

Student Arts & Research Symposium

April 11 & 12, 2013



UNIVERSITY OF ILLINOIS
SPRINGFIELD





Photo Acknowledgements



COVER
Sun Dance
Tyler Phibbs* Communication/Art, Music,
and Theatre Departments and Dave Kube
(Mentor), Art, Music, and Theatre Department

This photograph is the product of a creative idea and experimentation. The process began with basic household items to include, a whisk, steel wool, and string. By encaging the steel wool inside of the whisk it allowed the steel wool to be ignited and spun in circles while being contained at the same time. There is no better feeling than when a unique idea is executed successfully with outstanding results.



PAGE 1
Founder's Residence Hall
Tanya Bhatia* Communication Department
and Dave Kube (Mentor), Art, Music, and
Theatre Department

This photograph captures the beauty of our campus during the warmer months. The way the white blossoms frame the Founder's Residence Hall signify how our campus is encompassed in natural beauty. These trees are just a few of the many charms UIS has to its campus.



ARTS HEADER

Too Sharp
Chelsey Watters* Communication Department and Dave Kube (Mentor), Art, Music, and Theatre Department

This picture captures the essence of youth. The first thing an artist puts to paper is typically a crayon at a very young age. But no matter how old a person gets often times they do not forget how to use these colorful utensils.



MUSIC HEADER

Untitled
Nicholas Davis* and Michael Miller (Mentor),
Art, Music, and Theatre Department

This is a photo of a cast-iron fence at Union Station in downtown Springfield. One of my favorite things to do with photography is get a shallow depth of field. This consolidates most of what is in focus and shows a hyper-detailed foreground. In contrast the background is blurry and abstract which leaves the viewer some room to wonder and imagine. I like this photo because it shows both the craftsmanship of another artist and it displays a piece of history for the city in a new light.



HUMANITIES HEADER

Until Next Year
Chelsey Watters* Communication Department and Dave Kube (Mentor), Art, Music, and Theatre Department

I feel that this picture can represent a variety of things. This small flower was bright and vibrant until time caught up to it. Like many things in nature it will awaken with new life given enough time.



NATURAL SCIENCES HEADER

Proboscis
Megan Calcara* and Dave Kube (Mentor), Art,
Music, and Theatre Department

For as long as I can remember I have been drawn to the world of nature. As a child I would tag along with my mother and aunts to gardens and parks just to look at the plants. I never became as interested as they were until I was getting a closer view with my camera. Through the lens I am able to represent wildlife in the way that I see it, which is something more complex and intimate. This photograph was just one in a series of many refined shots that represent to me and hopefully the viewers, the visual intricacies in nature that can be explored by taking a closer look.



ALCHEMIST REVIEW HEADER

From the Ordinary
Jason Pignon* Criminal Justice Department
and Dave Kube (Mentor), Art, Music, and
Theatre Department

This picture has captured a subject matter that is not meant to be known. The image has a very interesting color and texture, which has left the original subject in an abstract form. The end result was a picture that is very unique reflecting what the viewer wants to see, oppose to what it really is.



SOCIAL SCIENCES HEADER

Lynn E. Err
Tyler Phibbs* Communication/Art, Music, and Theatre Departments and Dave Kube (Mentor), Art, Music, and Theatre Department I captured this photograph walking across a sky bridge in Destin. Florida. As I was standing at one end of the

I captured this photograph walking across a sky bridge in Destin, Florida. As I was standing at one end of the bridge and the sun high above overhead, I couldn't help but imagine an outstanding black and white image of this shadowy sky bridge.

PAGES 24-25

Untitled

Yuanxue Gao* and Dave Kube (Mentor), Art, Music, and Theatre Department





am delighted to offer the Chancellor's support and endorsement of this 2013 Student Arts and Research Symposium. This important event, Lateral featuring a broad variety of creative and research endeavors of both undergraduate and graduate students, epitomizes the mission of our university to provide an intellectually rich, collaborative and intimate learning environment for our students.

I well remember the first opportunity I had as an undergraduate to present my own research. It was a challenging and thrilling experience and one that encouraged me to continue my academic endeavors and aspirations. Like the UIS students presenting at the Symposium, I was mentored by a wonderful faculty member who provided the example and advice that I needed to develop my ideas, conduct my project and plan my presentation. I sincerely thank the many faculty members who have provided the mentorship that lies behind each student's presentation. Each of those UIS faculty members affirms our collective commitment to high standards of scholarly excellence.

Congratulations to all of our StARS Symposium student-presenters! With your presentation, each of you contributes in a positive way not only to your own educational experience, but also to the intellectual environment of our campus. I hope you will take a few moments today to thank the faculty members who have mentored you and prepared you for this day's achievement.

I sincerely appreciate the contributions of all faculty, staff and students who have worked so hard to provide this wonderful opportunity.

With all best wishes,

Jusanj. Kol Susan Koch, Chancellor

University of Illinois Springfield



It is my pleasure to welcome you to the 2013 Student Arts & Research Symposium at the University of Illinois Springfield. The Symposium celebrates the active scholarly inquiry and creative endeavors of some of our most talented students, who have been working under the skilled mentorship of our outstanding faculty. It represents an exciting opportunity for them to share their work with a broader community, and I am delighted that you are with us to share in the intellectual engagement and excitement of their discoveries. Your presence and interest in our students' work is essential to the success of the Symposium, for presenting one's scholarship to others, explaining the procedures and outcomes, and answering the questions that inevitably arise are all an important part of the scholarly process itself.

Faculty-student collaboration is at the heart of the educational experience at UIS and, as you will see from the student presentations, it is a powerful partnership for learning and development. The students who are presenting their work have been learning not just by listening and reading but by doing as well. They've been applying what they learn to new endeavors -- grappling with real-world problems, testing new ideas, discovering new knowledge, developing new approaches and insights, and finding new and innovative ways to creatively enrich our experiences of self, other, and the world. Presentations have been invited from all academic disciplines – the arts and humanities, life sciences, physical sciences, social and behavioral sciences, and professional programs. Different forms of scholarship will be represented, including oral readings and presentations, art exhibits, and musical performances, as well as research posters and presentations. I think you will find much of interest.

Speaking on behalf of the faculty and staff of UIS, we are very proud of our student presenters. We congratulate them on their scholarly achievements and on having been selected to share their scholarship in a professional forum and public venue.

I also want to extend my sincere appreciation to the UIS faculty members whose dedication to excellence in teaching, scholarship, and service is so apparent in the number and quality of presentations included in the Symposium, and in the Symposium event as a whole. I commend them for creating a dynamic atmosphere of scholarly inquiry and exchange that inspires, guides, and nurtures students toward greater levels of achievement.

I am especially grateful to members of the Undergraduate Research Steering Committee & the Student Arts & Research Symposium Committee. The Symposium simply would not have been possible without their leadership, commitment, and hard work.

Best wishes to all for an intellectually engaging and enriching 2013 Symposium experience!

Lvnn Pardie

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Vice Chancellor for Academic Affairs & Provost



Keynote Speaker Mary Jo Bang, M.F.A.

Mary Jo Bang is the author of six books of poems, including *The Bride of E* (2009) and *Elegy* (2007), which received the National Book Critics Circle Award. Her translation of Dante's Inferno, with illustrations by Henrik Drescher, was published by Graywolf Press in 2012. She received an M.F.A. in creative writing from Columbia University. Ms. Bang is currently a Professor of English at Washington University in St. Louis.



Keynote Speaker Ryan Ewing, Ph.D.

Ryan Ewing is an Assistant Professor of Geological Sciences at the University of Alabama. He is currently exploring the surface of Mars with the NASA Curiosity team. Dr. Ewing studies how wind shapes planetary surfaces and how the resulting geomorphic record is archived in ancient rocks. His research uses field work, remote sensing, and numerical modeling to unravel the paleoclimate and paleoenvironmental records locked within these wind-blown sediments and rocks across these worlds. Dr. Ewing's presentation is titled, "Mars' Past and Present Dynamic Environments."

The StARS Committee would like to acknowledge the following people and organizations for supporting the 2013 symposium.

Faculty Mentors for their hard work and dedication to students' creative work and research: Kristi Barnwell, Meagan Cass, Hua Chen, Adriana Crocker, Keenan Dungey, Richard Gilman-Opalsky, Sharon Graf, Shane Harris, Stephen Johnson, Holly Kent, Marc Klingshirn, Dave Kube, Mike Lemke, Yi-Sz Lin, Amy McEuen, Roger McNamara, Keith Miller, Mike Miller, Layne Morsch, Nikki Overcash, Karen Reinke-Pressley, Sheryl Reminger, Hinda Seif, Frances Shen, Yona Stamatis, Karen Swan, Carrie Switzer, Missy Thibodeaux-Thompson, Lucia Vazquez, Abigail Walsh, Benjamin Walsh and Marcel Yoder.

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Undergraduate Research Steering Committee:

Hei-Chi Chan

Keenan Dungey (Director)

Holly Kent

Brian Moore (Administrative Clerk)

Dennis Ruez

Sarah Sagmoen

Frances Shen

Karen Swan

Benjamin Walsh

StARS – Student Arts & Research Symposium Committee Members:

Meagan Cass

Layne Morsch

Sheryl Reminger

Carrie Switzer

Abigail Walsh

Amanda Winters

The following businesses and organizations for their donations to the prizes for the symposium winners:

The Cardologist

Chancellor's Office

Del's Popcorn Shop

Prairie Archives

Samuel Music

Vachel Lindsay Home





* Asterisks indicate student presenters.

