



## Adrian College

Welcome to our annual Ribbons of Excellence Day Program.

I am pleased to welcome you to our seventh annual Ribbons of Excellence Day Program at Adrian College, a day dedicated to celebrating scholarly accomplishments of our students through presentations, exhibitions and performances. A tradition started in 2008 and developed out of a faculty initiative to create and support our academic culture, today is the culmination of at least one year of preparation by students and their mentors.

The Ribbons of Excellence form the foundation of our shared values at Adrian College and each presentation today is linked to at least one thematic ribbon. I would like to thank Professor Heather Schuyler and the team of faculty and staff who worked in support of this event. We are thrilled that you are joining us today to celebrate our students and their accomplishments.

Regards,

Agnes I. Caldwell, Ph.D.  
Vice President and Dean of  
Academic Affairs



### Adrian College's Mission Statement

*Adrian College, a liberal arts college in the United Methodist tradition is committed to the pursuit of truth and dignity of all people. Through active and creative learning in a supportive community, students are challenged to achieve excellence in their academic, personal, and professional lives, and to contribute to a more socially just society.*



## Adrian College

Welcome to the 2015 Ribbons of Excellence Day Program!

The history of the Ribbons of Excellence Program resides in the Cane Ceremony tradition of tying a ribbon with the names of graduates to the Shepherd's Crook. This tradition has been carried on since 1887; in 2007 the academic community at Adrian College developed its academic vision of the Ribbons of Excellence Program. The Ribbons of Excellence are what each and every member of our community strives for; the Ribbons of Excellence are what we want Adrian College to be known for: *caring for humanity and the world; learning throughout a lifetime; thinking critically; crossing boundaries and disciplines; and developing creativity.*

Through today's Program we strive to achieve this goal of making this vision a reality. Students embark in research and other projects to *think critically* and *creatively* and to tie these ribbons into their lives, not just to the Shepherd's Crook. We also strive to achieve *learning throughout a lifetime* and *caring for humanity* by inviting community members, faculty, staff, students and other visitors to attend the day's events. The day is also about *crossing boundaries and disciplines*, as we are trying to expose students, through their presentations, to other buildings and communities on campus. Please take the time to look around. The work you will see is outstanding!



On behalf of the Ribbons of Excellence Program Committee, I would like to thank all students, faculty, and staff for their participation, support, and assistance with the 2015 Ribbons of Excellence Day Program.

Once again, welcome to the Adrian College Ribbons of Excellence Day Program. We hope you enjoy today's programs and return next year.

Regards,

Heather Schuyler, MA  
Director, Ribbons of Excellence Program  
Department of ESPE and Athletic Training





# ADRIAN COLLEGE

EST. 1859



## CAMPUS INDEX

CODE	NAME	GRID	CODE	NAME	GRID
ADMS	Ward Admission House	5C	JONES	Jones Hall	3C
ADTO	Adrian Tobias Center	4B	LOWRY	Lowry Hall	3D
ATO	Alpha Tau Omega Housing	4B	MAHAN	Mahan Hall	3-4C
ARGL	Argyle Apts.	2-3D	MSFC	Merillat Sport and Fitness Ctr.	2C
ARRI	Arrington Ice Arena	2B	NICO	Nicolay Field	1A
CAINE	Caine Student Center	4C-D	PEEL	Peelle Hall	3C
CARGO	Cargo Hall	3D	PELL	Pellowe Hall	2B
CASC	Cascade Circle	4B	PIKE	Pi Kappa Alpha Housing	2-3C
CVSA	College View South Apts.	4A	PLANT	Plant Facilities	1E
CVNA	College View North Apts.	4D	POWL	Powell Hall	4B
CVWA	College View West Apts.	2-3C	FIEL	Practice Fields	1E
CPLZ	Commencement Plaza	4C	RTCH	Ritchie Marketplace	4B
CRAFT	Craft Tennis Complex	1C-D	RUSH	Rush Center	3B-C
DAVIS	Davis Hall	4B	SHIP	Shipman Library	3C
DAWS	Dawson Auditorium	3B	SAE	Sigma Alpha Epsilon Housing	5A
DEANS	Deans Hall	3D	SBALL	Softball Field	1E
PRAC	Dick Indoor Practice Facility	1E	SPNC	Spencer Hall	3B
DOCK	Docking Stadium	2C	STAN	Stanton Administration Bldg.	3-4C
DOWNSS	Downs Hall	4C	STEV	Stevens Hall	4B
ESTES	Estes Hall	4D	TKE	Tau Kappa Epsilon Housing	4A
FACL	Faculty Housing	3D	TERR	Terrace	4C
FEEM	Feeman Hall	4B	THM	Theme Housing	2-3C and 3D
GOLD	Goldsmith Center	3B-C	THMM	Theme Housing/Michigan Ave.	3B
HERC	Herrick Chapel	3C	TC	Theta Chi Housing	5A
HERH	Herrick Hall	3D	THOM	Thomas Pavilion	2B
ICTR	Adrian Innovation Center	1E	TRACK	Track & Field	1D
INTR	Intern Housing	4A	VALA	Valade Hall	4C
JARV	Jarvis Hall	4D	WOW	WOW Wingery and Café	2B

## PARKING

#	TYPE	NAME	GRID
1	Standard Residential	Adrian Tobias Lot	4B
2	Standard Residential & Guests	Alpha Tau Omega (ATO) Lot	4B
3	Standard Residential	Cargo Lot	3D
4	Standard Residential	College View S. Street Parking	4B
5	Standard Residential	College View West Lot	2C-D
6	Standard Residential & Guests	Dawson Lot	3B
7	Standard Residential	Jarvis Lot	4D-E
8	Standard Residential	Lowry Lot	3D
9	Standard Residential	Mahan Lot	4C
10	Standard Residential & Guests	Merillat Lot	2B
11	Standard Residential	Pellowe Lot	2B
12	Standard Residential	Powell Lot	3B
13	Fraternity Members Only	Sigma Alpha Epsilon (SAE) Lot	2B
14	Fraternity Members Only	Tau Kappa Epsilon (TKE) Lot	4A
15	Fraternity Members Only	Theta Chi (TC) Lot	5A
16	Faculty/Staff (7 am - 5 pm Only)*	Valade Lot	4C-D

### PARKING KEY

- Standard Residential
- Standard Residential & Guests
- Fraternity Members Only
- Faculty/Staff (7 am - 5 pm Only)\*
- Special Events Only
- College View South Residents

\* Students with valid parking permits may park from 5 pm - 7 am, weekdays and all day on weekends. Vehicles must be removed by 7 am to avoid being ticketed, booted and/or towed.

Map not to scale



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## NEW for 2015!

**Coach David Kwan**, our opening speaker, talks about bridging the gap between academics and athletics. This session will be held in Dawson Auditorium and breakfast will also be available. The session begins promptly at 9am.

**Academic Foundations I and II** now have their own sessions at the Ribbons of Excellence Conference. These sessions are titled “Academic Foundations I Presentations and the Star Light Writing Award for Core” and “Core Williams Oratorical Competition” and can be found on pages 7 and 19, respectively.

## Schedule of Events

<b>Abstract Title</b>	<b>Presenters</b>	<b>Session</b>	<b>Page</b>	<b>Time</b>
Bridging the Gap of Academics and Athletics	Coach David Kwan	Gen		9:00 - 9:20
Do differences matter in the forest? Traits of shrubs in a Michigan forest.	Edwards, B., Sipsock, P.	1	2	9:30 - 9:50
Thyroid Hormone is Required for Hearing Regeneration	June, E., Mykolaitis, H.	2	3	9:30 - 9:50
The Evolution of Ethics in Accounting	Victor, Ben	4	5	9:30 - 9:50
Curriculum Development for the Track and Explore Program	Pendleton, Morgan	5	6	9:30 - 9:50
Academic Foundations I Presentations and The Star Light Writing Award for Core	Rivera, E. Hawkins, H., Schaefer, H., Nuler, A.	5	7-8	9:30 - 9:50
A Study on the Effect of After-School Activities on the Self-Esteem of Adolescent Girls	Barnes, Haley	1	2	10:00 - 10:20
Fall Phenology of Native and Invasive Shrubs in a Michigan Forest	Klett, Ashley	2	3	10:00 - 10:20
The Influence of Friction Between Football Helmet and Jersey Materials on Force: A Consideration for Sport Safety	Rossi, Anthony	3	4	10:00 - 10:20
The Baroque Feminists: A View of the Inclination of Feminism throughout the Baroque Period	Collins, Brittini	4	5	10:00 - 10:20
Track and Explore: Administration and Assessment Growth over three years	Dixon, Gabrielle M.	5	6	10:00 - 10:20
Speckled Mirrors	Passalacqua, Mariah	7	11	10:00 - 10:50
Pullulate	Campbell, Breanna	8	12	10:00 - 10:50
Sea School of Art	Kidd, Rochelle	9	13	10:00 - 10:50
The Lost Expedition of Bram Vaccaro	Church, Kaitlyn	10	14	10:00 - 10:50
Perils of the Pursuit	Garrity, Hope	11	15	10:00 - 10:50
Treeline Historic District	Rademacher, Molly	12	27	10:00 - 10:50
Enkindling Consciousness	Bunio, Lindsey	13	17	10:00 - 10:50
Enkindling Consciousness	Cain, Victoria	14	18	10:00 - 10:50
Academic Foundations II Core Williams Oratorical Competition	TBA	15	19	10:30 - 11:20
Gluten Analysis of Common Foods	Cookmaster, C., Harms, K.	16	21	10:30 - 10:50
Paragraph 175: A Glance into German Homosexual Penal Code	Fredrich, Nicole	17	23	10:30 - 10:50
Radius of Care: Calculating the area outside of the proper response time to an automated external defibrillator in secondary schools	Osterman, Mike	18	25	10:30 - 10:50

