors of undergraduate female athletes and non-athletes were examined. Female athletes reported lower levels of self-objectification, but higher levels of self-surveillance and body satisfaction. When it came to viewing other women, however, they were just as likely as non-athletes to engage in objectification behaviors based on athletic status.



Bio: Sarah is senior majoring in psychology. She is a member of the women’s swimming team and she is a resident advisor in St. Mary’s Hall. Sarah is currently looking into graduate opportunities in psychology. She would like to thank the Student Research Committee and the members of her departmental honors committee for their support of this project.

2:45 – 3 p.m.

“DEFINING THE DIVERSITY OF BOTRYOCOCCUS (TREBOUXIOPHYCEAE, CHLOROPHYTA)”

Afsah Chohan, Biology

Faculty Mentor: Dr. Hilary McManus

Abstract: Botryococcus is a freshwater green algal species used for biofuel production. Currently, the diversity of Botryococcus is not well understood. This study uses DNA sequencing and gene analysis to determine the evolutionary relationships of isolates collected during the summer of 2013. The goal of this research is to explore the diversity of Botryococcus and more accurately define the species *B. braunii*.



Bio: Afsah is currently a junior biological sciences major at Le Moyne. After graduation she hopes to attend medical school and pursue a career in the health professions.

3 – 3:15 p.m.

“LITERARY TROPES AND THE NATURE OF JUSTICE IN CHAUCER’S ‘WIFE OF BATH’”

Kristen Dombroski, English

Faculty Mentors: Dr. Erin Mullally and Professor Gratien

Abstract: “The Wife of Bath’s” prologue and tale reveal how Chaucer creates a conventional character (Alisoun), who develops conventional characters of her own (the Loathly Lady and the Knight). Alisoun then uses these conventions to demonstrate the power of legal conventions in her tale of the rapist Knight. Thus, while Chaucer’s tale abounds with 14th century literary conventions, it also develops a topical argument on the nature of crime and justice.



Bio: Kristen is a senior English major in the Integral Honors Program. She has a concentration in literature and minors in advanced writing and political science. After graduation, she will attend law school, with a concentration in family law. Kristen would like to thank Dr. Hayes, Dr. Mullally, and Dr. Gratien for their constant support and guidance during the development of her thesis.

3:15 – 3:30 p.m.

“THE LUCAS NUMBERS AND OTHER GIBONACCI SEQUENCES MOD”
Jeremiah Southwick, Mathematics

Faculty Mentor: Dr. Jonathan Needleman

Abstract: Numerical sequences have many intriguing properties to be discovered and studied. This project investigated integer sequences satisfying the property that each term in the sequence is the sum of the last two terms. Of particular interest were the structures resulting from the process of dividing the terms in a sequence by some integer m and considering the remainders.



Bio: Jeremiah is a senior majoring in pure mathematics. Over the past four years, his passion for math has grown and matured under the tutelage of Le Moyne’s dedicated math faculty. Jeremiah expects to graduate in May and is currently preparing to enter graduate school in the fall.

3:45 – 4 p.m.

“EXAMINING CHLOROPLAST GENOMES IN ORDER SPHAEROPLEALES”
Daniel Sanchez, Biological Sciences

Faculty Mentor: Dr. Hilary McManus

Abstract: Sequencing and analyzing whole genomes permits better understanding of the evolutionary biology of individual organisms, among other applications. Currently, only one chloroplast genome has been published in the green algal order Sphaeropleales. Comparison of the published genome from the family Scenedesmaceae and newly acquired sequence data from the family Hydrodictyceae will provide insight into evolutionary trends in genome evolution between the two families and within the whole order.



Bio: Daniel is a junior at Le Moyne majoring in biological sciences with a health professions concentration. He will be attending Le Moyne’s Physician Assistant Studies Program in the fall through the 3+2 accelerated bachelor’s/master’s degree program. Daniel would like to thank Dr. McManus and the Department of Biological Sciences for their support, as well as the Student Research Committee for funding his project.