Play Reading: *Bad Breath* by William Inge



Gretchen Addis* English Department, Theatre & Teacher Education Minors and Missy Thibodeaux-Thompson (Mentor), Art, Music, and Theatre Department

I have cast and directed a reading of William Inge's short play Bad Breath. Through this reading, I hope

to facilitate a discussion on modern consumerism and product promotion. The play itself was originally written in the 1950s, but its representation of advertisements is surprisingly prescient. It feels like any moment from the play could be ripped out and used for a commercial today. The brilliance of this is that within the day-to-day life setting of the play, the entire situation is absurd. Yet we accept advertisements like these on television and radio without question. What does that say to us about the nature of product placement and advertising? Produced by special arrangement with ICM Partners in NYC.

Public



Akeem Freeman* and Dave Kube (Mentor), Art, Music, and Theatre Department

The theme I explore with my work is the humanization of mythical creatures that are not human. I want to create digital images that show them as having character traits more associated with human beings.

These traits will be highlighted flaws associated with humanity. I want to depict my subject struggle with things only humans struggle with. For instance, fears and emotions that we, as human beings, struggle with on a day to day basis, while maintaining the traits that make them more than human. I want to show my audience no matter where we come from. I want my audience to leave with the realization that we share more similarities with each other than differences.

Twisted Religion



Thomas A. Gebhardt* and Shane Harris (Mentor), Art, Music, and Theatre Department

Drawing = easy, Poetry = easy, Short Stories = easy. Styrofoam, plaster, cardboard, what? Scrap, Junk and Wood. Me, no way!

Intimidating! Drawing with Charcoal = never, Play-Doh = easy, who cant? **Ceramics** = not in my wildest dreams. Intimidating!

As long as I can remember I have been pretty creative. But my creativity and skills were limited to what I knew to be easy. Some things I shied away from due to intimidation. Drawing and writing seemed to come easy. Here came the intimidation factor.

With 3D I was expected to work with several types of materials. My head spun with anxiety and intimidation. Then came Ceramics. Its clay, how hard can it be, Right?

The thing is, when you have excellent, patient instructors, the type who encourage and praise you all the way through as I did, intimidation is no longer a part of your vocabulary. Being challenged by my instructors brought out the best in me. Making me strategize and even rethink art all together. Even though both classes came with a set back or two, I was able to step back, re-assess move on. With even better results than originally planned.

Inspiration comes from many places. What appeals to my senses is everyday life, music and nature. Family and friends are most important. With this piece my belief in the faith in Jesus and the disappointment in this world. Jesus gives us love and we have twisted it beyond

Guess what? Now I am creating like never before. I love it. Not bad for a first year art student, eh?

Who's intimidated now?

Art Nerdveau: The Universe Is In Us



Kimberly Hobby* and Dave Kube (Mentor), Art, Music, and Theatre Department

I do not create work for the highest brows or even for the art community. I create for the nerds, geeks, and dweebs who cannot draw. I was blessed with the

ability to draw and design, but cursed with the unfeeling, cold, and logical mindset of a Vulcan. In my work I try to bridge the gap between art and science. I have combined my love for science into my favorite art period: Art Nouveau, an art movement that has had a comeback, though it has been mainly used for pop culture references. Science, and space more so, has always intrigued me since I was young. One of the most notable and living scientists today, Neil Degrasse Tyson, has said the world worships celebrities as superheroes or icons and leaves the scientists that change the world by the wayside. I thought he was right and I would like to help show his and other scientists accomplishments to the world. I thought that since Art Nouveau was seeing such a resurgence, it would be a fun and interesting avenue to go down while I brought to light the overlooked superheroes of the world, scientists. Taking elements from one of the most notable Art Nouveau artists, Alphonse Mucha used in his posters and advertisements, such as heavy outlines and intricate background work, I have created my own posters and advertisements for the icons that truly matter, like Neil DeGrasse Tyson.

The God of Google



Kayla Ico* and Michael Miller (Mentor), Art, Music, and Theatre Department

My work is about how people have come to revere technology as a god. This is done by referencing an ancient society, in this case the Egyptians, and having people worship the god of Google in a similar

manner as it was done long ago. The work should look as if it had come from centuries ago but with a contemporary subject. I'm interested in this worship because I've noticed in daily life, people are constantly checking their phone, or on their laptop, and even when someone knows a fact off the top of their head, they consult Google. The reason I chose the ancient Egyptian style to emulate was because they were both easily recognizable and they used the abstracted figures to convey stories. The way the figures are posed almost suggest a language among itself. My work also uses abstract figures to show how many people interact with their god of technology. Another aspect of this I explore is the fact that people will isolate themselves in order to continue their worship of technology. People will separate themselves from those around them in order to spend more time on the internet.

Growth



Allan J. Masterson* and Shane Harris (Mentor), Art, Music, and Theatre Department

I think of personal identity as a mass of individually discovered tumors. All of these tumors are initially manifested from outside stimuli such as social norms

and personal interactions. The growth is perpetuated however, by our own thoughts about who we are, and who we should be. If left unchecked certain tumors can grow to take over, and be seen as an entirety, not a part, of who you are. To function acceptably, one must learn how to excise these tumors periodically. They are then measured, dressed up for consumption, and bound in place, so as not to grow larger than desired. With constant work and analysis, one is able to create a whole identity that is much bigger than any individual part.

Disclosure



Mercedes Mayoral-Wiesner* and Dave Kube (Mentor), Art, Music, and Theatre Department

As I struggled endlessly with the process of generating ideas and concepts, experimenting with materials and techniques, I found myself searching desperately for

the "answer". I know now that this process is not a guided search but rather an intuitive adventure that is yours and no one else's. I was reaching and searching for something that I eventually found was right in front of me all along. I take photographs. I take photographs every single day. I do not stow away my camera and wait, I have found this leads only to miss opportunities. Instead, I think of myself as a type of documenter. The photographs I take are a timeline, a journal (I've never been much for text), of my life from a day-to-day basis. These photographs range from more personal, intimate moments to abstract, static images; though all are an expression of myself, something that I thought was worth the few extra moments of attention. For the

purpose of the Senior Show I wish to choose the more personal, intimate moments that I hope the audience can relate to in some fashion, in their own lives, directly or indirectly. These photographs are a dissection of myself in which I am inviting any willing audience

Decon Recon



Anna Mulch* and Shane Harris (Mentor), Art, Music, and Theatre Department

As an artist, I enjoy working with different materials and seeing how the materials can be re-appropriated to have different meanings or contradict their original meaning. As a political activist I feel the need to

question and bring attention to issues that still face women of all cultures today. I have done this by using objects that are well known and in some cases, a house hold name, to challenge the preconceived notions of society of femininity and beauty as well as bring light to issues that plague our society. I do this by using plastic dolls in a Darwinian Study and by creating individual ceramic flowers that are surrounded by a cage with no hope of escape. The idea that a household icon can be used in such a different manner that it was created to be used in is uncomfortable and jarring. This is a feeling that I want to get across because the automatic acceptance of plastic dolls in our society is unnerving, I am just reversing that feeling. The flowers are all individually made and crafted and are different shapes and sizes, as women in America are. The sheer stark beauty of the white flowers is a stark contrast to the environment they are placed in, encouraging the viewer to see the positive beyond the negative and give a sense of reconstruction to the feminine.

Mutations



Jared Strohm* and Michael Miller (Mentor), Art, Music, and Theatre Department

My work is about mutations. More specifically how the relationships we develop and the environments we put ourselves in mold us into mutated forms of

our original self. These Mutations can be good or bad but either way they are inevitable. In my work I depict different mutations I myself have experienced or that I noticed others around me are experiencing. I express this most prominently in my off the wall sculptures. These works are constantly mutating for the audience. For instance someone who looks at the sculpture from directly in front will not get the same depiction off the mutation as a person who is viewing it from farther back or from the side. By adding different tier to what would otherwise be a flat graphic I bring the mutation off of the flat paper into our realm where it can constantly mutate along with the rest of us.

Vulnerable Hominoids



Barbie Sutheard* and Shane Harris (Mentor), Art, Music, and Theatre **Department**

From the time we are children, we are exposed to animals being personified as ourselves. We visualize these characters as they were an example of us or even

our loved ones even though we all know that real animals cannot behave as we do so specifically. However, we both share vulnerabilities that tie us together just enough that this emotional connection can exist between animal and human. Working with the animal figure also helps rid off common stereotypes that might stray the viewer from the actual intent of the work. Vulnerabilities such as sleep, sex, love, sickness, and old age are explored. I would like to keep the notion of vulnerability being positive or negative entirely open to interpretation of the viewer and how it relates to their own experiences. In fact, I invite the viewer to feel both at some point of viewing my works. The human emotional connection can be a double edged sword and not always go as we plan in our heads, and that is the motive to most of my work. The risks we all end up taking in order to connect with someone really drives me to sculpt rabbits that are charged with the courage to be vulnerable to my viewers in hope that they too will love them as well. I hope to inspire those to seek courage in opening themselves up more to those around them in a way that most of us might not always feel comfortable.