## Schedule of Events

American Advertising Federation Adrian College Chapter- Pizza Hut	Doklovic, R., Reed, D., Waldrup, J., Powers, J., Miller, C., Vanston, K.	19	27	10:30 - 10:50
Bridging the Gap in Education with Language Accommodation	Gestwite, Nicole	20	29	10:30 - 10:50
Motown Music and the Civil Rights Movement	Pattyn, Emily	21	31	10:30 - 10:50
Business Development of Lenawee County	Jackson, Riley	16	21	11:00 - 11:20
“The slave of nature and the son of hell”: Exploring Essentialism and Identity Construction in Shakespeare’s Richard III	Wirtz, Carolyn	17	23	11:00 - 11:20
Effects of Hydration Education on Youth Ice Hockey Players	Fougerousse, Casey	18	25	11:00 - 11:20
The Hillrose	Rademacher, Molly	19	27	11:00 - 11:20
Role of Ethics in Journalism with Regard to Baseball	Ormiston, T., Sisoler, M.	20	29	11:00 - 11:20
How Daily Habits Influence Happiness	Berry, Aaron	21	31	11:00 - 11:20
Embracing Change	Coopshaw, Corinne	8	12	11:00 - 11:50
The Bureaucracies of (Im)Possibilities: A Retrospective of Sameness	McKeen, Matthew	9	13	11:00 - 11:50
Reverie	Warner, Hannah	11	15	11:00 - 11:50
Reminiscent	Pelham, Gabrielle	12	16	11:00 - 11:50
Stigma	Barker, Chelsea	13	17	11:00 - 11:50
The Maturation of Love, A Vocal Recital	Lewis, Cady	15	20	11:30 - 11:50
Crystal Growing: An Exploration of Methodology, Chromophores, and its Relation to Gemology	Strawser, Chelsea	16	22	11:30 - 11:50
The Jewish American Community in Detroit during the Late 1920s and Early 1930s	Mackey, Thomas	17	24	11:30 - 11:50
Acute Laryngeal Fracture in a Male Collegiate Ice Hockey Athlete	Rossi, A., Donovan, C.	18	26	11:30 - 11:50
The Role of Semantics in the Formation and Activation of Appraisal Mechanisms: A Theory of Semantic and Appraisal Processing	Crum, James E. II	19	28	11:30 - 11:50
Rethinking Recycling	Jerz, Joshua	20	30	11:30 - 11:50
Baseline levels of Blood Serum GDNF Levels in young adults	Sullivan, B., Kusch, K.	21	32	11:30 - 11:50
<b>LUNCH</b>				<b>12:00-1:00</b>
<b>Poster Session</b>				<b>1:00-1:50</b>
History of the Adrian College Department of Chemistry and Biochemistry	Kerr, Brittany	P	33	1:00-1:50
Glucose Reversibility and GLUT1 Expression in Hyperglycemic and Normoglycemic Storage Solutions Cause Irreversible Effects on Red Blood Cells	Murashova, Gabrielle	P	34	1:00-1:50

## Schedule of Events

Pollutants Affecting the River Raisin Watershed	Colton, E., Gomes, B., Paquette, A.	P	37	1:00-1:50
Dominican Republic Mission Team	Leese, Casey	P	33	1:00-1:50
Glial Cell Line-Derived Neurotrophic Factor (GDNF) in the Crayfish	Kusch, K., Sullivan, B.	P	35	1:00-1:50
First Time's a Charm? (How Aerobic Exercise Affects Learning and Memory in Female Soccer Players)	Crowell, Christine	P	38	1:00-1:50
The Effect of Art Medium and Personality Characteristics on Anxiety	Bunio, Lindsey	P	33	1:00-1:50
A Factor Analysis and Validation of a Measure of B-C Connection and Critical Disputation	Crum, James E. II	P	36	1:00-1:50
Public Relations and Ethical Impacts	Waterstradt, Grace	P	38	1:00-1:50
The Effect of Gender on Victim Blame and Rape Myth Acceptance	Connell, Cara	P	34	1:00-1:50
Stage Management: The Complicated Truth	Deere, Danielle	P	37	1:00-1:50
The Fall of Japan's Economy	Markovitch, Joe	25	41	2:00-2:20
Light and traits: Invasive shrubs in the understory of two Michigan forests	Konieczki, Matthew	26	43	2:00-2:20
Building The Oxcart	Wirtz, C., Garlick, H.	27	45	2:00-2:20
Wind Variability of the H-alpha Line of Epsilon Orionis	Oderio, Nicholas	28	47	2:00-2:20
Ethics In Theatre	Gladieux, Mia	23	39	2:20-2:50
Causal Thinking as Deduction: Has Cognitive Psychology Knocked Down Hume?	Crum, James E. II	24	40	2:20-2:50
"Eat me, drink me, love me": An analysis of society's timeless, unethical treatment of women as it relates to Christina Rossetti's "Goblin Market" and Adrian College Culture	Hatfield, J., Stanton, E.	25	42	2:20-2:50
Responses of tropical terrestrial invertebrates to a bactericide and an anti-fungal	Silvers, Megan N.	26	43	2:20-2:50
What Location in Adrian Provides the Best Coffee?	Gieseler, Ryan	27	45	2:20-2:50
Timothy Harkleroad's Senior Recital	Harkleroad, T., Crawford, B., Lewis, C.	23	39	3:00-3:20
Improving retention efforts of African American males on college campuses	Alexander, Devin	24	40	3:00-3:20
Spatial aggregation of shrubs in a southeast Michigan forest	D'Arcangelo, Kimberly N.	26	44	3:00-3:20
Reading vs. Writing: A Study of Perceptions on Literacy	Gabalis, Garrett	27	46	3:00-3:20
Reading vs. Writing: A Study of Perceptions on Literacy	Gabalis, Garrett	27	46	3:00-3:20
Alpha Chi Induction Ceremony	Bott, Bryan	29	48	3:30-4:20



## Session 1

Hickman Board Room

9:30-9:50

**Bailey M. Edwards & Pearle A. Sipsock***Do differences matter in the forest? Traits of shrubs in a Michigan forest.***Mentor: Jeffrey Lake****Ribbon: Thinking Critically**

Invasive shrub species are a substantial problem in southeast Michigan forests; they seem to be suppressing regeneration of canopy tree species, and are becoming more prevalent throughout the understory. It is also likely that they are displacing native understory shrubs through competition. It is hypothesized that non-native species may be invading by utilizing different parts of the ecological niche, represented in this study by functional traits. It has also been hypothesized that non-native species may be able to invade by being more variable than native species, allowing them to utilize a wider range of habitats. This study compares the traits of invasive shrubs in two forests in southeast Michigan—Dawson Arboretum and Michigan International Speedway. There are substantial differences in leaf chemical traits, in particular, between individuals of the same invasive species at the two sites, suggesting support for the second hypothesis. However, these traits, in both cases, differed significantly from those of the native shrubs, also supporting the novel niche hypothesis.

10:00-10:20

**Haley Barnes***A Study on the Effect of After-School Activities on the Self-Esteem of Adolescent Girls***Mentor: Penny Cobau-Smith****Ribbon: Caring for Humanity and the World**

The purpose of this project was to explore the effects of different after-school activities on the self-esteem of middle school girls in Adrian public schools. The after-school activities that were compared can be categorized as both athletic and non-athletic in nature and central focus. The theory behind this study was that student involvement in after-school activities increased self-esteem. Increasing self-esteem and self-worth in middle school girls has been a noticeable challenge in both early and late adolescence, so I chose to take it upon myself to attempt to learn more on how the task can be accomplished. I examined this factor of adolescent development by analyzing the behaviors of several girls at Springbrook Middle School in Adrian, Michigan, as well as the studies of other researchers, in order to form a connections and common trends regarding self-esteem. I did this by conducting a self-reported survey—made using the Likert scale—which is attached in this document. As a result of my research, it can be concluded that extracurricular activities play an active role in increasing self-esteem in middle school girls. This evidence was found both in athletic and non-athletic activities. Middle school is a critical time for the development of identities and relationships with peers, and self-esteem is an important factor in the formation of these things in adolescent girls. For future research, I would like to invest my time in seeing whether the effects of these involvements are consistent long-term (i.e.: in the transition from middle school to high school). For now, though, this study has reassured me that self-esteem in girls can be raised if only the individuals are given the opportunity and the tools to raise it. Keywords: self-esteem, development, girls, activities, adolescence.

**Session 2**

Knight Auditorium

9:30-9:50

**Elizabeth June & Heidi Mykolaitis***Thyroid Hormone is Required for Hearing Regeneration***Mentor: Marti Morales & Keith Duncan****Ribbon: Caring for Humanity and the World**

In collaboration with Dr. Keith Duncan at the University of Michigan, we have established methodologies to induce hypothyroidism in embryonic and adult chicks using the goitrogen methimazole. Congenital hypothyroidism in mammals leads to profound deafness due to aberrant cochlear development. Preliminary data suggests that the same thyroid hormone sensitive processes are at work in the chick. Since non-mammalian vertebrates, like chicks, spontaneously regenerate lost hair cells after injury, we have the opportunity to examine the requirement for thyroid hormone in regenerating sensory hair cells. The results could have a major impact on strategies for inducing hair cell regeneration in mammals. The chick is an ideal animal model for exploring this possibility. Our results will guide future strategies for regeneration of mammalian hair cells and other research applications.

10:00-10:20

**Ashley L. Klett***Fall Phenology of Native and Invasive Shrubs in a Michigan Forest***Mentor: Jeffrey Lake****Ribbon: Thinking Critically**

Invasive shrubs are common in the understory of many forests in Michigan, and seem to be growing in prevalence. They have the potential to negatively affect the functioning of the forest ecosystem, and may eventually replace the trees with a shrub thicket. In past work, it has been shown that many of the invasive species have leaf traits more typical of plants growing in full sun, yet they commonly occur in the shaded understory of the forest. One hypothesis proposed to explain this apparent paradox is that of an extended fall phenology – that is, invasive shrubs will keep their leaves and continue to photosynthesize well after native plants have shed their leaves. This project tested that hypothesis by measuring time to leaf fall of two invasive shrub species, three native shrub species, and three common canopy tree species at Adrian College's Dawson Arboretum. The hypothesis was strongly supported in that both invasive shrub species kept their leaves for months following leaf fall by both native shrubs and trees.

## Session 3

Valade 107

10:00-10:20

**Anthony Rossi***The Influence of Friction Between Football Helmet and Jersey Materials on Force:  
A Consideration for Sport Safety***Mentor: Tina Claiborne & Greg Thompson Ribbon: Caring for Humanity and the World**

**PURPOSE:** The purpose of this study is twofold: 1) measure the coefficient of static friction between different football helmet finishes and football jersey fabrics; and 2) calculate the potential amount of force that could be experienced by the cervical spine due to the amount of friction present. **METHODS:** The coefficient of friction was determined for two helmet samples (glossy and matte), three football jerseys (college, high school, and youth), and three types of jersey numbers (silkscreened, sublimated, and stitched-on) using the TAPPI T 815 Standard Method. These measurements determined which helmet-to-helmet, helmet-to-jersey material, and helmet-to-jersey number combination resulted in the least amount of static friction. **RESULTS:** The Glossy Helmet vs. Glossy Helmet combination produced a significantly greater amount of static friction than the other two helmet combinations ( $p = 0.013$ ). The Glossy Helmet vs. College Jersey produced a significantly greater amount of static friction than the other helmet-to-jersey material combinations ( $p > 0.01$ ). The Glossy Helmet vs. Silkscreened numbers combination produced a significantly greater amount of static friction than the other helmet-to-jersey number combinations ( $p < 0.01$ ). **CONCLUSION:** The coefficient of friction is the ratio between friction forces between surfaces, and the force necessary to commence sliding of one surface over another. When the coefficient of friction is converted to Newtons, the meaning becomes more clinically relevant. Conditions with higher coefficients of static friction result in higher forces. In this study, the highest coefficient of friction could increase the forces experienced by the cervical spine by 3,553.88 Newtons. The results of this investigation indicate that materials helmets and uniforms are made of may impact sport safety.