4 – 4:15 p.m.

“GLASSCAPES: VIRTUALIZATION IN GOOGLE GLASS”

Michaella Steinruck and Jean-Philippe Rancy, Business Management and Leadership and Information Systems and McDevitt Undergraduate Scholars

Faculty Mentor: Dr. Martha Grabowski

Abstract: GlassScapes is a Virtualization Application for Google Glass that will bring the computing power of a PC to Glass. Users will sign up on our website and, once they have a user account, a personal desktop will be available to them on any mobile device via a remote server.

Bio: Jean-Philippe has a passion for information technology and has undertaken many internships and opportunities to enrich his technical skills. His career in IT started in elementary school when he aided with community service projects. In high school, his skills developed and he started with programming, technical database design, implementing Web-design projects and improving the technology. Jean-Philippe is currently taking business and computer science courses at Le Moyne hoping to practice and master his technical skills.

Bio: Michaella is currently a junior looking to build her programming skills. Her interest in computers began in high school when her sister taught her some of the basics about computers. She is relatively new to the programming side of things, and is enjoying being able to expand her horizons. Michaella plans to continue her education at Le Moyne in the Information Systems master's degree program.

4:15 – 4:30 p.m.

“CAYLEY GRAPHS: SEPARATING THE WHEAT FROM THE CHAFF”

J.C. Eallonardo, Mathematics

Faculty Mentor: Dr. David Nash

Abstract: In the field of abstract algebra, or modern algebra, a group is a set of elements, and an operation defined over that set. A digraph can be created so that vertices represent elements of a group and the directed edges represent how a generating set generates all of the elements in the group. This specific kind of digraph is known as a Cayley Graph. As there are an infinite number of digraphs, we'd like to be able to conclude whether or not a given digraph is Cayley.

Bio: J.C. is a senior mathematics major. He has worked as an intern at the Department of Defense as a computer scientist and mathematician. J.C. is the president of the Le Moyne College Math Club and is involved in tutoring for computer science students on campus. After graduation, he plans on working for a year or two and eventually going back to school to earn his master's degree or doctorate in mathematics.



4:30 – 4:45 p.m.

“PREVALENCE OF BORRELIA BURGdorFERI IN IxODES SCAPULARIS TICKS COLLECTED AT LE MOYNE COLLEGE”

Ryan Krahmer, Biological Sciences

Faculty Mentor: Dr. Patrick Yurco

Abstract: Increasing deer populations and encroachment have contributed to an increase in the incidence of Lyme disease throughout the Northeast. Our study focuses on the detection of *B. burgdorferi*, the pathogen that causes Lyme disease, within ticks collected at various locations on the Le Moyne College campus. By extracting and amplifying the DNA from deer ticks, we hope to determine the prevalence of the Lyme disease pathogen on campus, creating greater public awareness



Bio: Ryan is a senior biological sciences student, a photographer, and a chef. Her professional interests include obtaining a Master of Public Health and attending medical school. In the future, she hopes to integrate her passion for research with clinical practice. Ryan would like to thank Dr. Yurco for his guidance throughout the project, the Student Research Committee for funding her work, and her friends and family for their support.

1:15 – 1:30 p.m.

“THE PICTURE OF DORIAN GRAY: A STUDY OF MUSIC AND THEATRICAL APPRECIATION”

Natasia White, Psychology

Faculty Mentors: Mr. Matt Chiorini and Dr. Elizabeth Hayes

Abstract: This project explores the effect of music on theatrical appreciation. I adapted Oscar Wilde’s novel *The Picture of Dorian Gray* for the stage with the intention of preserving Wilde’s text and composed music for this adaptation. There will be two performances: one with no music, and one with vocal and instrumental music. The audience will take a survey. I will analyze the responses and draw conclusions about the relationship between music and theatrical appreciation

Bio: Natasia is a senior psychology major in the Integral Honors Program. She minors in theatre arts, music, philosophy and biological sciences, and she enjoys discovering new ways that the arts can improve a person’s quality of life. Natasia is exploring the possibility of attending New York University to obtain a graduate degree in drama therapy. In the meantime, she enjoys working as a personal assistant both within and outside of the performing arts community.