Childish Endeavors



David Ryan Swaar* and Michael Miller (Mentor), Art, Music, and Theatre **Department**

I've been an artist since I could hold a crayon; at least that's what my parents have always told me. Art, music and creative processes have been constantly

flowing through me in all stages of my life, from childhood, to adolescence, into my adulthood. However: the struggle to "grow up" has been the bane of my adult existence. I feel like a big kid; I like childish things, I enjoy childish behavior. Getting older does not mean I see myself much differently than I did a decade ago, or even 2 decades ago in some cases. Growing up has always meant more responsibility, chores and honey-do lists, more headaches, more bills, and less time for childish fun. As a father, I know the importance of setting a good example for my children, especially my son. Good male roll models can be hard to find in society today, and we all have our idols we look up to, to be inspired by. I want to be the kind of man and father who can provide a good life for his family, a man my son can be proud of and brag about, all the while having childish fun. I still aspire to "adultness", a more structured and potentially static twilight, but I still don't wanna grow up...not NOW...and no one is gonna make me, not until my kids are good and ready.







Musical Performances by UIS Musicians Thursday 5:00-6:00 p.m. Brookens Auditorium

Ballo Handel Romance Sperger Scotch Quick-Step Beethoven Aliena Rogers,* flute; Janet Jones, violin; Connie Christianson, clarinet

Christoph Gluck Minuet A Farewell Henry Purcell Melissa Frost,* flute; Phylicia Gaddis,* flute

Trio Op. 159 No. 3 Carl Reinecke Sharon Graf, violin; Lynn Fisher, cello; Siwen Tang,* piano

Bach/Gounod Elizabeth Farris,* soprano; Pamela Scott, piano

Three Pieces from Pirates of the Caribbean Badelt/Zimer/arr. Duinen In the Hall of the Mountain King Edvard Grieg/arr. Halferty David Dang,* euphonium; Aliena Rogers,* euphonium; Eric Foster,* Tuba; David Miller,* tuba

Dmitiri Shostakovich The Mechanical Doll Idvllio Pattapio Silva Melissa Frost,* flute; Laura Drennan, clarinet and piano

Sweetie Pie **Bruce Evans** "The Kid" Edward Ory/ Arr. Bruce Evans Gary Kerr, alto saxophone; Bruce Underwood, alto saxophone; David Hecht,* tenor saxophone; Jared Osland,* tenor saxophone; Gus Pflugmacher, baritone saxophone

Friday 11:00-11:30 a.m. PAC Lobby

Ernst Köhler Wie Schön leucht' uns Canzona per Sonare No. 1 "La Spiritata" Giovanni Gabrieli Sharon Graf, trumpet; Samantha Coad,* trumpet; Ryan Philyaw,* horn; Elizabeth Jones, euphonium

Pavanne Op. 50 Gabriel Faure/ arr. Birtel Josh Eastby,* viola; Pamela Scott, piano

Empty Chairs at Empty Tables from Les Miserables Claude-Michel Schönberg John Spurgeon,* tenor; Pamela Scott, piano

Leroy Ostransky Arioso Trio No. 1 Joseph Haydn

2. Andante 3. Allegro

Meghan Lindstrom,* flute; Andrew Dambrasukas,* oboe; Kaleb Fowler,* clarinet



Pamela Scott & John Spurgeon*



Josh Eastby*



Lynn Fisher, Siwen Tang,* and Sharon Graf



Pamela Scott and Elizabeth Farris*



Gus Pflugmacher, Jared Osland,* David Hecht,* Bruce Underwood, and



Aliena Rogers,* David Miller,* David Dang,* and Eric Foster*



Melissa Frost* and Laura Drennan



Samantha Coad,* Elizabeth Jones, Sharon Graf, and Ryan Philyaw*



Andrew Dambrauskas,* Kaleb Fowler,* and Meghan Lindstrom

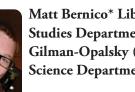


Melissa Frost* and Phylicia Gaddis*





Jean Baudrillard: The Man of Ressentiment and the Possibility of Politics



Matt Bernico* Liberal & Integrative **Studies Department and Richard** Gilman-Opalsky (Mentor), Political Science Department

Jean Baudrillard is a theorist of great controversy. Working out of the post-Marxist and postmodern

trajectory, Baudrillard has put forth a great deal of theory toward a postmodern critique of reality. The theory that Jean Baudrillard presents is fascinatingly brilliant, however it is politically dissuasive. The overall project of this essay is to show that first, Baudrillard's theory is incredibly useful, but it leaves one in a state of, what Raoul Vaneigem calls ressentiment. However, Baudrillard's theory is not something that should be given up so easily; this essay argues that one can leave the bulk of Baudrillard's theory intact with few only a few reductions if one takes the advice of Raoul Vaneigem for overcoming ressentiment. Vaneigem's theory pushes one beyond political dissuasion toward a revolutionary politics. Finally, through the synthesis of Baudrillard, Vaneigem, and John Holloway a practical and viable politics beyond Baudrillard's initial theory can be formulated.

Doomed to Failure: The Downfall of Okonkwo in Chinua Achebe's Things Fall Apart



Tawna Brown* and Roger McNamara (Mentor), English Department

Chinua Achebe (1930-) played a pivotal role in the founding of African literature. His works outline the African experience, especially as it pertains to the events and effects of colonialism. One such work, Things Fall

Apart, traces the effects of colonization from the eyes of the colonized, specifically the Igbo clan in Nigeria. In particular, this work focuses on the life of Okonkwo—a man who has risen out of poverty into wealth through his own determination, but ultimately is ruined during the period of colonization. Because Things Fall Apart grounds itself in a colonial period, there is a tendency to only criticize colonialism for Okonkwo's downfall. However, in doing so, the actual plot often is ignored. By judging the entire book by its last act, we imply that the previous actions are irrelevant to the plot. Instead, if we examine these often-overshadowed events, we see that Okonkwo's actions fall into a pattern that simply continues after the arrival of colonialism. Prior to colonialism, Okonkwo acts rashly because he fears becoming like his father. His fear also leads him to be prideful and condescending. These actions cause him to lose his position within the clan. Okonkwo's status continues to decline after the entry of colonial rule, and concludes with his final break with the clan's traditions—his suicide. This paper criticizes the assumption that colonialism is exclusively responsible for the tragedy in *Things Fall Apart*, and it argues that issues beyond colonization are equally to blame.

Operation Cyclone: The Biggest Blowback in CIA History



Dexter M. Burns* Global Studies Department and Kristi Barnwell (Mentor), History Department

Since its founding on September 18, 1947, the United States' Central Intelligence Agency has always been a top secret organization. Known for gathering

foreign intelligence to assist the president and policymakers, the CIA is quite valuable to the United States. It is also notorious for its failed covert operations abroad. This paper examines CIA mission "Operation: Cyclone," which sought to overthrow the Soviet-friendly communist regime in Afghanistan in 1979. The coup succeeded, but the primary objective of establishing a pro-Western government never came to pass. The unintended consequences of this CIA action led to instability in Afghanistan, making it possible for the Taliban and al-Qaeda to flourish in the region. I argue that this miscalculation led to the darkest crisis the United States has ever faced, the September 11th attacks. This paper uses primary source documents, recent CIA and congressional publications on terrorism, including the 9/11 Commission Report in order to trace the connections between Operation: Cyclone and the development of the 2001 terrorist attacks. In examining the history of Operation: Cyclone, it becomes clear that the decisions made by the CIA, although well intentioned, ultimately led to disaster. This research raises questions about the short-sighted nature of America's covert operations abroad.

Obierika's Challenge to Society



Thomas Clark* and Roger McNamara (Mentor), English Department

Hailing from the West African nation of Nigeria, Chinua Achebe is known as "the father of modern African writing." Things Fall Apart is his magnum opus, one of the first African novels written in English

to receive global critical acclaim. The story is set in Pre-colonial Nigeria towards the end of the 19th century, highlighting the conflict between colonialism and traditional culture. I focus on this conflict through a secondary character named Obierika, a well-respected man in his community, and overall exceptional thinker. Obierika's ideas helped formulate my argument that he challenges the customary relationship that morality holds in both Igbo and European society and individual members belonging to them, including himself, through the death of his twins and by defending his own manhood in relation to his opposition of ritualistic execution, and through the protagonist Okonkwo's eventual suicide. My case is focused on Obierika because he is the sole character who confronts both Igbo and European societies, thus making him unique. While he is critical of his own culture, Obierika also challenges European society in their practice of colonialism. He recognizes European religion in addition to European law as the stratagems used to infiltrate and sequentially fragment traditional African societies.