**Session 4**

Valade 202

9:30-9:50

**Ben Victor***The Evolution of Ethics in Accounting***Mentor: David Coy****Ribbon: Learning Throughout A Lifetime**

Around the world, the public accounting profession has long demonstrated the importance of practicing ethical behavior in the workplace. Over the course of time, ethics have evolved in the accounting profession not only in the United States, but in many countries throughout the world.

10:00-10:20

**Brittni Collins***The Baroque Feminists: A View of the Inclination of Feminism throughout the Baroque Period***Mentor: Carissa Massey****Ribbon: Thinking Critically**

During the late sixteenth and early seventeenth centuries, while the Counter Reformation was occurring in Northern Europe, a handful of women artists began to assert a new sense of work that was distinctly feminist. Italian artists, Artemisia Gentileschi and Lavinia Fontana created a new way of depicting women in art work during this time. Through the femme forte (positive illustrations that depicted women in powerful positions) in Italy and the rise of worship of Mary Magdalene in Northern Europe, Gentileschi and Fontana found inspiration to overcome injustices and create feminist works. This presentation explores these new trends in women's art by analyzing the historical and visual evidence of this shift.

**Session 5**

Peelle 207

9:30–9:50

**Morgan Pendleton***Curriculum Development for the Track and Explore Program***Mentor: Penny Cobau-Smith****Ribbon: Developing Creativity**

The Track and Explore program is an opportunity for the surrounding area schools to go to Michigan International Speedway for a day filled with interactive science lessons in an outdoor setting. In the last 3 years, this program has reached over 3000 students in Lenawee County and other neighboring counties. Beginning with 4 programs for the combined grades of 5 through 8 in 2012, the program has evolved into 18 lessons in 2015 supported by Michigan Department of Education's benchmarks for specific grades. The lessons and activities were developed and taught by Adrian College students in the Teacher Education Department with support from faculty in the Teacher Education, Biology and Chemistry departments. After each field trip in May, the teachers and schools that visited would evaluate the program, which is then used to enhance the lessons and the program as a whole. The evolution of the program lessons and the process of curriculum development is examined in this presentation.

10:00-10:20

**Gabrielle M. Dixon***Track and Explore: Administration and Assessment Growth over three years***Mentors: Jeffrey Lake,****Ribbon: Learning Throughout a Lifetime****Penny Cobau-Smith, & Janna D'Amico**

Since its beginning in 2012, the Track and Explore partnership between Adrian College and Michigan International Speedway has grown from serving 130 students to over 1400 in May 2014. As the program grew, assessment tools were used to determine the strengths and weaknesses of the program, and to make changes to better serve the needs of the students participating. This presentation will address each year's assessment results, and discuss the related changes and growth in the program. The presentation will also discuss the administrative growth of the program, including the role of the Institute for Career Planning and the role that Adrian College students play in the development, administration, and implementation of the program.

**Session 6**

Jones 110

**9:30-10:20 Academic Foundations I Presentations and The Star Light Writing Award for Core**

In Academic Foundations I (AF I), the first course in Adrian College's new Core First-Year Curriculum, students practice the kinds of reading, writing, thinking, and research strategies they will need to be active and successful participants in their academic, professional, and civic lives. AF I focuses on questions that are central to students' daily lives, and aims to cultivate an ethic of inquiry that inspires students to live out each of the college's Ribbons of Excellence.

Each of the four presentations in this session represents the writing excellence that has emerged from AF I. First identified by instructors as outstanding essays from their AF I classes, student work was then submitted to a committee on writing made up of faculty from across the disciplines, who selected the four essays being presented today as representative of some of the best writing accomplished in AF I. By examining their own experiences in relation to readings on the purposes of higher education, Eric Rivera and Hannah Hawkins, writing in response to the question of what brings them to college, respectively demonstrate the ribbons of Learning Throughout a Lifetime and Crossing Boundaries and Disciplines. Hannah Schaefer and Annika Nuler, in their exploratory, research-based essays exemplify what it means to Think Critically and explore multiple points of view. Not only do these essays reflect writing excellence—achieved through dedication and hard work—as well as the mission of the Core program and Adrian College, but they also illuminate the diversity and talent of the newest members of our college community.

One of these essayists will be recognized with the new Star Light Writing Award for Core I, which resurrects the spirit of a past Adrian College prize, the Inter Society Contest, established in 1879 by two campus literary societies: the Star Literary Society and the Lambda Phi Society (whose symbol was a ray of light). Then, as now, judgment for the award is based upon “thought, logical arrangement, and rhetorical style.”

**Eric Rivera***Why Should I Go to College***Mentor: Mary Wall****Ribbon: Learning Throughout a Lifetime****Hannah Hawkins***Amish Country to College Campus: My Reasoning for Attending College***Mentor: Bethany Shepherd****Ribbon: Crossing Boundaries and Disciplines**

9:30-10:20

**Session 6**

Jones 110

**Academic Foundations I Presentations and The Star Light Writing Award for Core  
Hannah Schaefer**

*The Negative Aspects of the NCAA*

**Mentor: Amy Campbell**

**Ribbon: Thinking Critically**

**Annika Nuler**

*Easy as Uno, Deux, Three: The Impact of Bilingualism on Children*

**Mentor: Bethany Shepherd**

**Ribbon: Thinking Critically**

Honorable Mention:

<b>Student</b>	<b>Title</b>	<b>Mentor</b>
Almedina Agic	Stigmatized Nation	Dr. Andrew Winckles
Allyse Zondlak	College: A Complex Journey of Career Passion and Personality	Dr. Melissa Stewart
Allyse Zondlak	Negative Effects of High School Dress Code on Female Self-Image	Dr. Melissa Stewart
Amanda Anderson	College Criteria: How I Selected a School	Dr. Bethany Shepherd
Amanda Anderson	Three Sides to the Story: A Play on Immigration and Discrimination in the U.S.	Dr. Bethany Shepherd
Annika Nuler	Why Go to College at All: My Belated Answer to an Unasked Question	Dr. Bethany Shepherd
Annika Nuler	I am Who I am on Facebook: Technology and Identity in Millennials	Dr. Bethany Shepherd
Ashley Bruce	Going Solo: Venturing into the Unknown as a Woman	Dr. Melissa Stewart
Caroline Barrett	World Views of Assisted Suicide	Dr. Bethany Shepherd
Cassidy Williams	Why Am I Here?	Prof. Ben Dettmar
Ellie Lovell	The Effects of Learning and Teaching in an Inclusive Classroom	Dr. Stephanie Jass

Emily Gibbons	Theater: The Ideal Petrie Dish for Empathy	Dr. Bethany Shepherd
Emily Gibbons	Let's Start at the Very Beginning: My Lifelong Journey to Adrian College	Dr. Bethany Shepherd
Emily Gibbons	The Doctor Tests Me: The Internet and Millennials	Dr. Bethany Shepherd
Hannah Hawkins	Yours, Mine, and Ourstory: A Biblical Perspective of American History	Dr. Bethany Shepherd
Jaelyn Winia	Two Way Immersion Learning	Dr. Andrew Winckles
Jennifer Kelly	A Liberal Arts Education: How to Know the Answers to "Basic" Questions	Dr. Bethany Shepherd
Jennifer Kelly	Fraternities and Sororities: Their Perception Due to Pop Culture and News Media	Dr. Bethany Shepherd
Jessica Feutz	Breaking Free	Dr. Bethany Shepherd
Jordan Powell	Where I Belong	Dr. Bethany Shepherd
Katarina DuMont	The Clash of the Generations in the Workplace	Dr. Bethany Shepherd
Katarina Dumont	Me, Myself, and the Psychologist	Dr. Bethany Shepherd
Kirsten Chambers	Honorable or Horrible	Dr. Melissa Stewart
Kyle Bell	Final Verdict	Dr. Stephanie Jass
Kyle Carrington	Beating the Odds	Dr. Andrew Winckles
Matt Cohen	Physics of Throwing a Baseball	Dr. Andrew Winckles
Matt Gordon	People Aren't All Bad	Prof. Ben Dettmar
Noah Brueckner	A Discussion at Panera	Dr. Bethany Shepherd
Paige Halfmann	What Brought Me Here	Dr. Andrew Winckles
Rachel Kanaziz	Are We Loving Our Parks to	Dr. Melissa Stewart

Rebekah Sebastian	Death? Free Fall: The Quick Escalation from Discrimination to Suicide	Dr. Bethany Shepherd
Rebekah Sebastian	Tumbling Downward: The Effects of Being an Elite Gymnast	Dr. Bethany Shepherd
T.J. Hoffman	The Decision	Dr. Stephanie Jass
Timothy Cain	Selfish Destruction of Nature	Dr. Bethany Shepherd
Torrey Christopher	Root Cause of Violence	Dr. Bethany Shepherd
Zach Armstrong	The Athletic Standard	Prof. Ben Dettmar

**Session 7**

Stanton Administration Building

10:00-10:50

**Mariah Passalacqua**  
*Speckled Mirrors***Mentor: Catherine Royer****Ribbon: Caring for Humanity and the World**

A worthy goal is striving for peace and happiness. The body, mind, and spirit all long for this. For me, peace and happiness are most often found at the water. My body of work consists of paintings of memories made with family on vacations to beaches around the world and especially at my family's cottage up north. Water is a gathering place. People are drawn to the water for its beauty, liveliness, and peacefulness. My fondest memories and favorite places around the world all reside on the waterside. Through my work, I want my audience to feel that same sense of peace and happiness I feel when I am by the water. I paint images of my favorite places, but I make adjustments to increase their universality. By employing some abstraction, I soften details and disguise individuals and locations enough to mimic the quality of memory. Working with black and white acrylic paint, often at the scale of a snapshot, I bring to mind family photographs viewers can connect to their own family archives." In addition, I provoke images of water and light by including my blown glass work and mirrors. By looking into the mirrors, viewers can see themselves in this environment that is so nourishing to me, and find their own peace and happiness in my watery world. My Ribbon of choice is Caring for Humanity and the World because my work offers the viewers a chance explore my peaceful world, and to be reminded of cherished memories. I will need wall surfaces in which I can drive tacks or other small fasteners and six pedestals for my display.