3:30 – 4:45 POSTER PRESENTATIONS

“GOOGLE GLASS APPLICATIONS FOR PERFORMING ARTS”

Steve Weiter, Computer Science and McDevitt Undergraduate Scholar

Gabe Adams, Computer Science and McDevitt Undergraduate Scholar

Morgan Thomas, Physics and McDevitt Undergraduate Scholar

Faculty Mentors: Mr. Travis Newton and Dr. Martha Grabowski

Abstract: The GlassPresenter Application is intended to allow a presentation to be created and shared with multiple Google Glass users at once. Presentations are created in a HTML-based Web application and then shared simultaneously with up to 30 Google Glass devices. This program has potential applications in the performing arts and classroom environments. The conductor’s assistant application prompts a conductor of an ensemble with a display of sheet music that scrolls at a user-defined tempo.



Bios: **Stephen Weiter** is a junior computer science major with a minor in philosophy. He worked as an Intern at Blue Highway developing Web applications before joining the McDevitt Scholars program. When not working or in class, Stephen can be found playing his guitar or enjoying a good book.



Gabriel Adams is a freshman computer science major at Le Moyne College. Next year, he will begin taking engineering courses at Syracuse University to fulfill his prerequisites for the computer engineering master’s degree program. Gabe was excited to work on Glass during his second semester at Le Moyne. He also works for Le Moyne’s IT Help Desk and has previously worked for EMC Corporation, a large data-storage provider.



Morgan Thomas is a senior physics major with an electrical engineering concentration and a minor in mathematics. She’s enrolled in a dual degree program with Syracuse University. Morgan worked for Le Moyne IT for two years before obtaining a yearlong internship at Illumination Technologies. She has enjoyed her last semester developing on the new Glass interface. Next year, she will enter the master’s program in electrical engineering at Syracuse University’s L.C. Smith College of Engineering.

“SUMOYLATION IN *CHLAMYDOMONAS REINHARDTII*”

Devin Clegg, Biological sciences, and Emily Mahoney, Biological sciences

Faculty Mentor: Dr. Beth Mitchell

Abstract: Post-translational modifications are a topic of interest in the biological sciences. Many of these modifications have been studied in great detail, however there is a lot still unknown. One such modification is the process of SUMOylation, in which a Small Ubiquitin-like Modifier (SUMO) group is attached to a protein.



The purpose of our study is to isolate SUMOylated proteins from the eukaryotic unicellular alga *Chlamydomonas reinhardtii*. Eventually we hope to identify the proteins modified in this way as well as to learn their functions.

Bios: Devin is a junior biological sciences major who plans to attend medical school following graduation. Emily Mahoney is a junior biological sciences major who aspires to be a physician assistant following graduation. Special thanks to Dr. Beth Mitchell for her guidance and support throughout this project.

“YOUTH CONVICTION: WHO IS MOST LIKELY TO BE AFFECTED?”

Gabrielle Testani, Sociology

Faculty Mentor: Dr. Jeffrey Chin

Abstract: This paper uses data from the General Social Survey to explore reasons behind youth conviction rates. Analysis of these data suggests that youth conviction rates are highest among youth who complete fewer than 11 years of school, are black, male and who are growing up below the federal poverty line. Lack of education, race, gender and family income all play a significant role in who gets convicted of a crime and who doesn't. These youth had reported a significantly higher rate of conviction than their counterparts. I also discuss implications for this findings as well as suggestions for future research.