The Anne Boleyn Problem



Ariel Dunn* and Holly Kent (Mentor), History Department

Historians and Henry VIII's contemporaries alike have argued over what caused King Henry VIII to decide to pursue a divorce from Catherine of Aragon. Unfortunately, Anne Boleyn usually bears the blame

in these arguments. In my paper, I demonstrate that Anne Boleyn was not the initiator of Henry VIII's divorce. I begin my paper by establishing a timeline of Henry VIII's divorce. I demonstrate that Henry VIII had begun making inquiries about his marriage as early as ten years before he became enamored with Anne Boleyn (Duncan & Derrett, 1963). Such a timeline suggests that Anne Boleyn could not have been the initiator of Henry VIII's divorce because she was simply not in the picture at that time. I also put forth the idea that it was actually dynastic instability which caused Henry VIII to pursue divorce. The Tudor dynasty was a very new dynasty which has been founded on questionable circumstances. Without a legitimate male heir Henry VIII's dynasty was in danger and his current wife could no longer have children. I also examine the letters exchanged between Anne Boleyn and Henry VIII. These letters suggest Henry VIII withheld from sexual relations because he was not willing to risk having another illegitimate child (Byrne, 1968; Bernard, 2010). Such letters would contradict the legend that says Anne Boleyn convinced Henry VIII to divorce Catherine by withholding sexual relations. By making Henry VIII the controlling party in the relationship, these letters disarm Anne Boleyn of any leverage she might have had to influence Henry VIII's divorce.

"The Harley Bitch": A Creative Writing Reading



Lacey Jean Frye* and Meagan Cass (Mentor), English Department

"The Harley Bitch" explores the definition of "trashy women" within the context of growing up in the Midwest during the 1980s. As a young girl found in a similar setting to Evelyn, the fourteen year old

protagonist, I grew fond of "trashy women" who displayed a sense of independence, which was as much about sexuality as it was to sustain an existence parallel to their mothers and grandmothers—the only existence they were privy to. Various stages of the writing process have allowed the tale to become more than just an analysis of "trashy women" and their stereotypical dumpster deadbeat counterparts. Evelyn speaks to those avoiding such stereotypical paths but the story also illustrates patterns of influence that hold significance in Evelyn'sdevelopment. As a result of Evelyn's shifting family dynamic, she is unable to identify a true sense of place and thus, is unable to establish a true sense of self-value. Through analyzing contemporary fiction by Alice Munro and Bonnie Jo Campbell I further concretized themes of place and gender roles in the context of a young woman's self-worth. Quite similarly, my understanding of romantic love through the lens of an independent female protagonist has altered considerably due to Dorothy Allison's short fiction collection, "Trash" as well as by her illustrations of "trashy women."

Chinua Achebe's *Things Fall Apart*: Tragedy or Fate



Elizabeth Howell* and Roger McNamara (Mentor), English Department

Chinua Achebe is a renowned Nigerian author, professor, and literary critic. One of his best known works is a novel entitled *Things Fall Apart* (1958). This novel examines the impact British colonialism

had on the Nigerian people, the Igbo society in particular. It paints a very vivid picture of one Igbo man's trials to fit in with his society and, later, to either adapt to the colonization of his village or suffer the consequences. The novel's protagonist, a man named Okonkwo, spends his entire life working to build up his reputation among his fellow village members, only to be subjected to a series of unfortunate events that ultimately leads to his tragic death. My claim is that Okonkwo's suicide was the result of how he felt the Igbo society he so loved betrayed him by conforming to the rules the British colonizers tried to enforce upon them. When Okonkwo realized that everything he had worked so hard for, had spent his whole life to build, was being cast aside by his society and that they were conforming without a fight, he discovered that he no longer fitted in with the society that had once valued him. All of the longstanding customs and traditions of his people were forgotten and new ones took their place. Upon discovering that he could not conform, Okonkwo took his own life.

Older Generations and their Influence on Integration in Adichie's "The Headstrong Historian"



Jessica Jasinski* and Roger McNamara (Mentor), English Department

Chimamanda Adichie is a recently established Nigerian author who represents the newest generation of African writers who still examine the impact of colonization on the African continent. During the

nineteenth century many European countries colonized Africa, and in the process introduced new social structures, including Christianity, Western education, and Western forms of government. This, in turn, disrupted indigenous African social traditions and norms and created conflicts between those Africans who embraced "modern" Western culture and those who resisted it. In her short story "The Headstrong Historian," Adichie shows how the integration of these two distinct cultures is difficult but possible. The short story illustrates the life of Grace, a child who is a part of a new generation, torn between traditional African culture and European modernity. Her father expects her to discard her roots, while her grandmother encourages her embrace them. Grace struggles to find equilibrium in order to be content in life. It is through the aid of the older generation, in this case, her grandmother—a strong female role model—that Grace is able to successfully merge these different cultures.





Progress on the Prairie: The Influence of Farmers and Rural Interests on Public Road Policy in Illinois, 1918-1930



Brockton G. Lange* and Holly Kent (Mentor), History Department

This paper discusses the role that farmers' groups played in influencing public road policy in Illinois during the hard roads movement of the 1920s. Rural interests dominated Illinois' road management for the

century following statehood, evidenced by state highway policy and the pace of road construction in downstate areas. The end of World War I, however, signaled a sharp decline in farmers' influence, due in part to the Progressive movement, advances in road construction technology, and a crippling agricultural depression. As state highway official began constructing a new highway system across the state, farmers and other rural groups voiced their resistance to paved roads and the centralization of the state's highway authority. Many historians have attributed this reaction to a widespread cultural resistance to progress and a fear of urban incursion into rural life. By using rural newspapers and previously overlooked publications of the highly influential Illinois Farm Bureau, this paper challenges this view. It argues that Illinois' farmers were advocates for hard roads as long as they served rural interests and that the complicated relationship between rural and urban interests was characterized by compromise as well as conflict. By the end of the 1920s, rural interests had again assumed an important, though diminished, place within Illinois' public road policy.

The Female Condition: An Examination of Postcolonial Africa in Tsitsi Dangarembga's Nervous Conditions



Sock Ho Lim* and Roger McNamara (Mentor), English Department

Tsitsi Dangarembga (born 1959) is an award-winning Zimbabwean author and filmmaker, and is considered a major contributor to African feminism and post-colonial literature. Her semi-autobiographical novel,

Nervous Conditions (1988), explores the nascent challenges of young women gaining a Western education in a patriarchal and postcolonial Africa. The novel is centered on a young girl named Tambu, who is taken to her Uncle's mission school to gain an education; however it is through her cousin, Nyasha, that Dangerembga reveals the full representation of a "nervous condition." While reading the novel, it becomes quite clear that Nyasha sees her mother's (Maiguru) acceptance of her role as oppressed matriarch of an African family as unacceptable for someone so highly educated and Anglicized. Throughout the novel, Maiguru defers to her husband, Babamukuru, for important family decisions, and the house is run under his iron rules in regards to their children's behavior and punishment. Though it is easy to reduce and blame colonialism for Nyasha's condition, this would devalue the complexity of the Shona people and reduce Nyasha's struggle to something anchored to a past that cannot be reformed. While colonialism is pervasive and malicious, and whose byproducts – such as an opportunity for a Western education - contribute to Nyasha's "nervousness," it is Nyasha's willful personality and fear of being subjugated that is the cause of her rebellious attitude toward her father, and leads to her ineluctable condition.

Fiction Reading: Writing Central Illinois RCA 630-TS



Erich O'Connor* and Meagan Cass (Mentor), English Department

I will present a story dealing with a man who is an antiques collector. This piece is a ghost story that also deals with how people react to being reminded of a family member who has recently died. It also deals

with what steps the antiques collector it taking to save his marriage. I was influenced by Italo Calvino after reading *Cosmicomics*. I was also influenced by Jonathon Lethem's novel *Men and Cartoons* and the way he uses machinery in his stories.

"Love is a Strange Word for This": A Creative Writing Reading



Donald Squires* and Meagan Cass (Mentor), English Department

"Love is a Strange Word for This" tells how infatuations or overly-active imaginations can confuse the feeling of love. The story follows a protagonist coming to terms with a failing marriage by projecting a myth

onto a new woman, a woman who perhaps only exists through hearsay, who may or may not be ten feet tall, and who is very much seen as a threat to the patriarchy of a small, Midwestern town. The character finds himself drawn to the myth of this woman, and seeks her out regardless of her actual existence. The story examines the idea that perhaps we love the things that we can't have, or the things that do not even exist in a concrete form, and perhaps that makes us love them even more. The story also touches on the stereotypes of gender roles and the consequences of turning a woman into a myth, regardless of whether that myth is attractive or grotesque. Still, mystery and idealism draw us to a thing, not the ordinariness that we find as we come closer to it. To be in love with a person, an object, or an idea – to have such a strong, pulling force to those things – is perhaps as fantastical as searching for someone, or something that doesn't and cannot exist in reality.