**Session 8**

Peelle Lobby

10:00-10:50

**Breanna Campbell**  
*Pullulate***Mentor: Catherine Royer****Ribbon: Caring for Humanity and the World**

My art exhibition “Pullulate” explores the idea of our world without humans: a post-apocalyptic setting where animals, creatures, and gods reside. Examining their interactions and the cleansing of our earth you will see the effects humans have had on our planet, and how gods will re-awaken and create new creatures to bring back order. Dark creatures will interact and help the wildlife around them, while Demi-gods will protect and regrow the earth’s wildlife. Growing from the ground and hanging from the gallery walls and ceilings will be vines, trees, and grasses, depicting a thriving earth. My inspiration comes from other artists such as Martin Wittfooth, Bob Ross, video games and Japanese graphic novels. “Pullulate” depicts a world where we no longer exist; it is intended to invoke fear and inspire viewers to care more deeply for humanity and the world by developing habits that help and heal our environment.

11:00-11:50

**Corinne C. Coopshaw**  
*Embracing Change***Mentor: Catherine Royer & Carissa Massey****Ribbon: Developing Creativity**

This Ribbons of Excellence project is an exhibition of realistic sized female sculptures created for my senior capstone exhibition. I take negatives from real mothers in different stages of motherhood ranging from 9 months pregnant to 26 years post pregnancy. I then carve images of children into the clay to emphasize what their bodies are capable of and keep the scares to show what some have to endure. For this exhibition I will need to hang 4 sculptures from the wall and three 24”x24” to 30”x30” pedestals. My exhibition engages the “Learning throughout a lifetime” ribbon: I am currently experiencing all the changes a body goes through while entering and after becoming a new mother and learning from all the new obstacles that come with this new world my son has created for me and my newly restrained freedoms. These two subjects of body image and motherhood are important to me for these reasons and why I have decided to use them to create this exhibition. I also create this art in hopes that it will be empowering and educational for mothers and eye-opening for everyone.

**Session 9**Peelle Conference (3<sup>rd</sup> Floor)

10:00-10:50

**Rochelle Kidd**  
*Sea School of Art***Mentor: Catherine Royer****Ribbon: Crossing Boundaries and Disciplines**

My art work is comprised of ceramic pieces making up a class of sea animals. Not only are they ceramic pieces, but they are items you can use in some kind of way. My sculptures are functional pieces. The creation and use of sea animals relates to my water theme. Water to me symbolizes purity and beauty. I live by the quote "you can never touch the same water twice, but it all comes from the same place." I feel like this quote describes how the mind learns. You can be taught the same thing twice but you will learn something new from each experience. This is important to me because I am in the Art Education field. You can be taught one subject so many different ways. The experience you have is pure and you learn from it. From my pieces, I want you to feel that even though they all come from one sea; they all are different in their own way.

11:00-11:50

**Matthew McKeen***The Bureaucracies of (Im)Possibilitites: A Retrospective of Sameness***Mentor: Zach Dunn,****Ribbon: Caring for Humanity and the World****Catherine Royer & Pi Benio**

The content of my work reflects our society's subjective idolatry, and moreover, the suppressed emotions that are triggered by wrongfully placing these priorities on metaphorical pedestals. I consider my works to be a mixture of contemporary social and political influences, as well as abstract expressionism – always inviting the audiences' personal interpretation. I will sculpt many porcelain spherical shapes that will be placed on multiple pedestals increasing in height that suggest the difficulties of meeting society's demands. This will be the central instillation in my show, and around the outside of the room will be three or four sculpted pieces reflecting emotions that are relevant to the central instillation. One example of these pieces, is a laminated wood sculpture that is an open-ended spiral, mounted on a central post. The text next to the piece will read, "This seems to be the law of progress in everything I do. It revolves around a spiral, rather than perpendicular. It seems like we go nowhere, but we're secretly progressing upwards." I hope for my audience to react in an understanding, and empathetic, fashion. Whether it involves gender, education, fitness, or our place in our Marxist society, there are always requirements to "fit in" and if these are not met we feel inadequate. My job is to translate those personal emotions and express the "sameness" of these insufficient feelings.

**Session 10**

Kapnick Business Suite

10:00 – 10:50

**Kaitlyn Church***The Lost Expedition of Bram Vaccaro***Mentor: Catherine Royer****Ribbon: Crossing Boundaries and Disciplines**

This exhibition challenges the idea that nightmares should be synonymous with fear, through the photographic lens of Bram Vaccaro. The Lost Expedition, uses curious black and white photographs of nightmarish creatures, mixed media “found” objects, and written narrative to explore the psychological effect of nightmares. The exhibition itself will be staged as a museum setting, making the narrative feel plausible to the audience. The show is intended to read as a narrative on human fear and its effects on self-exploration and understanding.

## Session 11

Heritage Room

10:00-10:50

**Hope Garrity**  
*Perils of the Pursuit***Mentor: Catherine Royer****Ribbon: Learning Throughout a Lifetime**

My exhibition consists of a series of 5-7 2'x4' acrylic paintings on panel in a semi-realistic style. I view my paintings as visual metaphors depicting various facets of the pursuit of knowledge. These metaphors communicate through the interaction of figure and environment, perspective, lighting and color. As a college student, seeking to learn throughout a lifetime, my goal is to seek knowledge, about the world, about other people, and about myself. Stagnation within the realm of the familiar constantly tempts me, but time after time, I rediscover that stepping out of my comfort zone rewards me with a better understanding of myself and the world around me. Despite the rewards, the quest for knowledge is not without risks, setbacks, stumbles, mistakes and misdirection are common. And knowledge itself, once gained, is not intrinsically good, it is merely the potential for change, whether internal or external. For instance, learning to split the atom was a watershed moment in the history of science, and it has brought both good and evil into the world. Knowledge is power, and the burden of power lies in using it to make the world a better place, and not contributing to the tragedies caused by evil.

11:00-11:50

**Hannah Warner**  
*Reverie***Mentor: Catherine Royer & Garin Horner****Ribbon: Developing Creativity**

My work is black and white photography, and usually my subjects are children. These photographs will be printed as small posters, possibly 11.3"x17.3". I work in black and white because I see it as a way to freeze the time the kids are in; the focus becomes about children. The point of my work is to capture the idea of youth and purity. I photograph children in their own environments, deeply engaged in their inner worlds. When I review the candid pictures it is clear the children only care about what they are doing. The ribbon connected to this is Developing Creativity. The children are encouraged to engage their own imagination and explore all of their possibilities. While engaging in their activities and play, their faces are painted as a masked superhero. These "models" are near and dear to my heart. They allow me to record the purity and energy of youth so often lost in posed photographs. Commonly the kids are photographed in the park or in their own play space while they're minding their own business. Often they are engaged in an activity, an emotion, or another important moment.

**Session 12**

Valade Gallery

10:00-10:50

**Molly Rademacher**  
*Treeline Historic District***Mentor: Catherine Royer****Ribbon: Learning Throughout a Lifetime**

Large rusticated steel trees will act as a pedestal for various historic homes of different historic styles which will sit among the branches. Consistent white exteriors will create a cohesive aesthetic while calling attention to the features that most represent that particular historic style. For example, simple shape, support brackets, bay and elongated windows, and a metal mansard roof all characterize the Italianate style. The viewer of this 'neighborhood' amongst the branches will observe these identifying characteristics that make each style unique. Trees, which are often the symbol for saving the environment, will act as a metaphor, encouraging the viewer to also see historic homes as endangered environments. Ultimately, these treehouses will help to educate the viewer about the importance of historic architecture, and give them the knowledge to appreciate and possibly advocate for them in their daily lives. "Treeline Historic District" will be presented as part of Enkindling Consciousness, opening March 30 through April 12 in Valade Gallery in Shipman Library.

11:30-11:50

**Gabrielle Pelham**  
*Reminiscent***Mentor: Catherine Royer****Ribbon: Developing Creativity**

Reminiscent is an artistic exploration of memories and the imagery associated with them. My work consists of a series of houses collaged with colorful patterned paper, each of which represents a specific place that I have lived and the memories associated with that place. I have lived in over 17 houses and apartments throughout my life; this show features 12 of them. The centerpiece for my show is a larger work of collage on stretched canvas that features the majority of these houses, within protective branches that extend from a brain representative of my mind. Sometimes foggy, bottled up memories, like the ones represented by my houses, can feel frustratingly unresolved. I create this work as a way of speaking to that idea. Although this constant dislocation added to the difficulty of my childhood, these pieces give me an opportunity to represent things that have what happened in a light and almost humorous manor. The things that happen to us and the memories we have of them may contribute to making us who we are, but they do not need to define us, and by shedding light on these events I attempt to convey this.

**Session 13**

Valade Gallery

10:00-10:50

**Lindsey Bunio***Enkindling Consciousness***Mentor: Zach Dunn & Pi Benio****Ribbon: Caring for Humanity and the World**

My series of ceramic work consists of a range of shoes varying in design, form, and surface all influenced by psychology. When I make shoes I am inspired by my personal experiences as well as the experiences of people around me. As natural instinct we create preconceived judgments about people without understanding the whole person. I make shoes to physically represent the experiences people have lived through and how they have shaped the ground they walk on today. The shoes I create are all made from a mold, making them resemble each other in basic structure. However, just as our bodies are all built from similar blueprints, time and circumstances change these structures. I want my viewers to engage in the art by looking around, and finding a pair of shoes that would fit them and a pair of shoes they don't understand. I want viewers to explore the experiences that have shaped their shoes and be open to the events that could have developed the misunderstood shoes into what they are today. I challenge the viewer to not only see my shoes this way, but to take this view outside of the gallery.

11:00-11:50

**Chelsea Barker***Stigma***Mentor: Catherine Royer****Ribbon: Crossing Boundaries and Disciplines**

I use six black and white digital photographs that portray the human body from an abstract point of view. This allows the viewer to see the beauty in "negative" physical characteristics because their view isn't influenced by stigma.

**Session 14**

Valade Gallery

10:00-10:50

**Victoria Cain**  
*Enkindling Consciousness***Mentor: Zach Dunn & Catherine Royer****Ribbon: Developing Creativity**

In today's society, mass production is utilized by manufacturing companies. Identical copies of goods are created by the millions causing people to overlook the importance of craftsmanship, originality, and handmade products. My series is based around the importance of craftsmanship and wood in its natural form. When you think of art most people imagine a pretty picture hanging in a frame, but my art is the frame itself. People often overlook a framework whether it is manufactured, vintage, or homemade the image inside steals the spotlight. In my series of wooden frames there is no picture to steal the focus. My viewers are challenged to get up close to see the intricate details and artistry of the frame standing alone. In my series you will find aged bark, environmental cracking and natural colors of the wood. Each frame is carefully handcrafted from carving, layering, and even burning the wood. My hope is that my viewers will leave feeling challenged to look beyond what is right in front of them and look at the bigger picture.