Bio: Gabrielle is a senior sociology major with a concentration in criminology. She is the current vice president of Le Moyne College's Sociology Club and has been a member since her sophomore year. Gabrielle is also a member of Le Moyne College's Sociology Honor Society, Alpha Kappa Delta. Next fall she will attend Binghamton University, to pursue a master's degree in social work.

“WRITTEN LANGUAGE AS AN EFFECTIVE COPING DEVICE FOR DIFFICULT EMOTIONAL EXPERIENCES”

Beate Berger, Psychology

Faculty Mentor: Dr. Shawn Ward

Abstract: The goal of this study is to investigate whether or not language can be used as an effective method for coping with and overcoming stressful emotions. Previous studies have claimed that putting negative experiences into verbal or written language should benefit individuals at some point during their coping process and therefore language can be used as a therapeutic method of dealing with emotional distress.



Bio: Beate is 22 and a senior from Germany who started her education in the U.S. two-and-a-half years ago. She is a psychology major and was recently accepted into a graduate clinical psychology program at Pepperdine University in California. After earning her Ph.D., she wants to work in a mental-health setting and help adults who are struggling with mental illnesses.

“EFFECTS OF SALINITY ON FRESHWATER GREEN ALGAL SPECIES MONACTINUS SIMPLEX AND PEDIASTRUM DUPLEX (HYDRODICTYACEAE, CHLOROPHYCEAE)”

India Dancil, Biological Sciences

Faculty Mentor: Dr. Hilary McManus

Abstract: *Monactinus simplex* and *Pediastrum Duplex*, are both freshwater algae of the taxonomic class Chlorophyceae (family Hydrodictyaceae). As such, when grown in labs, both are placed in media mimicking freshwater. Recent studies have indicated that *M. simplex* and *P. duplex* have been thriving in natural waterways with increased salinity without intervention; discovery locations include various Polish Lakes and the Ebro River in Spain. This study explored possible anadromous character of both algal species.



Bio: India is a senior biological sciences major and a Syracuse native. She enjoys her position as a resident advisor in Mitchell Hall, as well as her active role as a Le Moyne Banshee. Currently in the graduate-school application process, India plans for a career as a surgical physician assistant, with a secondary focus in medical research.

“IS COMPARISON THE THIEF OF JOY? EXAMINING INSTAGRAM’S IMPACT ON SELF-ESTEEM”

Briana Corradi, Psychology

Faculty Mentor: Dr. Monica Sylvia

Abstract: This study examined the impact of Instagram on self and body esteem. For two weeks, 59 undergraduate females checked their Instagram accounts daily and “liked” a post. For 29 women in the experimental group, posts consisted of pictures of physically fit females with neutral quotes, whereas for the remaining 30, they consisted of landscapes. “Liking” content during this time was associated with a decrease in self- and body-esteem as it pertained to weight, but an increase as it pertained to appearance.



Bio: Briana is a senior psychology major. She plans on obtaining a master’s degree in social work in the future. Her interests in social media and the quote “comparison is the thief of joy” were the foundational building blocks for her project. She would like to thank the members of her Departmental Honors Committee as well as the Student Research Committee for their support of this project.

“A MODERN EDITION OF SAMUEL ROWLEY’S PLAY *WHEN YOU SEE ME YOU KNOW ME*”

Jennifer Locastro, English with a dual adolescent/special education concentration

Faculty Mentor: Dr. Miles Taylor

Abstract: This independent research project’s aim is to turn Samuel Rowley’s early Jacobean history play about King Henry VIII titled *When You See Me You Know Me* into a modern, accessible text. This research involves transcribing the Early Modern English into Modern English as well as annotating important information throughout the play.



Bio: Jennifer is a senior English major at Le Moyne who aspires to become a high school English teacher. She is currently participating in Le Moyne’s BA/MST 5-year program in order to earn her bachelor’s degree, master’s degree, and teaching certification. She has truly enjoyed this opportunity to learn more about the editing process and would like to thank her mentor, Dr. Taylor, for his support and guidance throughout this process.