The Tragic Clash between Okonkwo's Individualism and Igbo Collectivism within Achebe's *Things Fall Apart*



Kathleen Sullivan* and Roger McNamara (Mentor), English Department

Chinua Achebe (1930) is an internationally renowned Nigerian writer, professor and critic. His groundbreaking first novel *Things Fall Apart* (1959) became an international success, and it opened the

way for other Africans to give voice to a people silenced by colonial rule. Things Fall Apart explores the negative impact that the incursion of British colonialism wreaks upon a once well-functioning Igbo community (a clan within Nigeria). While exploring this major issue, Achebe delves into the personal problems that the protagonist, Okonkwo, battles in adapting to a changing society. While Okonkwo's suicide illustrates the destructive impact of colonialism upon Igboculture, I argue that the clash between Okonkwo's individualism and the Igbo's submission to the gods foments his decline which colonialism only completes. Okonkwo strives to achieve the greatest prominence within his society, but his efforts are crippled by an obsessive fear of failure, of becoming like his unsuccessful father. This fear impels him to prideful individualism and impulsive violence in his battle for success. The negative results of Okonkwo's violence, as when he breaks the Week of Peace or kills his foster son, highlights the conflict between his fear-driven individualism and the god-fearing, communal Igbo society. Essentially, Okonkwo becomes the classic tragic hero whose individualism and pride lead to his undoing. Beyond the larger, conspicuous tragedy of the destruction of the Igbo society by colonists lies the tragic personal irony of a man whose lifelong battle to contradict his shameful father ends in a similar, sad end.

"Plenty of Room with Nowhere to Go": A Creative Writing Reading

Nicholas Teeter* and Meagan Cass (Mentor), English Department

"Plenty of Room with Nowhere to Go" is a creative work that deals with alcohol abuse, unemployment, and failing romantic relationships. The story centers around the protagonist, Louis Waters, who struggles with writing and what it demands of you. Drawing from a Mid-Western setting and attitude, this story explores a world going one way and a young man going another.

The Old Ones: An Original Coming-of-Age Horror Story



Robert Von Nordheim* and Meagan Cass (Mentor), English Department

"Old Ones" is an original coming-of-age horror story, using elements of young adult novels, Judeo-Christian lore, and the occult to describe a teenager too committed to his afterschool hobbies. The short piece

also references the phantasmagorical themes of classic horror authors, like Edgar Allan Poe and H.P. Lovecraft, while remaining realistic and relatable. "Old Ones" allowed me to delve into some of my greatest authorial obsessions and seriously explore issues of family, identity, adolescence, and organized religion. The resulting work reveals the influence of stories, fictional or otherwise, on our beliefs and identities.

War Widows and Black Bombazine: Mourning Dress in the American Civil War



Laura Weiss* and Holly Kent (Mentor), History Department

Mourning dress seemingly presents paradox between the display of personal grief associated with losing a loved one and the display of beauty and body associated with fashion. However, during the

American Civil War, mourning dress was not completely removed from the realm of fashion. This research project examined the importance of mourning to women during the war, and the relationship between mourning customs and the larger fashion world of the time. Due to the high mortality rates for soldiers during the Civil War, there were large amounts of women at home left in mourning. These women clung to mourning rituals as a way to comfort themselves. The pervasiveness of mourning turned mourning dress into one of the popular styles during the war. Because of this, fashion periodicals and the style sections of newspapers had to cover it. While some accepted mourning as a type of fashion, others were more resistant to that idea. Godey's Lady's Journal, the highest circulating women's magazine of the era, included discussions of mourning dress, but in an effort to stay apolitical either tried to hide these discussions or seemed to write about the black dresses and accessories with distaste. Between 1861 and 1865, the color fashion plates Godey's was so well known for only included 4 examples of mourning clothes. Mourning was not kept out of the fashion world, but it was never fully accepted either.

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🚳 🍞 🕸 ALCHEMIST REVIEW



The *Alchemist Review* is a 30-year literary tradition at the University of Illinois Springfield and is an online and printbased journal of literary fiction, poetry, and visual arts dedicated to publishing dynamic works by emerging writers and artists in the University of Illinois Springfield community. With an appreciation for print culture, as well as digital technologies and mixed media, the Alchemist Review provides a forum for collaboration and exploration within the ever-evolving world of literary publishing. The journal is edited by undergraduate and graduate students at the University of Illinois Springfield. All UIS students are invited to share their creative writing projects. View our website at: http://thealchemistreview.com/



Managing Editor: Donnie Squires

Donnie is a graduate student in the English department, just finishing up his thesis in the Spring 2013 semester. His academic interests include Twentieth Century American literature and creative writing whereas his personal interests include his family,

music, traveling, and coffee. After graduation, Donnie hopes to work with students in developmental reading and writing and introductory creative writing.



Production Manager: Kristen Chenoweth

Kristen is graduate student in the Department of English at the University of Illinois Springfield. Her literary interests are in fairy tales and fairy tale retellings as well as children's literature. She currently works in corporate communications and public relations. After

completing her Master's Degree in English and Certificate in Teaching English, Kristen plans to pursue a career that includes teaching writing or working with students who struggle with writing.



Poetry Editor: Maureen Bocka

Maureen Bocka is a Communication major with a minor in English. Maureen is the Poetry Editor of the Alchemist Review. She is happy to discover poetry written by student poets. She thinks that the future of the Alchemist Review would involve helping student

poets find places to submit and/or publish their work. Maureen also serves as the Vice Chair for the Queer Straight Alliance. Outside of academics Maureen enjoys rollerblading, writing Barbie poems, and mastering new crochet patterns.



Assistant Production Manager & **Assistant Poetry Editor:** Ryan McConville

Hello, my name is Ryan McConville. I am currently a junior majoring in Political Science with a minor in Philosophy and plan to attend law school upon

graduating from UIS. My first journey into writing outside of my major came in the spring of 2012 as a student in ENG 271, Introduction to Poetry with Dr. Meagan Cass. I was surprised at how much I enjoyed the class and how studying poetry helped in the refinement of my political and philosophical writing abilities. By working with the Alchemist Review I am hoping to highlight the importance and benefit of interdisciplinary writing techniques, as well as the liberal arts approach to academic study in general.



Fiction Editor & Assistant Managing Editor: Erich O'Connor

I am an undergraduate of English at the University of Illinois Springfield. I was born and raised in Springfield. I have a sister who is taking classes at Eastern Illinois and a twelve-year-old brother who

currently attends Chatham Glenwood. After working at Taco Bell for close to a decade, I am currently a math and reading tutor at Hazel Dell Elementary.











Development of the Emiquon Virtual Campus: Emiquon Stories



Ramirez, Berndt, Couch

Laura Berndt* English Department & Teacher Education Minor, Emily Couch* Biology Department, Dongcheng Li,* & Becca Ramirez* Psychology Department, Karen Swan (Mentor) Educational Leadership Department, Keith

Miller (Mentor) Computer Science Department, & Mike Lemke (Mentor) Biology Department

During a first-year seminar at the University of Illinois Springfield (UIS), students had an assignment to create a web-accessible presentation. The presentation could be about any subject related to Emiquon – history, biology, ecology, or economics were all suggested. The very best of these presentations have been installed on a UIS Web server and QR codes with the appropriate address are being installed around Emiquon so that the public can access these presentations. In this poster, QR codes are displayed and conference attendees will be invited to use them to access the presentations on their web-enabled devices (such as an iPhone, Android, or tablet). We will have tablets available for attendees who don't have their own devices handy. The students who created the web content will discuss the process they went through to develop their "Emiquon stories."

Using Aqueous Wittig Reactions to Teach Green Organic Chemistry



Leanne Deak,* Dyllan Tiburzi,*and Layne Morsch (Mentor), Chemistry Department

We were interested in applying green chemistry techniques and processes to the Wittig reaction, an important way to make alkenes from aldehydes. The traditional Wittig reaction involved solvents and components that are dangerous to both the experimenter and the environment. The new techniques that were applied to the Wittig reaction were done to make the reaction both safe and efficient for Undergraduate Organic Chemistry labs. Various changes were made to the traditional procedure that included elimination of reaction solvent, replacing recrystallization solvent with natural chemicals, lowering stir times, eliminating chromatographic purification and removing heating from the process.

The reactions were successful with a wide variety of aromatic aldehyde starting materials, The products were analyzed via 1H Nuclear Magnetic Resonance Spectroscopy (1H NMR), Thin Layer Chromatography (TLC), Gas Chromatography Mass Spectrometry

(GCMS), Infrared Spectroscopy (IR), and melting point determination. Most products gave sufficient yields to be acceptable for both analysis and identification in an Undergraduate Organic Chemistry lab setting.

Ceruloplasmin Analysis by Electrospray **Ionization-Tandem Mass Spectrometry** Using Thermo LTQ XL Ion Trap



Jessalyn Fontana* and Marc Klingshirn (UIS Contact), Chemistry Department Work performed at Centers for Disease Control and Prevention, Atlanta, GA

Wilson's Disease (WD) is an autosomal recessive disorder resulting in dysfunctional copper transport affecting approximately 1 in 30,000 individuals. Patients with WD present a dysfunctional ATP7B gene which encodes for a copper transporting protein ATPase, primarily expressed in the liver. Disrupted function of this protein plays a dual role in both the excretion of copper from hepatocytes as well as copper incorporation into the protein Ceruloplasmin (CP), a major copper carrying protein in blood. To date, there are no robust economic analytical methods that are used to characterize CP and diagnosis patients with WD. In this study, purified CP and dried blood spots were analyzed using electrospray ionization-tandem mass spectrometry in order to profile CP and further develop a robust method that could be implemented within the newborn screening community.