**Session 15**

Downs Hall

10:30-11:20

**Core Williams Oratorical Competition**  
**Ribbon: Developing Creativity**

In Academic Foundations II (AF II), the second course in Adrian College's new Core First-Year Curriculum, students practice rhetorical strategies they will need to be active and successful participants in their academic, professional, and civic lives. AF II focuses on Adrian College's abolitionist history and aims to cultivate an ethic of inquiry that inspires students to live out each of the college's Ribbons of Excellence.

Each of the speakers in this session represents oratorical excellence that has emerged from AF II. These students, one from each section of AFII, were selected by their instructors as the best orators in their class. Each will be presenting, in character, the short speech they prepared for the Reacting game, Frederick Douglass, Slavery, Abolitionism, and the Constitution: 1845. This game required historical characters to discuss Douglass' recently published memoir, "Narrative of the Life of Frederick Douglass" at a literary forum convened by Charles Dickens.

One of these speakers will be awarded the Williams Oratorical Cup, which was historically given to the Literary Society with the best oration in head-to-head competition. Then, as now, judgment for the award was based on "a panel of judges appointed for this purpose."

**Session 15**

Downs Hall

11:30-11:50

**Cady Lewis***The Maturation of Love, A Vocal Recital***Mentor: Elizabeth Major****Ribbon: Developing Creativity**

The Maturation of Love is the title of my junior recital being presented this March in Dawson Auditorium. I will speak about the creativity used and developed while working on this project. I will enlighten my audience about the process one uses in creating a vocal recital. I will also ask questions of the audience and I will perform a few selections as well.

**Session 16**

Hickman Board Room

10:30-10:50

**Caitlyn Cookenmaster & Katherine Harms**  
*Gluten Analysis of Common Foods***Mentor: David Bartley****Ribbon: Caring for Humanity and the World**

Gluten is a combination of proteins common to many grain-containing foods. Intolerance to gluten is called celiac disease, which is an autoimmune disorder that causes damage to the small intestine upon ingestion of gluten. The only form of treatment is a diet completely free of gluten. Gluten-free eating has also attracted the interest of those wishing to live a healthier lifestyle, although medical experts say gluten-free does not always mean healthy living. People who are gluten-free, by choice or due to medical reasons, often have a hard time finding foods to fit their diets. This is especially true for college students who have limited choices for meals. Analysis of different foods accessible to Adrian College students on and off campus, as well as of the gluten proteins themselves, will provide further insight into gluten and its impact on the AC community.

11:00-11:20

**Riley Jackson**  
*Business Development of Lenawee County***Mentor: Terrence Jackson****Ribbon: Learning Throughout a Lifetime**

My presentation will focus on research that I am conducting this semester for Lenawee Now! to celebrate the history of the county's business development over the past 100 years. Lenawee County's first ever Chamber of Commerce, known as the Adrian Area Chamber of Commerce, was founded in 1916 and began with 420 members. With its centennial fast approaching, this research examines the county's rich history of both industrial and commercial growth. It will investigate the significance of industry during the two World Wars, as well as consider the roles played by specific business such as the Page Wire Fencing Company, The Lion Automobile Company, Tecumseh Products, Ace Drill, and Kapnick Insurance Company. In addition, it will consider the decisions made by the Chamber of Commerce over these past 100 years. This talk will be based on original research conducted in the Lenawee Museum archives and the library.

**Session 16**

Hickman Board Room

11:30-11:50

**Chelsea Strawser***Crystal Growing: An Exploration of Methodology, Chromophores,  
and its Relation to Gemology***Mentor: Sarah Hanson****Ribbon: Thinking Critically**

The purpose of this project was to determine the best crystal growing method at room temperature and pressure and to determine how chromophores can impart color on an otherwise colorless crystal. This was accomplished by first growing potassium aluminum sulfate dodecahydrate crystals in open and closed containers. Although crystal growth was slower using the open jar or evaporation method, it was the most efficient method for crystal growth and growth rate control. Alternatively, the closed jar or sealed method did not consistently grow large single crystals and prohibited growth rate control. After the initial crystals were grown, copper sulfate was added to the solution in an effort to add a blue overgrowth to the crystal. Although copper is a strong chromophore, it did not create a blue rim on the crystal, likely because the two compounds have different crystal structures. Further studies will add a structurally similar chromium aluminum sulfate to the solution to determine if a chromium chromophore fits within the crystal lattice. It is apparent that there are crystallographic and chemical limitations to color alterations in minerals, an understanding of which is essential to the gem industry where the growth of synthetics and treatment of gems is practiced.

## Session 17

Knight Auditorium

10:30-10:50

**Nicole Fredrich***Paragraph 175: A Glance into German Homosexual Penal Code***Mentor: Seth Knox****Ribbon: Caring for Humanity and the World**

Paragraph 175 (§ 175): a simple title for a straightforward section in the Germany penal code (Strafgesetzbuch). Yet the historical implications of this two lined section of the penal code were enormous. Used as justification for discrimination, imprisonment, and sometimes even death, § 175 is a very dark topic in Germany's LGBT history. § 175 made homosexual acts between males a crime, and in its earlier forms also criminalized bestiality as well as forms of prostitution and underage sexual abuse. Over time, § 175 was revised to adapt to cultural shifts, each variation worse than its predecessor. The concentration camps of the Nazi era stand as examples of how § 175 was utilized to persecute homosexuals. Although stricken from Germany's penal code in the 1990's, this historical document impacts homosexuals today and exists in a variety of forms. Legislation against homosexuals is a growing and global problem. § 175 is not just a relic of the past; such legislation continues, fed by fear, hate and ignorance. The voice of the LGBT community is growing, and it deserves to be heard and respected.

11:00-11:20

**Carolyn Wirtz***"The slave of nature and the son of hell": Exploring Essentialism and Identity Construction in Shakespeare's Richard III***Mentor: Bethany Shepherd****Ribbon: Caring for Humanity and the World**

Individual identity remains a hotly debated topic; some argue that identity construction is solely based on culture, while others argue that it is based in the individual. Essentialism, the Renaissance idea that the individual's core manifestation of character is reflected in outward physical appearance, largely influences Shakespeare's Richard III. Throughout the play, Richard struggles between accepting an identity that the court imposes and constructing his own character through soliloquy. This research investigates both cases for identity construction; the court's imposition and Richard's self-made identity are equally involved in determining inherent value, as society and the individual are coactive in establishing societal roles. The primary cause for Richard's maltreatment in the play is due to a historical misunderstanding of handicaps and disfigurement. Essentialism, although conceptualized in the Renaissance, remains surprisingly popular today in perpetuating public ridicule towards both groups and individuals. The problem with essentialism is in its foundation: the belief that the individual's inner essence is reflected in outward appearance. This theology, therefore, is directly correlated with discrimination in the twenty-first century. Confronting society's acceptance of essentialism is vital in order to establish tolerance towards diverse backgrounds and cultures.

11:30-11:50

**Thomas Mackey***The Jewish American Community in Detroit during the Late 1920s  
and Early 1930s***Mentor: Terrence Jackson & Benjamin Dettmar****Ribbon: Thinking Critically**

During World War I, America saw an influx of immigration from a large number of people, coming from a wide array of cultures and ethnicities. Some among them were Jews, who also came to America seeking peace and freedom away from war-torn Europe. Similar to many other immigrant groups, they would go onto settle in major cities, where some would form their own communities, open up their own places of worship, community centers, and businesses that would allow them to practice and maintain their traditions and heritage. In addition to the struggles that they were faced with during the Depression, the Jewish community of Detroit was also faced with unique problems resulting from prominent, anti-Semitism. This research, with the help of primary and secondary sources ranging from anti-Semitic publications, to various scholarly works written over the past several decades, seeks to identify and describe the problems faced by the Jewish American community in Detroit, and how they were dealt with on a communal level through the establishment of clubs, organizations, schools, among many other things.

## Session 18

Valade 107

10:30-10:50

**Mike Osterman***Radius of Care: Calculating the area outside of the proper response time to an automated external defibrillator in secondary schools***Mentor: Victor Liberi & Tina Claiborne****Ribbon: Caring for Humanity and the World**

Sudden cardiac arrest is the leading cause of death in young athletes. A sudden cardiac arrest is typically caused by a malfunction in the heart's electrical system which results in an individual's heart to stop beating. When a sudden cardiac arrest occurs, the application of an automated external defibrillator, or AED, is essential to increasing the chance of survival. Once applied, the AED will analyze the victim's heart rhythm and determine if an electrical shock is appropriate to restore normal heart rhythm. The American Heart Association states that AEDs should be placed so that no matter where one is on campus, they are always within a 1-1.5 minute brisk walk away from one. From this statement, the term "Radius of Care" was created and can be defined as the circular area an individual can travel from the AED to a spot on campus within the 1-1.5 minute timeframe. To better reflect the real life situation of a possible sudden cardiac arrest, three different speeds were used: Walking, jogging, and golf cart or Gator speed. The purpose of this study was to determine the percentage of area that is outside the "Radius of Care," or proper response time to an AED, for each condition. Secondary schools located in the Southeast Michigan and Northwest Ohio regions who are willing to participate were selected for the study. The AEDs were located at each school and plotted on an application on an Apple iPad. The percentage of area outside the "Radius of Care" was calculated for each condition at each school. My hypotheses were that there will be a percentage of total property area that is not covered by walking and jogging radii in both Public and Private schools. Most, if not all, of the total property area will be covered by the Gator radii in both Public and Private schools. Lastly, Public schools will possess a larger percentage of area outside the "Radius of Care" than Private schools in each condition.

11:00-11:20

**Casey Fougrousse***Effects of Hydration Education on Youth Ice Hockey Players***Mentor: Tina Claiborne & Keith Bozyk****Ribbon: Caring for Humanity and the World**

**PURPOSE:** This study examined the effect of education on hydration status of youth male ice hockey players. **SUBJECTS:** Twelve male ice hockey players between the ages of 8-10 volunteered for the study. **PROCEDURES:** Using a handheld refractometer and physician's scale, specific gravity of urine and body mass were measured to determine hydration status. Six measurements were obtained from each subject prior to hydration education (pre- and post-practice/game). Following the pre-testing, hydration education consisted of a presentation to the volunteers and parents on the definition of dehydration, how dehydration can affect performance, signs and symptoms of dehydration and heat illness, fluid intake guidelines, and appropriate fluids for hydration. Following education, six post-test measurements were obtained. **RESULTS AND CONCLUSION:** Data will be analyzed using a paired samples t-test for each dependent variable. This will determine whether hydration education effected hydration status of youth male ice hockey players.