“DEVELOPMENT OF VOLATILE BISMUTH FLUOROALKOXIDES FOR ALKALINE EARTH BISMUTHATE HETEROBIMETALLIC MOCVD PRECURSORS”

Cody Webb, Chemistry

Faculty Mentor: Dr. Anna O'Brien

Abstract: Metal-organic chemical vapor deposition is a technique used in the electronics industry to produce electronic thin films, some of which contain bismuth and alkaline earth metals. The sources of these metals are organometallic compounds, which are ideally volatile in order to readily sublime prior to metal deposition, while maintaining structural stability. In collaboration with Syracuse University we have developed a new series of bismuth organometallics using the perfluoro-*t*-butanol ligand system and various neutral co-ligands.

“THE EFFECTS OF PANAX GINSENG ON MAMMALIAN PHYSIOLOGY AND COGNITIVE PERFORMANCE”

Elisa Hannan, Biological Sciences

Faculty Mentor: Dr. Beth Pritts

Abstract: Manufacturers claim Panax ginseng can improve one's overall health. It crosses the placenta; however, ginseng's presence in breast milk is unknown. Rat litters were prenatally exposed, and also possibly via lactation. The Morris water maze, blood assays, and organ protein content will be used to determine the effects of this exposure. Findings will be compared with Maggie Lynch's results, which may allow inferences to be made about the presence/absence of ginseng in rat breast milk.



Bio: Elisa is a senior biological sciences major with a minor in chemistry. She will be attending the University of Connecticut School of Dental Medicine beginning in fall 2014. She would like to extend her appreciation to Dr. Pritts, the Student Research Committee, and the Institutional Animal Care and Use Committee for their support.

“FETAL EXPOSURE OF PANAX GINSENG EFFECTS ON COGNITIVE PERFORMANCE”

Maggie Lynch, Biological Sciences

Faculty Mentor: Dr. Beth Pritts

Abstract: Panax ginseng is reported to improve health and memory. It crosses the placenta and is potentially in breast milk. The effects of fetal and postnatal exposure to high and low doses of ginseng during gestation to birth or weaning on lipid and glucose levels will be determined. Memory will be tested using the Morris water maze. Results will be compared to Elisa Hannan's, where rats will be exposed to normal doses for their weight.

Bio: Maggie is a senior majoring in biological sciences and minoring in chemistry and psychology. After graduation, she hopes to pursue a career in medicine. Maggie would like to thank Dr. Pritts for her guidance and support throughout this research project, the Student Research Committee and the Institution of Animal Care and Use Committee for approving and funding this research, and the faculty of the biological sciences department for their continued support.

“CULTURAL SUSTAINABILITY ACROSS THE GENERATION GAP IN NORTHERN THAILAND”

Frank Sapere, Biological Sciences (Anthropology Minor)

Mallory Munro, Communication (Anthropology Minor)

Emily Powers, English and Communication (Anthropology Minor)

Kelsey Woodrick, English (Anthropology Minor)

Leon Cominsky, Peace and Global Studies

Faculty Mentor: Dr. Deborah Tooker

Abstract: After spending a period of time in Bangkok and Chiangmai, our research group left these urban surroundings to spend almost three weeks in the summer of 2013 in a small village among the Akha people of Northern Thailand. While living among the villagers, each of the five student researchers conducted independent research on issues related to the impact of rapid political and economic change on the people in this formerly subsistence-based and semi-autonomous rural hill community.

Bios: Frank will graduate from Le Moyne College in 2014 with a bachelor's degree in biological sciences and a minor in anthropology. He plans to attend dental school and practice in underserved areas around the world. He also plans to join the U.S. Army Dental Corps.

Leon graduated from Le Moyne College in 2013 with a bachelor's degree in peace and global studies. He plans on pursuing graduate work in international policy studies with a focus on international conflict resolution.