Mapping Trees on the UIS Campus Using ArcGIS Online Cloud-Based Server and a Smartphone



Nate Hoyle* and Yi-Sz Lin (Mentor), **Environmental Studies Department**

This study focuses on mapping and documenting the "major" trees on campus. Only trees of about 3 meters or more in height are mapped. Landscaping beds are omitted from this map unless there is a substantial

tree, and then only that tree's data is taken. This project is ongoing from ENS 404 (Fundamentals of GIS) in the fall 2012 to ENS 503 (Advanced GIS) first, because of time constraints, and second for specificity. This map is created to show the differences in biodiversity across campus and to "know" what is where. As you will come to learn, there are fundamental differences in the planning of the original part or campus and the new part of campus. The map will also provide one of the requirements from the Arbor Day Foundation for UIS to gain the distinction of "Tree Campus USA" which is a project the author is also working on. The author's personal hope is that the current new building plan will be augmented to follow more of a natural perspective and not a "row-crop agriculture" theme as it is becoming.

Greener Analogs of the Bis(Pyridine) Iodine(I) Nitrate Salt



Troy Kramer* and Marc Klingshirn (Mentor), Chemistry Department

Through the principles of green chemistry, different solvents, washes, and ligands were experimentally substituted in the synthesis of Bis(Pyridine)Iodine(I) Nitrate to create "greener" analogs with the goal of

improving the environmental friendliness of the procedure. The most preferable substitution was the replacement of organic solvents used, specifically chloroform and diethyl ether, both which have health and flammability hazards. Ligand substitutions included the replacement of pyridine with methyl substituted pyridines which have improved safety characteristics. The reactions performed with substitutions formed yellow products which were consistent with their chemical structure with yields ranging from 1% to 30%. Additional results and observations will be discussed.

An Intra and Inter Specific Comparison of the Venom Alkaloids from Fire Ants in North America



Taylor M. Moore* and Stephen R. Johnson (Mentor), Chemistry Department

Fire ants of the genus *Solenopsis* (Myrmicinae) are a highly invasive species that originated in northern Argentina and have migrated throughout the southern United States over the last 100 years. The fire ant

poses a serious threat to both humans and agriculture due to the nature of the aggressive behavior and their venoms unique characteristics. The venom of the red imported fire ant is composed mainly of piperidine alkaloids, known as solenopsins, which have been shown to cause severe anaphylaxis as well as pain and irritating pustule formation. However, they have also shown a large spectrum of potential for therapeutic intervention: they inhibit angiogenesis by the PI3-K pathway and have antibacterial, fungicidal, and insecticidal properties. In order to better understand their natural diversity, we dissected the venom sacs of three different species from five different geographical regions and characterized the contents using high performance liquid chromatography-tandem mass spectrometry (HPLC-tMS). The profiling of these alkaloids enables possible species delimitation for intra and inter species comparison as well as characterizes new analogs not yet described. An intraspecific comparison of venom from Solenopsis invicta showed minimal diversity in the overall abundance and profile of the alkaloid analogs. However, an interspecific comparison among S. invicta, S. geminata and S. xyloni venom show a significant profile difference. These data suggest that each species of Solenopsis may be identifiable by their alkaloid fingerprint and thus may be used for species delimitation to better understand their invasive behavior as well as their medical significance.

Small Mammal Population Monitoring in the Tallgrass Prairie at Emiquon Preserve



JoAnn Morgando,* Kyle Peecher,* and Amy McEuen (Mentor), Biology Department

Morgando

The nation's tallgrass prairies have been rapidly declining and restoration projects such as the Emiquon Preserve in Fulton County, Illinois have been created in response. Examining small mammals

in tallgrass prairie restoration projects allows researchers to evaluate the overall success of the restoration and the health of the ecosystem since small mammals are indicators of habitat availability and quality. Small mammal populations were studied at Emiquon Preserve's tallgrass prairie at two different sites through the use of sherman live traps for a total of 1,280 trap nights. Traps were placed at 10 m intervals along each transect with two transects per site. A total of 40 trap locations, with 20 locations on each transect, were monitored from May 26 to August 4 2012 at Nature Conservancy sites 17 and 22. A mark – recapture study was conducted to estimate small mammal population sizes. Individuals were marked using ear-tags at the initial capture and ear-tag numbers recorded on recapture. Site 17 did not contain a water source, while Site 22 did. These sites were compared to see if a water source increased the habitat value for small mammals. The meadow vole (*Microtus pennslyvanicus*), prairie vole (*M. ochogaster*), prairie deer mouse (Peromyscus maniculatus), and the white-footed mouse (P. leucopus) were found at both sites, while the long-tailed weasel (Mustela frenata) was only found at Site 17 along with the capture of a cottontail rabbit (Sylvilagus floridanus).

Toward Efficient Iodine Quantification in Bis(pyridine)iodine(I) Nitrate



Ngoc Pham* and Marc Klingshirn (Mentor), Chemistry Department

This work explores greener synthesis routes of bis(pyridine) iodine(I) nitrate with a special focus on the quantification of iodine in the resulting salts. The initial focus of our work has involved method

development for iodine determination in the parent pyridine nitrate analog. Two promising methods of iodine determination have been explored. One method involves adding a proportional amount of a reducing agent (ascorbic acid) and subsequent titration of the liberated iodine with sodium thiosulfate. The second method involves doping the salt solution with potassium iodide followed by titration with hydrochloric acid. We are currently working to increase the efficiency and accuracy of each method.

Carbon and Nitrogen Storage in Two Restored Prairies at Emiquon



Sophia Pham* Chemistry Department and Hua Chen (Mentor), Biology Department

Terrestrial ecosystems play important role in carbon (C) and nitrogen (N) cycle. The loss of prairies for croplands results in a release of significant amount of C

from soil organic matter (SOM) into atmosphere. Prairie restoration from croplands has potential for C sequestration. The overall goal of this study was to quantify C and N storage of SOM of two restored prairies at Emiquon in Illinois by using a CHN Elemental Analyzer (PerkinElmer 2440). These two prairies were restored from croplands in 2007 and 2001, respectively. Soil samples were collected along a 60-m long transect at each site in 2008. Soil samples were collected every 20 m using a 4 cm diameter stainless steel soil corer from top 20 cm and 20-40 cm. Thus, a total of 8 soil samples (4 locations x 2 soil layers) at each site were collected. A CHN Elemental Analyzer is used for this study because it has the capability of handling different types of samples and gives the rapid determination of the C and N concentration. The analysis only takes 5-6 minutes for each sample. For a CHN Elemental Analyzer, the combusted sample goes through a reduction chamber to a homogenization chamber. The resultant gases are separated using Frontal Chromatography, then elute through a thermal conductivity detector. The organic C and total N concentration of soil samples will be reported. The C and N storage of the two restored prairies at Emiguon will be estimated.

Prairie Plant Ethnobotany: Assays for Antimicrobial, Anticancer, and Antioxidant Activities



John Spurgeon* and Lucia Vazquez (Mentor), Biology Department, Layne Morsch (Mentor) and Stephen R. Johnson (Mentor), Chemistry Department

This research targets the discovery of novel compounds with medicinal properties from ethnobotanically

significant prairie plants including milkweed (Asclepias tuberosa), wild bergamot (Monarda fistulosa), and black-eyed Susan (Rudbeckia serotina). Each of these prairie plants has historically been used by native peoples in medicinal applications. Samples were collected from populations of these native species throughout central Illinois including the Grand Prairie Division and the Wabash Border Division. Acetone and methanol crude extracts were prepared using dried, powdered plant parts (stems, leaves, and flowers). These extracts at concentrations of 25, 100, and 250 μg/mL are being tested for radical scavenging capacity, minimum concentration for bacterial growth inhibition (Staphylococcus aureus, Bacillus subtilis, Pseudomonas aeruginosa, and Escherichia coli), and HeLa cancer cell growth inhibition. Upon the discovery of general activity in one or more assays, extracts will be fractionated using high performance liquid chromatography and tested again with the purpose of isolating the active constituent(s) from the plant. Once an active fraction is found, mass spectrometry will be used to identify specific compounds.

Change in Tallgrass Prairie Plant Diversity from 2008 to 2012 at Emiquon Preserve



Emily Staley,* Kyle Peecher,* and Amy McEuen (Mentor), Biology Department

In Illinois, tallgrass prairies previously covered an estimated 8,900,000 hectares. However, only 930 hectares remained by 1994, a 99.9% decline. As restoration ecology has become a more developed field of study, ecologists are working to better under-

stand the restoration process including developing techniques for evaluating restored sites. In 2007, the Nature Conservancy's (TNC) Emiquon preserve in Fulton County, Illinois began the process of restoring agricultural lands back to natural tallgrass prairie and wetland ecosystems. We examined tallgrass prairie plants along four 200m N-S transects at TNC sites 22 and 17. One meter square plots were sampled every 10 meters along each transect. Plant species and grass/forb cover were documented at each plot with surveys conducted from May 26th through August 9th 2012. The species documented are being compared to a previous study performed in 2008 on the same sites and approximately the same transects. This will allow us to determine the change in species composition that has occurred over the past four years. Preliminary results show a shift in species composition with an increase in native species. Many nonnatives documented in 2008 were not seen in 2012 such as Shepherd's Purse (Capsella bursa-pastoris) and Lambsquarters (Chenopodium album) and

new native plants were recorded such as Prairie Dock (Silphium

study will give us a better understanding of succession of tallgrass

terebinthinaceum) and Prairie Spiderwort (Tradescantia bracteata). This

A Novel Phospholipase A2 Activity from the Venom of the South African Predacious Ant Platythyrea lamellosa



prairie plants during restoration.