**Session 18**

Valade 107

11:30-11:50 **Anthony Rossi & Casey Donovan***Acute Laryngeal Fracture in a Male Collegiate Ice Hockey Athlete***Mentor: Victor Liberi & Meg Sharp**  
**Critically****Ribbon: Thinking**

Acute laryngeal injuries account for 1 out of 42,528 emergency room visits. Only 10% of laryngeal injuries are related to athletics. There is a lack of knowledge regarding anterior laryngotracheal structure pathologies in the field of athletic training. This case presents the challenges faced and outcomes of one laryngotracheal injury in a male hockey player.

**Session 19**

Valade 202

10:30–10:50

**Rachel Doklovic, Dominick Reed, Jacob Waldrup,  
Janaye Powers, Cristina Miller, & Kayla Vanston***American Advertising Federation Adrian College Chapter- Pizza Hut***Mentor: Patrick Quinlan****Ribbon: Thinking Critically**

Advertising is a form of marketing communications, used to persuade consumers; it plays a huge role in everyday life. The American Advertising Federation is a national organization that provides college students the opportunity to work together to create an advertising campaign for a well-known company and present the campaign in front of various executives, while competing against other universities. This gives interested college students hands on experience in creating an advertising campaign. For the 2015 case, the Adrian AAF chapter must develop a campaign for Pizza Hut, focusing on online ordering. This presentation will consist of the chapter's presentation team demonstrating their Pizza Hut campaign. In the presentation, our ribbon of focus is developing creativity. The advertising campaign incorporates creativity with the traditional artistic side, and by creating and developing new marketing ideas. The presentation requires the creation of original artwork and media, and creative ideas to be developed to produce an advertising campaign for Pizza Hut's online ordering.

11:00-11:20

**Molly Rademacher**  
*The Hillrose***Mentor: Nancy VanOver****Ribbon: Thinking Critically**

Maintaining our nation's history and accommodating the needs of a large modern family may seem to have little in common, but historic homes hold this potential. Careful preservation of exterior architectural detail of The Hillrose, a Sears and Roebuck model which was first offered for "cut and fitted" purchase in 1916, will allow future generations a glimpse into America's residential architectural history. The interiors and floor plan will be remodeled to provide both a functional environment and modern conveniences for a family of seven, while still maintaining the historic charm of the Foursquare style. The transforming of the large cellar into finished living space will accommodate the family with much needed square footage without compromising the overall character of the home. Overall, this restoring and remodeling of The Hillrose, will show how one may not only provide a space fit for a modern family, but also provide a living history for generations to come.

11:30-11:50

**James E. Crum II**

*The Role of Semantics in the Formation and Activation of Appraisal Mechanisms:  
A Theory of Semantic and Appraisal Processing*

**Mentor: Stacey Todaro****Ribbon: Crossing Boundaries & Disciplines**

Could the way the brain constructs meaning affect how people evaluate themselves, others, and the world? Specifically, do the words people use to describe experiences act as an integral component to facilitating emotion? It is unclear: On one hand, the account of semantic processing at the neurobiological level is still rudimentary (Pylkkänen, Brennan, & Bemis, 2010) and, on the other, the relationship between theoretical models of meaning and cognitive models of appraisal is uncorroborated. However, cognitive science offers a promising direction towards which a coherent theory might advance. In the following, I will explicate semantics as it relates to linguistic theory and make clear some of the issues, as well as advantages, of a neurobiological approach to investigating semantic processing; then I will examine how cognitive science has informed appraisal theory. Lastly, I will propose that certain lexical representations and semantic operations help form and activate appraisal mechanisms. Conclusions consider some future directions towards which research in cognitive neuroscience can work.

## Session 20

Peelle 207

10:30-10:50

**Nicole Gestwite***Bridging the Gap in Education with Language Accommodation***Mentor: Carman Curton****Ribbon: Caring for Humanity and the World**

This work will examine the importance of implementing African American Vernacular English (also known as Black American English) in the culturally diverse elementary classroom. Research trends show that there is still a wide educational achievement gap between African American and Caucasian students. Research also informs that this educational achievement gap has much to do with language in the classroom. While educators are likely to recognize Spanish speaking students as students who speak English as a second language (ESL students,) they often discredit the language of African American English. Standard American English (SAE) has been the most widely accepted form of language historically. However, as diversity in our education system grows, we must discover how best to accommodate such diversity. Every child deserves the chance to succeed and most will do so if they feel respected by their educator, specifically in the area of language. It is important for educators to recognize that in order for students to be internally motivated in their studies, they must feel some sort of confidence when they enter their classroom. This presentation will suggest viable options for code switching, or translating from one language to another, in the elementary classroom as well as introduce a proposed AAVE language accommodation workshop for educators in culturally diverse areas.

11:00-11:20

**Tyler Ormiston & Matthew Sisoler***Role of Ethics in Journalism with Regard to Baseball***Mentor: Renee Collins****Ribbon: Thinking Critically**

Baseball has been America's pastime since the nineteenth century when it became popular just after the Civil War. Many stories have arisen from baseball including the 1919 Chicago White Sox and Shoeless Joe Jackson in which six players participated in a conspiracy to fix the 1919 World Series. Of course, a recent film that relates to this story is Field of Dreams. Other famous stories include the color barrier and Jackie Robinson, Roberto Clemente and the coverage of the plane accident which tragically ended his life, and of course the steroid era of Major League Baseball today. We are planning to take an in-depth look at the major scandals and news stories that directly correlate to baseball, and how events such as the Black Sox and Biogenesis scandals have affected not just baseball, but all sports and the world itself. We are going to look at how the media has played a key role in bringing several of these scandals to the public's attention, and we will explain why, in the modern age of today, why it is more important than ever to maintain journalistic ethics across all fields, not just sports. Our presentation will go chronologically, from the first scandal to rock Major League Baseball (the Black Sox affair of 1919) and work our way forward, touching on various incidents and news stories. Jackie Robinson breaking the color barrier into Major League Baseball will be a definite focus point for the presentation, as it was the media and the perceptions in that era that whipped up such a frenzy against an African-American person being allowed to play Major League Baseball. The home run race between Mark McGwire from the St. Louis Cardinals and Sammy Sosa from the Chicago Cubs will be featured, and how that historic season is now forever tainted by the "s-word," steroids. That will lead into the discussion about the Mitchell Report and leading into the Biogenesis scandal that broke just one year ago in 2013, and how the media was utilized to call Commissioner Bud Selig to action against the steroid abusers.

**Session 20**

Peelle 207

11:30-11:50

**Joshua Jerz**  
*Rethinking Recycling***Mentor: Susan Nichols****Ribbon: Caring for Humanity and the World**

With the scientific debate about climate change over, our society has seen a shift towards recycling. While this has been a progressive step towards a more sustainable Earth, we have seen uninformed cities using “one bin for all” recycling programs which combines recyclables and trash together. The bin is delivered to a material recovery facility (MRF) where it is sorted either manually or optically. Unfortunately this process is only able to recover between 5% to 30% of “recycled” materials due to the contamination inherent in this design. Dirty MRFs use incineration (also known as “gasification” or “catalytic conversion”) to dispose of the trash, which releases Persistent Organic Pollutants (POPs) like dioxin and furans into the air. These pollutants are responsible for birth defects, disrupt hormonal systems, and cause cancer while MRFs expose their employees to dangerous health consequences. This presentation covers why we must reject trash incineration due to its continuation of the unsustainable model of extraction, production, distribution, consumption, and disposal. With informed choices for our waste disposal we can help shape policies that are sustainable and healthy for humans, animals, and the earth by moving to zero waste solutions by reducing, reusing, and recycling.

## Session 21

Jones 110

10:30–10:50

**Emily Pattyn***Motown Music and the Civil Rights Movement***Mentor: Benjamin Dettmar****Ribbon: Learning Throughout a Lifetime**

Motown Records, one of the most successful record labels during the African American Civil Rights Movement, was prominent in bridging white and black culture during troubled racial times in Detroit. Characterized by a combination of soul and pop, the “Motown Sound” aided in the battle to end racial discrimination towards African Americans via the use of powerful lyrics and catchy beats. The popularity of the songs and activism by the Motown artists themselves, ensured Motown played a major role in the Civil Rights Movement. “Motown Records and the Civil Rights Movement” aims to show just how crucial and indispensable of a role music played as a mechanism of hope and determination not only during the 50s and 60s for African Americans, but also today for so many minorities. Macklemore’s “Same Love” describes the prejudices that same sex couples experience in contemporary America with regard to same sex marriage. Macklemore’s popularity will help to influence a generation, similar to how Martha and the Vandella’s “Dancing In The Street” was instrumental in influencing public opinion at the peak of the Civil Rights Movement. Activism through music promotes “Learning Throughout A Lifetime” because it is timeless in nature and it constantly strives for social change. In fall 2014 I won the History & Art History Department’s Annual McNitt Grant, which funded my research in Detroit at the Motown Museum and archives. My research and presentation will highlight how this happened in the 1960s in Detroit, Michigan and how it is still happening in the 2000s in Adrian, Michigan.

11:00–11:20

**Aaron Berry***How Daily Habits Influence Happiness***Mentor: Christe Boxer****Ribbon: Caring for Humanity and the World**

Happiness has been a much discussed topic during the last decade. Cleveland Cavaliers owner Dan Gilbert, acclaimed Professor of Psychology and Management at Claremont Mihaly Csikszentmihalyi, famed American Psychologist Martin Seligman and many others have studied the importance of happiness. I hypothesize that there are certain habits that correlate to an individual’s rating of their happiness. I will survey Adrian College faculty and students about their daily activities, relationships, and health habits and correlate their data with self-reported happiness levels. One of the factors I intend to study is the amount and quality of sleep an individual gets every day. Other factors include, time spent with family, type and the length of time of exercise conducted, connectedness within Adrian College or the community, and satisfaction within intimate romantic relationships. In addition to finding correlations, I am also interested in how happiness affects students’ academic success at Adrian College. Higher levels of happiness may allow students to focus more on assignments and lectures, which leads to more academic success. I expect to find a positive relationship between happiness and student GPAs.

**Session 21**

Jones 110

11:30–11:50

**Brian Sullivan & Kelsey Kusch***Baseline levels of Blood Serum GDNF Levels in young adults***Mentor: Monica McCullough****Ribbon: Thinking Critically**

Neurotrophic factors are a family of proteins that help the growth, survival and maintenance of neurons. Glial Cell Line-Derived Neurotrophic Factor (GDNF) is a vital neurotrophic factor for dopaminergic and motor neurons. To date baseline measurements of GDNF have yet to be established in human blood levels. The purpose of this study is to establish baseline measurements of GDNF in human blood serum. GDNF serum levels will be tested by using an enzyme-linked immunosorbent assay (ELISA). A student's T-test and ANOVA will be performed to determine differences between the following characteristics: gender, smoking habits and physical activity levels.