Emily graduated in 2013 from Le Moyne College with degrees in English and communication and a minor in anthropology. She is currently an acquisitions assistant at Cornell University Press, and hopes to someday work as an editor or literary agent.

Mallory graduated from Le Moyne in May of 2013. She earned a B.A. in Communications with a concentration in Print Journalism and Public Relations. Due to her love of people and culture, she chose to minor in Anthropology. This choice allowed her to advance in her studies and provided her with the opportunity to participate in Dr. Tooker's anthropological Asian study along with the AsiaNetwork students. Mallory is currently working for SUNY Cortland as an Alumni Program Manager. She hopes to continue her career in higher education.

Kelsey graduated in 2013 from Le Moyne College with a degree in English and a minor in anthropology. Currently she is fulfilling a Fulbright fellowship as an English teaching assistant at Sripatumpittayakarn School in the province of Ubon Ratchathani in Thailand. During the school's summer break, she will intern with Thailand's Ministry of Education, in the Policy and International Relations Bureaus. When her grant ends in October 2014 she plans to return to the United States. She hopes to find an inner-city ESL teaching position and to pursue a master's degree in either education and anthropology, or educational policy.

“ANOREXIA NERVOSA VS. BINGE-EATING DISORDER: HOW CAUSAL BELIEFS AND LEVEL OF CONTACT AFFECT STIGMATIZATION OF EATING DISORDERS”

Christine Hanna, Psychology

Faculty Mentors: Dr. Brenda Kirby, Dr. Christina Michaelson and Ms. Anne Kearney

Abstract: Individuals with eating disorders (EDs) are generally targets of stigmatization because of their conditions. This study examines how causal beliefs and level of personal contact may contribute to negative attitudes toward the ED subtypes of anorexia nervosa (AN) and binge-eating disorder (BED). These subtypes were specifically chosen in order to further explore the differences in attitudes between a weight-loss ED (AN) and a weight-gain ED (BED).



Bio: Christine graduated from Le Moyne in December 2013 with a bachelor's degree in psychology. She plans to go on to graduate school in the fall to pursue a doctorate in clinical psychology. Christine would like to thank her mentor, Dr. Kirby, and the rest of her research committee for their support and contributions to the project.

“SYNTHESIS OF CHIRICANINE A”

Katie Donovan, Post-Baccalaureate, Pre-Med Preparation.

Faculty Mentor: Dr. Joseph Mullins

Abstract: Chiricanine A is classified as an antioxidant; its structure is similar to resveratrol, the most abundant antioxidant present in red wine. These compounds inhibit the oxidation of human low-density lipoproteins (LDLs) and platelet aggregation. They have also been shown to delay tumor onset in transgenic mice. The aim of my research with Dr. Mullins is to scale up the synthesis of Chiricanine A, which has a known seven-step synthesis. I am experimenting to find a shorter synthetic route, in addition to increased yield.



Bio: Katie is a non-traditional student who has been attending Le Moyne for the past year and a half, taking post-baccalaureate courses for medical school. From Lyncourt, N.Y., she graduated *magna cum laud* in 2009 from Cornell University, majoring in biology and society. She is presently working full time at ARISE Child and Family Service as the training coordinator.

“DESIGN OF A VACUUM CHAMBER FOR EXPERIMENTS IN THIN FILM DEPOSITION”

Kevin Baxter, Physics

Faculty Mentor: Dr. Christopher Bass

Abstract: CFor my project I had to develop and construct a high-vacuum chamber to be used for various experiments. The experiments I chose to focus on were those involving thin film deposition. The process of building a vacuum chamber itself was very complex and educational. The thin film deposition experiments are just begging and will be carried on next year by underclassmen.



Bio: Kevin is a senior physics major with a concentration in civil engineering. He is a part of the pre-engineering program with Syracuse University. Next year he will be pursuing his master's degree in civil engineering at Syracuse University.