Alison R. Svoboda* and Stephen R. Johnson (Mentor), Chemistry Department

Phospholipase A2 (PLA2) is an enzyme known to catalytically hydrolyze the sn-2 ester linkage of membrane phospholipids to liberate arachidonic acid

and lysophospholipids that subsequently play an active role in membrane trafficking, signal transduction, cell proliferation and possibly apoptosis. While PLA2 is a known component of many snake venoms, the activity in invertebrate venom was only first suggested forty years ago in studies of Apis mellifera, commonly known as the honey bee, whose envenomation causes cutaneous edema and pain. Since this discovery, many researchers have investigated other aculeate Hymenoptera, namely ants and social wasps, due to their similar venom characteristics. In this study, we investigated the venom of the South African predacious ant, Platythyrea lamellosa (Ponerinae) known to cause a severe and sustained pain as well as prolonged inflammation to determine if a similar PLA2 activity may be present. A fluorometric based PLA2 enzyme assay was completed using purified honey bee PLA2 as a reference and a comparison was made to molecular weight fractions of whole venom of P. lamellosa to confirm the enzyme presence and to determine the level of enzyme activity exhibited. It was found that one fraction of P. lamellosa venom contains an active

form of PLA2. It was also determined that the catalytic efficiency (Kcat) of the fraction was significantly higher than that of PLA2 purified from *A. mellifera*. These data suggest a possible explanation for the exaggerated pain experienced from the sting of this ant compared to the mild pain from a honey bee sting.

A Proteomic Investigation of a Phospholipase A2 from the Venom of the South African Predacious Ant Platythyrea lamellosa



Ian C. Tinsley* and Stephen R. Johnson (Mentor), Chemistry Department

While some form of phospholipase A2 (PLA2) enzyme has been found in almost every studied mammalian tissue, orthologous proteins have been shown to be present in many venom profiles. PLA2

catalytically hydrolyzes phospholipids at the acyl sn-2 position to produce a lysophospholipid and a free fatty acid. It has been s peculated that these fatty acids produced by venomous PLA2 causes the body to enter into a positive feedback cycle that are indicated by physiological symptoms. Consequently, the PLA2 plays an important role in cardiovascular, inflammatory and nervous system disorders, and cancers. The sting of the South African ant, Platythyrea lamellosa is known to cause severe pain and inflammation at the site of envenomation and the venom has recently been shown to contain a very high level of PLA2 activity. In this study, we conducted a proteomic investigation to identify the presence of PLA2 in P. lamellosa and compared our data to the purified PLA2 from Apis mellifera. Venom fractions were separated by SDS-PAGE and proteins with similar relative mass were trypsin digested and subjected to high performance liquid chromatography-tandem mass spectrometry (HPLC-tMS). Although there was no high score match in any databank search

performed, the active fraction of *Platythyrea lamellosa* venom was shown to contain a 12 kDa with >20% sequence homology to Am PLA2. This data suggests that the venom contains a PLA2 enzyme that has different primary structure characteristics and consequently differences in activity from the other hymenopterans' phospholipase.

Enhancing Bacterial Denitrification Rates By Using Zero Valent Iron Nanoparticles (nZVI)



Ritesh Uppuluri,* James R. Johnson,* Aubrey Watson,* Stephanie Gorsuch,* Nicole Vanderpool,* and Keenan E. Dungey (Mentor), Chemistry Department

Zero valent iron nanoparticles (nZVI) have showed promising applications as catalysts due to their large

surface area to volume ratios. One such application of nZVI explored in this research was to enhance bacterial denitrification in agricultural soils. Excess nitrates in agricultural fields are observed to be environmental pollutants and should be reduced to prevent degradation of lakes and rivers. In this experiment, nZVI was prepared in a sustainable manner using biochar from Milo seed and impregnated with iron (III) salts; the iron was then reduced by carbothermal reduction. The prepared nZVI was added to a reaction mixture containing low-nutrient bacterial media, a culture of *Pseudomonas aeruginosa*, and sodium nitrate. Three reaction mixtures were similarly set up all containing nitrate and bacterial culture but one with no nZVI or bacterial culture (control), another with nZVI only, and a third with bacterial culture only. The bottles were placed in a shaking incubator and samples (5 mL) were collected every 12 hours and frozen. Results indicated that the denitrification rate was greatest in the mixture containing both nZVI and bacterial culture. This was observed by analyzing the amount of nitrates present in each sample with respect to time using ion chromatography.







Coming Out As Undocuqueer



Keisha Barreto* Teacher Education Minor and Hinda Seif (Mentor), Sociology/Anthropology Department

An identity that has not been widely addressed or accepted is people who are both undocumented immigrants and LGBTQ. "Undocuqueer" is a

neologism that derives from the words undocumented and queer. This paper focuses on the history of undocuqueer organizing and the difficulties that people who call themselves undocuqueer face when they challenge family members, citizens, and government leaders to accept their identity. Information has been gathered by locating relevant websites and resources and analyzing them, with a focus on events that have been hosted by undocuqueers. Another research method is locating blogs posted by undocuqueer people that tell their personal history and experiences. The term was created to bring together undocumented and LGBTQ identities because people did not want to choose between the two. I conclude that "undocuqueer" is a topic that is relevant to today's youth. All should be aware of the ways that people with this dual identity are doubly oppressed. This research is important because it reflects new identities being created by youth for the future. Both identities are relevant to highly charged and current public debates. Undocuqueer youth are challenging the ways that dominant society has constructed their identities as "wrong" and "illegal."

Ethical Leadership and its Implications for Workaholism, Stress and Health



Brooke Carroll* Psychology Department, Ashley Tague* Business Administration & Business Management Departments, and Benjamin Walsh (Mentor), Management Department

Carroll



Tague

Research has uncovered a number of beneficial correlates of ethical leadership such as perceptions of leader honesty and fairness (Brown et al., 2005). We sought to explore additional outcomes of ethical leadership, especially those related to employee health. In particular, we examined the direct influence of ethical leadership on workaholism culture and indirect influence on employee well-being (i.e., job stress and general health). Ethical leaders are considered role models and influence the work

behavior of their followers. Because leaders create the culture of organizations (e.g, Gelfand et al., 2012), and ethical leaders are positive and fair-minded (Brown & Treviño, 2006), we hypothesized that ethical leadership would be negatively related to workaholism culture; a work environment where employees are pressured to work excessively.

In turn, we hypothesized that workaholism culture would be positively related to job stress and negatively to general health. More generally, our interest was in the mediating role of workaholism culture in the relationship between ethical leadership and employee well-being. Data were collected from 104 working adults using an online survey with self-report measures. Regression analyses were used to test the hypotheses, although mixed support was observed. Results supported our hypotheses that ethical leadership deterred a workaholism culture, and workaholism culture was negatively related to job stress. However, workaholism culture was unrelated to general health as originally hypothesized. This study might act as a catalyst for organizations to see how ethical their leaders are and see if their leadership style is benefiting or hurting employees. Implications for future research will be presented.

Internalized Homo-Negativity and Traditional Asian Values Moderates Relationship Between Parental Attitudes and Well-Being among Asian LGB Persons



Rebecca Goldsborough* Human Development Counseling Department and Frances Shen (Mentor), Psychology Department

This study will consider whether internalized homonegativity and traditional Asian Values will moderate

the relationship between parental attitudes and well-being among Asian lesbian, gay and bi-sexual persons. Research has shown that traditional Asian culture tends to be less accepting of homosexuality, and that Asian parents perceive homosexuality as a moral rather than identity issue (Calzo & Ward, 2009; Lippincott et al., 2000). Therefore, we hypothesized that the impact of parents' homo-negative attitudes on internalized homo-negativity and perceived social constraint will be greater among Asian American LGB persons with more compared to less traditional Asian values. For this study, we recruited 125 Asian American LGB students from university student organizations across the U.S. Participants completed a websurvey that included a demographic questionnaire, perception of mother's and father's Attitudes Toward Lesbians and Gays Scale (ATLG; adapted from Herek, 1988), Internalized Homophobia Scale (IHP; Martin & Dean, 1988), Asian Values Scale (AVS; Kim, 2004), Rosenberg Self-Esteem Measure (RSE; Rosenberg, 1965), and Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). We found that the impact of mothers' homo-negative attitudes on both internalized homo-negativity and social constraint among Asian LGB were more remarkable for those who adhered to more compared to less traditional Asian Values, but fathers' homo-negative attitudes only impacted internalized homo-negativity among Asian LGB who adhered to more traditional Asian values.