Poster Presentations

1:00-1:50

Adrian Tobias Room

**Brittany Kerr***History of the Adrian College Department of Chemistry and Biochemistry***Mentor: Michael Claus****Ribbon: Crossing Boundaries and Disciplines**

The Department of Chemistry and Biochemistry at Adrian College has a rich history. Based on research conducted in the spring of 2014, this poster will outline the history of the Department of Chemistry and Biochemistry starting from its roots with the founding of the college in 1859 when only two courses were offered, one referred to as the Science Course and the other the Classical Course. The department experienced remarkable growth in the Elmer Jones era and has continued to change and evolve in regards to technology, facilities, and faculty. The poster will conclude with the recent renovations of Peelle and Jones Halls and will reflect the crossing boundaries and disciplines ribbon of excellence through the connection of history and writing with the chemistry department focus.

**Casey Leese***Dominican Republic Mission Team***Mentor: James Hill****Ribbon: Caring for Humanity and the World**

The main goal of the mission trip is for participants to grow in their spiritual life and outlook of life in general. There is something about observing the natives in the community we serve. They are so happy with so little. We Americans seem to have so much but are still unhappy. There have been participants that have learned they were in the wrong field of study and have changed their entire course direction upon returning from the Dominican Republic. There have been individuals that realize they were in the wrong field of work and made a change in their lives. These trips provide a time for personal reflection and a time to connect with God on a deep level.

**Lindsey Bunio***The Effect of Art Medium and Personality Characteristics on Anxiety***Mentor: Michelle Beechler & Amy Hillard****Ribbon: Crossing Boundaries and Disciplines**

This study examined the effects of art making on anxiety while considering the Big Five personality characteristics of each individual. Along with taking the Big Five Inventory and the State Trait Anxiety Inventory participants were given a prompt to make art using either colored pencils or paint. It was predicted that the reduction of anxiety would be dependent on the personality of the participant in accordance to the art medium they used. The hypothesis was supported that those high in conscientiousness had a greater anxiety reduction when using colored pencil rather than using paint. It was also confirmed that the relationship between art medium and personality did not moderate anxiety for those high in agreeableness. Lastly, while extroversion and neuroticism did not have significant interactions, openness was approaching significance. Converse to the hypothesis, those high in openness had a greater decrease in anxiety when using colored pencil rather than paint.

Poster Presentations

1:00-1:50

Adrian Tobias Room

**Cara Connell***The Effect of Gender on Victim Blame and Rape Myth Acceptance***Mentor: Amy Hillard & Michelle Beechler****Ribbon: Thinking Critically**

The present study tested the effect of participant and victim gender on victim blaming and rape myth acceptance when the gender of the rapist remained unknown. Past research has found gender to have an effect on victim blame and the acceptance of rape myths. For this study, 27 female and 13 male general psychology students were randomly selected to read either a vignette depicting a female or male who was raped. Participants were asked to complete measures of victim blame and rape myth acceptance. Male participants were found to accept rape myths as being true more than female participants,  $F(1,33) = 8.80, p < .01$ . This finding is consistent with previous research; however, the present study indicates that this gender difference persists even when the rapist's gender is unknown. Contrary to previous research, victim gender did not influence rape myth acceptance or victim blaming when the rapist's gender was unknown.

**Gabrielle Murashova***Glucose Reversibility and GLUT1 Expression in Hyperglycemic and Normoglycemic Storage Solutions Cause Irreversible Effects on Red Blood Cells***Mentor: Michael Claus & Dana Spence****Ribbon: Caring for Humanity and the World**

Current protocols approved by the Food and Drug Administration (FDA) for the storage of donated red blood cells (RBCs) cause irreversible effects on the function as well as the proteins imbedded with in the plasma membrane of these cells. One of these storage solutions evaluated in this study is called Additive Solution-1 (AS-1). With a glucose concentration of 111 mM, this is approximately twenty times the glycemic level in normal blood. Using time-resolved fluorescence (TRF) and Western Blot Analysis glucose uptake data was collected and evaluated over a four-week storage period. Additional studies are currently underway in order to provide additional data to support these finding and conclusions. The evaluation of all the FDA approved storage solutions; AS-1, AS-3 and AS-5, needs to be conducted as well. This will increase the quality of transfused RBCs.

**Poster Presentations**

1:00-1:50

Adrian Tobias Room

**Kelsey Kusch & Brian Sullivan***Glial Cell Line-Derived Neurotrophic Factor (GDNF) in the Crayfish***Mentor: Monica McCullough****Ribbon: Thinking Critically**

Glial cell line-derived neurotrophic factor (GDNF) is a protein that promotes the survival of multiple neurons such as dopaminergic and motor neurons. Humans, among other species such as mice, rats, and frogs, have been shown to express GDNF. However, little research has been conducted previously among invertebrates, thus this study is aimed at determining how much GDNF protein content is found within the crayfish. Analyses of GDNF protein content will be examined in various organs and tissues of the crayfish via an enzyme-linked immunosorbant assay (ELISA). All samples were analyzed using an ANOVA (analysis of variance) with a p-value of  $<0.05$  to determine significance. By studying the crayfish, this allows us to examine major organs and compare them to the results of vertebrates such as humans. The results of these findings could allow for preventative research in motor neuron degenerative diseases such as Amyotrophic Lateral Sclerosis (ALS).

Poster Presentations

1:00-1:50

Adrian Tobias Room

**James E. Crum II***A Factor Analysis and Validation of a Measure of B-C Connection and Critical Disputation***Mentor: Stacey Todaro****Ribbon: Thinking Critically**

Cognitive penetrability is the central principle on which Cognitive Behavioral Therapy (CBT) is predicated, according to which information-processing precedes responses, such as emotions and behaviors, and that changes to cognitive processing engender changes to the emotive or behavioral corollaries (David, Miclea, & Opre, 2004). This theoretical tenet informs the practice of CBT in that a major object of CBT-based therapies is to deconstruct those cognitions indicative of dysfunctional processing, such that they lead to unhealthy emotional distress or maladaptive behavior, and to reconstruct cognitions that are protective against the pathogenesis of psychopathological symptoms (Clark, 1995; David, Lynn, & Ellis, 2010). However, discord among CBT-based therapies as to the cognitive processes responsible for change, that is, those cognitions whose deconstruction, as well as reconstruction, most effectively treats psychopathological symptoms, has rendered the field devoid of a theoretically, empirically coherent model of change (David et al., 2010; Hyland & Boduszek, 2012). There is, therefore, reason to explore the possible governing dynamics of cognitive change that are commensurable with the respective postulations of CBT-based therapies. There are at least two viable candidates which might account for the modification of CBT-based change mechanisms, and both of which are integral components to any CBT-based therapy, namely b-c connection and critical disputation. In order to instantiate b-c connection and critical disputation as latent constructs, this study sought to develop a reliable apparatus by which to measure b-c connection and critical disputation and to establish construct validity via corroboration of their relation to CBT-based mechanisms of change. Specifically, the research strategy involved first assessing the factor structure and internal consistency of the b-c connection and critical disputation scale (BCCCDs); second, whether or not the factor structure of the BCCCDs could be confirmed was investigated; and third, convergent validity of the BCCCDs was examined by assessing whether or not b-c connection and critical disputation corresponded to irrational and rational belief processes, as described in REBT theory (Ellis, 1994; David et al., 2010).

**Poster Presentations**

1:00-1:50

Adrian Tobias Room

**Danielle Deere***Stage Management: The Complicated Truth***Mentor: Annissa Morgensen-Lindsay****Ribbon: Developing Creativity**

Deere, Danielle. Stage Management: the Complicated Truth A stage manager is at the backbone of a performance. The skills learned in the process of becoming a stage manager can be carried into multiple careers. In accordance with the Ribbons of Excellence, Developing Creativity is relevant for stage management. Stage managing is all about communication, time, and utilizing skills. From the front of the house to the depths of backstage, the stage manager must be involved in all aspects of the production. Danielle Deere has spent time preparing herself as a stage manager for the production of School for Wives by Moliere. Through the use of research, rehearsals, previous productions and courses, she has put forth focus in establishing the qualifications of a stage manager. This included being at the rehearsals, casting, overseeing designers, and the master prompt book. In Deere's poster presentation, she plans to show the procedures and process of being a stage manager for a college production as well as sample materials such as templates, notes, and design aspects. The focus will be on the complex nature of a stage manager and the development of creativity through her skills. Her poster presentation will also include the details of an effective stage manager and the importance of working as a team and as a leader in the theatre environment.

**Ethan Colton, Braydon Gomes, & Alaina Paquette***Pollutants Affecting the River Raisin Watershed***Mentor: Sarah Hanson****Ribbon: Caring for Humanity and the World**

The River Raisin Watershed covers 1,059 square miles and drains into Lake Erie at Monroe Harbor. The area is 75% agricultural with a vast diversity of wildlife and plants that are at risk from pollutants, including nitrates and phosphates, that are being released into the watershed. Agriculture is a major part of the economy within the watershed but, despite some efforts to improve agriculture practices, dissolved reactive phosphorous and nitrates are still being released into the streams. These contaminants produce microcystis blooms that lead to anoxic conditions and create dead zones in western Lake Erie. Over the course of the semester, water samples will be taken from six different sites weekly and following substantial precipitation. These sites include two locations along the South Branch of the River Raisin, two along Black Creek, and two along Evans Creek. These samples will be analyzed for phosphates and nitrates. At the end of the 2015 spring semester, this data will be used to evaluate stream health and potential sources of pollution within the River Raisin Watershed.

**Poster Presentations**

1:00-1:50

Adrian Tobias Room

**Christine Crowell***First Time's a Charm? (How Aerobic Exercise Affects Learning and Memory in Female Soccer Players)***Mentor: Monica McCullough****Ribbon: Thinking Critically**

Aerobic exercise is one of the many important ways to try and delay the deterioration of memory in advancing age. Studies have found that aerobic exercise plays a major role in the improvement of cognitive functions, especially learning and memory. The purpose of this study is to determine the effects of one bout of aerobic exercise on learning and memory among female soccer players. Two groups, an exercise group and control group, were given information on cloud formation and were tested on their recall ability following immediately, one week and two weeks after exercise. The control group was not exposed to a bout of aerobic exercise. Results were compiled from three quizzes and are reported as the mean +/- the standard deviation, where a  $p\text{-value} < .05$  was used to determine significance. The control group's scores were  $15.75 \pm 1.258$ ,  $7.666 \pm 1.154$ ,  $8.7 \pm 1.707$ , following immediately, one week, and two weeks post exercise, respectively. The exercise group's scores were  $18.5 \pm 5.802$ ,  $10.75 \pm 4.991$ ,  $9.5 \pm 3.511$ , following immediately, one week, and two weeks post exercise, respectively. While there were no significant differences between the groups, there were trends that might suggest that exercise could help with learning and memory in female soccer players.