Neural Processing of Male and Female Fearful Faces in a Spatial Attention Modulation Task



Andrew Hathaway* and Karen Reinke-Pressley (Mentor), Psychology Department

Previous research has shown that attention can be modulated by the presentation of a fearful face. The purpose of the current research was to examine the

differences in modulation based on whether or not the fearful face was male or female. A dot-probe paradigm was used to measure reaction times. A 128-channel electroencephalography (EEG) cap was used to examine the event related potentials. Participants viewed two face stimuli of the same sex for 166ms on either side of a fixation point. The stimuli were immediately replaced by a target dot on one side of the fixation point. There were six different trial types, three for each sex of faces. Congruent: one neutral and one fearful face with the target dot presented in the same visual field as the fearful face. Incongruent: one neutral and one fearful face with the target dot presented in the opposite visual field as the fearful face. Baseline: both faces were neutral and the target dot could appear in either visual field. Both male and female faces produced a congruency effect. There was also a slight, but non-significant, difference in reaction times to male faces versus female faces. However, EEG waveforms differed for male versus female faces, suggesting that there was a difference in neural processing based on the sex of the fearful face.

In Your Face: Judgments of Attractiveness Depend on Context



Kadylyn Havemeyer* and Marcel Yoder (Mentor), Psychology Department

This study concentrated on impressions of facial attractiveness in a face-to-face versus video and photo contexts. Face-to-face interaction provides perceivers information not readily available in videos or photos,

but is this additional information necessary? Past research has shown that face-to-face judgments formed after individuals are asked to "get to know each other" are similar to photo judgments (Weisbuch, Ivcevic & Ambady, 2008). We sought to: 1) extend dynamic stimuli from video to face-to-face and correlate attractiveness ratings to those of static faces, and 2) to examine mean differences among face-to-face, video and photo contexts. The primary dependent variable was facial attractiveness in a zero-acquaintance situations (i.e., participants were strangers who did not interact). Participants in the face-to-face condition returned for one follow-up to be videotaped and a second to be photographed. Thirtyseven stimulus faces had complete data across all three contexts. Correlations between attractiveness ratings across all three contexts were statistically significant, but there was also a significant difference in attractiveness ratings across conditions. The most and least attractive faces were in the face-to-face and video conditions, respectively. While participants' ratings of others in the face-to-face and photo conditions were robustly correlated, the statistically significant differences between attractiveness ratings in these two conditions suggests that judgments of targets' facial attractiveness benefit from the unique information that face to face interactions provide in the person perception process. Future research should focus on moderators of the photo versus faceto-face effect such as race, gender and attractiveness level.

Pass it on? Individual Differences in the Spread of Urban Legends

Wesley Hill* Psychology Department, Rachel Tohme* Human Development Counseling Department, Carrie Switzer and Marcel Yoder (Mentors), Psychology Department



Tohme, Hill

A meme is a cultural idea, behavior, or symbol that is transmitted from person to person via written material, oral communication, rituals, or other mediums (Dawkins, 1989). As an aspect of cultural evolution, memes exist within popular culture and function in a way that is

analogous to genes, in that they self-replicate, mutate, and respond to natural selection (Brodie, 2009). We will examine whether urban legends elicit specific emotional responses that lead people to pass them on to others. Previous research has found that an emotion (i.e., disgust) can play a role in the retention and spreading of urban legends (Heath, Bell, & Sternberg, 2001). We will also investigate relationships between emotions and the spreading of memes in the context of individual differences among rationality of belief, optimistic/pessimistic viewpoints, external/internal attributions, and attributional complexity. Specifically, we will examine if differences in these variables mediate the relationship between emotional selection and the likelihood that an urban legend will be passed on. The theories used as a framework for this study have made important contributions to the fields of psychology, marketing, and consumer behavior in attempting to explain the spreading of ideas, fads, myths and superstitions within a culture. It is anticipated that this study will add to this body of research by identifying individual differences that may affect the likelihood of passing on ideas.

Playing Politics: The Equal Rights Amendment Battle in Illinois



Bridget Maloni* and Nikki Overcash (Mentor), Capital Scholars Honors Program

This study is an overview of the Equal Rights Amendment and its place in history and in the present. I hope to explain both the political and social

reasons behind the roadblocks that the Equal Rights Amendment has faced and what ultimately caused it to fail in 1982. This research specifically looks at the microcosm of Illinois in 1982 to explain what made the ERA fail on a state level. My research also covers the struggles that the ERA faced on a federal level. It is hoped that this research will help to disprove some of the misconceptions about the Equal Rights Amendment and prove that it still has the potential to become an amendment. I will explain what can be done even after the deadline for the Equal Rights Amendment has passed and it has still not been ratified.

#Diplomacy



Michael McColpin* and Adriana Crocker (Mentor), Political Science Department

This paper will examine the role of social media, specifically the use of Twitter, in modern-day International Relations. The nearly ubiquitous use of social media in the developed world has also included

public officials, who have utilized social media as a significant resource in the foreign policy decision-making process. In this light, this presentation shall assess the different roles Twitter and other social media platforms can play as a soapbox for policy making, public diplomacy, and news reporting done by United States, foreign governments, and supra-national organizations. These concepts were best exemplified by Israeli Defense Force's attacks on Hamas in the Gaza Strip in the Fall of 2012. During these months, Hamas and the IDF fought a public relations war for sympathizers in the Twittersphere, which included a near declaration of war over Twitter by Hamas. Additionally, the reporting by major news corporations, such as CNN and Thompson Reuters, of the events relied heavily on firsthand accounts that were depicted in real-time on Twitter and to a lesser degree, YouTube. Thus, setting the prospective norm for international news journalism in the usage of "Citizen Journalists" as sources is becoming much more common. Such ground-breaking events are a foreshadowing of the future of public diplomacy and journalism and should be further researched in order to understand the new dynamics of a 21st century world polity.

Body Image Ideals and Concerns Among the Asian American Female Population



Brittany Sievers* and Frances Shen (Mentor), Psychology Department

This study will examine the body image of Asian American women. There is limited research on body satisfaction among Asian populations (Stark-Wroblewski, Yanico, & Lupe, 2005; Reddy &

Crowther, 2007), and no studies have examined the cultural factors and experiences that impact Asian American women's body image. A major concern with existing ethnic minorities research in this area is their use of westernized measures of body image (Cashel, Cunningham, Landeros, Cokley, & Muhammad, 2003). Western perceptions of body image may not be generalizable to Asian American populations, and may therefore overlook important contributing factors (Davis & Katzman, 1996; Yates, Edman, & Aruguete, 2004). Through a focus group, we hope to better understand what specific factors contribute to the body related issues of this population. Ten to fifteen Asian American females will participate in two focus groups. Semi-structured questions will address the ideals of beauty and attractiveness for themselves and the opposite sex, perceived societal, cultural, and familial beauty expectations, the impact of these perceived ideals on their well-being and self-concept, and the relationship between body image and notions of femininity. The results of this study will highlight the limitations of existing research on body image issues of ethnic minorities and help us better understand the body image concerns of Asian American women as distinct from European American women. In addition, the results will contribute to the future study and understanding of body image issues specific to Asian American women's culture.

The Impact of Eating Habits on Thinking Skills



Robert Torrence* and Sheryl Reminger (Mentor), Psychology Department

With the growing amount of diet-related health problems in the United States, many individuals are attempting to be healthier by adopting a vegetarian diet. According to McEvoy and Woodside (2010),

vegetarians have a lower risk of certain health problems in comparison to omnivores. Research suggests that obesity and a western diet have an adverse effect on cognitive function, specifically executive function (Gunstad et al., 2007; Kanoski & Davidson, 2011). It would be beneficial to examine the executive function skills of individuals who consume various diets ranging on a continuum from vegan (most restrictive) to omnivorous (least restrictive). I hypothesize that individuals with more restrictive diets will show better executive function, and individuals with the least restrictive diets will show poorer executive function. Approximately 50 students and community members ranging in age from 18-64 years will participate in the study. The participants will complete two questionnaires, the Dietary Screener Questionnaire (National Cancer Institute, 2012) and Lifestyle Habits Questionnaire, created specifically for this study. The Trail Making Test, Tower Test, and Sorting Test from the Delis-Kaplan Executive Function System (Delis, Kaplan, & Kramer, 2001) will be used to assess executive function. For statistical analysis, ANOVAs comparing executive function scores across six different diet conditions will be undertaken. We anticipate a significant main effect of diet, primarily being due to differences in performance between vegetarians and non-vegetarians.

Asian American Men's Perceived Body Image



Brianna Werner* and Frances Shen (Mentor), Psychology Department

This study will examine Asian American men's body image issues. Existing research in this area is based on western ideals that may not be generalizable to Asian American men's cultural perceptions and values

of body image. A study by Pompper (2010) found that Asian American men differed from their White counterparts in that they do not value muscularity as an important and defining factor of masculinity. Therefore, more research is needed to examine the culturally relevant perceptions and implications of body image for Asian American men. For this study, we will conduct two focus groups with 10-15 Asian American males. Participants will be asked about the messages they have received regarding body/physique expectations, the source and impact of these messages, and the importance of body image on masculinity. At this time, one focus group with 7 Asian American men has already been conducted. Preliminary findings indicate that height, broad shoulders, and double-eye lids are important for Asian American men. While participants receive explicit messages of body ideals from family, the lack of portrayal of Asian American men in the media often creates feelings of uncertainty about the body image expectations for members of this population. In addition, efforts to fit western ideals (i.e. muscularity) have led to realizations and disappointment that these body standards cannot be achieved by Asian American men. These findings indicate that there is disconnect between Asian American men and western standards of body image.