**Grace Waterstradt***Public Relations and Ethical Impacts***Mentor: Renee Collins****Ribbon: Thinking Critically**

Whether they know it or not, consumers are impacted by public relations. Companies around the globe use public relations to influence buying decisions and consumer choices as well as to protect their image in a time of crisis. Consumers are affected in a variety of ways depending on the skill and ethics of public relations within companies. How these companies campaign for buyer dollars and promote their image will be explored within the context of ethics. Examining specific PR campaigns will reveal which companies are using these campaigns for ethical returns and which ones are all about the "image." In today's society, where branding has such an immense impact on the consumer, all PR teams should be held accountable for ethical work. Comparing and contrasting promotions on either side of the ethical fence show which businesses are working for society, and which are working for themselves.

**Session 23**

Downs Hall

2:30-2:50

**Mia Gladieux**  
*Ethics In Theatre***Mentor: Annissa Morgensen-Lindsay & Renee Collins****Ribbon: Thinking Critically**

Gladieux uses her journalistic instincts as well as musical theatre knowledge to explore the underlying ethical issues of five popular musicals from a variety of decades that detail unique ethical dilemmas. This presentation challenges Gladieux to think critically about the musical theatre world and allows her to discuss how these shows were received by audiences, performed by actors, and reviewed by journalists. The musicals, including selections from *Do I Hear a Waltz?* and *Wonderful Town*, fall into different divisions of history and relate directly to the society in which they were written. Does the audience acknowledge the ethical issues or are they inconsequential if the songs and book are well written and entertaining? This question is explored while Gladieux illustrates how and why the musicals were received through song and dance, a reflection of her musical theatre recital. The presentation is a look into both theatre and journalism with live performance as a vehicle to “Thinking Critically,” a ribbon that embodies this topic. The presentation will identify new ways of thinking about musical theatre content as well as open up ethical questions involving musical theatre and society.

3:00-3:20

**Timothy Harkleroad, Brian Crawford, & Cady Lewis**  
*Timothy Harkleroad's Senior Recital***Mentor: Michael Allen  
& Annissa Morgensen-Lindsay****Ribbon: Learning Throughout a Lifetime**

Through this presentation, Timothy shows how he has been able to think critically by exploring different points of view. In the recital, Timothy delves into the life of a different character for each scene; portraying emotions, actions, and thoughts of many different characters. This performance also allows Timothy to learn throughout a lifetime. By performing numbers from multiple different decades, he was able to pursue knowledge from each era, and therefore, continue to grow as a performer. Timothy’s recital focuses on song, dance, and acting to capture an audience. For the presentation, Timothy plans to perform contrasting pieces as well as touch on the planning/rehearsal process.

## Session 24

Hickman Boardroom

2:30-2:50

**James E. Crum II***Causal Thinking as Deduction: Has Cognitive Psychology Knocked Down Hume?***Mentor: James Spence****Ribbon: Learning Throughout a Lifetime**

People reason both inductively and deductively. In some cases people draw general conclusions from particular propositions (bottom-up reasoning), while in others they produce a conclusion from general premises (top-down reasoning); they also reason inductively and deductively in other ways, such as via analogy or math. For example, one might infer from observing cars stopped at a stop sign that all cars are to stop at stop signs, which is an inductive inference because the person has generalized from several instances of cars stopping at stops signs to the conclusion that all cars are to stop at stop signs; or, one might hold the proposition that 'if grass is wet, then it rained,' see wet grass, and conclude that it rained, which is a deductive inference because the affirmation of the antecedent necessarily entails an affirmation of the consequent. However, the type of reasoning people use to draw conclusions about perceived causal relations is not well understood, such that the process by which someone concludes, for instance, that water causes plants to grow is unclear. Some have argued, such as Hume (1748), that causal thinking is based on experience, rendering casual thinking an inductive process, whereas others, such as Popper (1959), have contended that causal thinking is a deductive process. In the following, I will discuss this issue surrounding human reasoning by weighing first the arguments in favor of inductive causal reasoning and second the positions in defense of deductive casual reasoning, together with an assessment of the limitations to these views, and conclude that no account has shown that causal thinking is exclusively an inductive or deductive process; then I will examine, in the same fashion, the mixed findings of cognitive psychology and assess Rips' (1994, 2008) views on the line of research from which a correct interpretation of casual thinking will arise. Conclusions discuss the advantage of cognitive science, over philosophy of mind, in the pursuit of a satisfactory description of causal thinking, as well as consider some future directions towards which cognitive science can work.

3:00-3:20

**Devin Alexander***Improving retention efforts of African American males on college campuses***Mentor: Agnes Caldwell & Bridgette Winslow****Ribbon: Thinking Critically**

Nationwide we see that the retention rate of African Americans males is at a dismally low of 42% compared to the national average of 80%. Administrators in higher education across the nation are working to find efficient ways to increase retention of African American on their campuses. This study, using qualitative data, looks at African American males that were retained and why they remained in college. By holding interviews, focus groups and secondary data I will be able to analyze the stories of retention success at a small Midwest private college.

**Session 25**

Knight Auditorium

2:00-2:20

**Joe Markovitch**  
*The Fall of Japan's Economy***Mentor: Bryan Bott****Ribbon: Thinking Critically**

In the past decade, Japan's economy has been increasing at a very slow rate. Recently, Japan has even slipped into a recession. There are many factors that are hindering Japan's economy. Some of the main problems Japan is facing are simply cultural. Japan's business environment, lack of women in the workforce, and Japan's rapidly declining population are each key roles into the demise of Japan's economy. Looking at each of these problems, I was able to determine what Japan needs to change to continue to be a leading competitor in the global market.

## Session 25

Knight Auditorium

2:30-2:50

**Joslyn Hatfield & Ellyn Stanton**

*“Eat me, drink me, love me”*: An analysis of society’s timeless, unethical treatment of women as it relates to Christina Rossetti’s “Goblin Market” and Adrian College Culture

**Mentor: Bethany Shepherd****Ribbon: Caring for Humanity and the World**

“Is it a fable—or a mere fairy story—or an allegory against the pleasures of sinful love—or what is it?” Caroline Norton asks of Christina Rossetti’s poem, *Goblin Market*. Although there is no sound consensus on which of Norton’s categories *Goblin Market* fits into, I would argue that *Goblin Market* is a testament to the unethical double standards put in place when a woman succumbs to temptation and participates in acts of “sinful” love. More specifically, I assert that *Goblin Market* sends a message that Victorian culture presumed women had to rely on men to survive. This poem demonstrates the Victorian double standard that, in order to be a desirable life partner, a woman must succumb to her suitor’s wishes. However, if she succumbs to her suitor’s sexual wishes, she is cast aside and deemed unworthy of marriage and, therefore, unable to survive. Upon reading *Goblin Market*, the concepts behind my interpretation proved to be timeless, in the sense that they still apply to several societal norms, today, and more specifically, several cultural norms at Adrian College. The ethically related interpretations of the oppression of women, taken from this Victorian poem, although aged, are not outdated. My analysis of the Victorian double standard for women is still relevant in today’s modern society. Although the particulars of the oppression of women have changed with the passing of time, the concept that a woman’s sexual actions negatively relate to how she is perceived by society is still very present today. Therefore, inherently, the notion that a woman’s sexual actions directly affect her worth, in a culture dominated by male interests, is also still true. Through my interpretation of *Goblin Market* I will shed light on the treatment of women at Adrian College in relation to the sexual and gender-based double standard society has put in place. I will use Christina Rossetti’s, *Goblin Market*, as a platform to analyze this ethical dilemma. My presentation will consist of my analysis in the form of a journalistic, documentary-style film.

## Session 26

Valade 202

2:00-2:20

**Matthew Konieczki***Light and traits: Invasive shrubs in the understory of two Michigan forests***Mentor: Jeffrey Lake****Ribbon: Thinking Critically**

Invasive species are a substantial threat to biodiversity, environmental processes and ecosystem function. Several species of invasive shrubs are common in the understory of Michigan forests, yet their method of invasion is currently unknown. Many hypotheses center on niche theory—how species live in their environment. Some argue invasive species exploit unfilled niches in existing environments, while others suggest they develop novel niches. Still others suggest they outcompete native species by utilizing resources more efficiently. This study tests these hypotheses in two Michigan forests, by comparing native and invasive shrubs for their functional traits and utilization of understory light environment. Data from nearly three hectares of forest plots at Michigan International Speedway and Dawson Arboretum were used to estimate the light environment of individual woody plants. Leaf trait data collected from these plants were combined to determine the species' position on the leaf economics spectrum (LES), which describes light utilization of plants. While two invasive shrub species utilized significantly brighter light environments than other species, the wide range of environments experienced by all species suggests substantial niche overlap. The wide range of LES traits in the shrubs, however, was suggestive of a much broader light niche than was actually present.

2:30-2:50

**Megan N. Silvers***Responses of tropical terrestrial invertebrates to a bacteriocide and an anti-fungal***Mentor: Jeffrey Lake****Ribbon: Thinking Critically**

Antibacterial and anti-fungal agents are used both for human health and commonly in agriculture to maintain the health of crops and livestock. Meanwhile, soil invertebrates play a key role in soil decomposition and nutrient cycling. However, antibacterial and anti-fungal agents have a potential to negatively impact these invertebrates through affecting their gut flora and physiology. This study asked if three distinct terrestrial invertebrates showed preference for treated or untreated soil environments. This study focused on millipedes, isopods, and Ectatomma ants, and their response to antibacterial Streptomycin and the anti-fungal Captan. In soil and mesocosm studies, millipedes and isopods showed strong to moderate aversion to soil treated by either Captan or Streptomycin, while Ectatomma ants showed a preference for the treated soils. While this study was unable to determine the reason for these divergent results, it was suggested that ants may be attracted to the semi-sweet smell of the treatments, a response less likely in millipedes and isopods.

**Session 26**

Valade 202

3:00-3:20

**Kimberly N. D'Arcangelo***Spatial aggregation of shrubs in a southeast Michigan forest***Mentor: Jeffrey Lake****Ribbon: Thinking Critically**

The enemies release hypothesis of biological invasions argues that species-specific natural enemies, such as disease, have not followed the species to their new habitats, allowing them to thrive and invade local communities. While native species must contend with, and suffer from mortality due to their pathogens, invasive species are freed from this phenomenon. Because disease organisms in plants are spatially limited – that is, they commonly only disperse a short distance – such a mechanism of invasion may leave a pattern in the spatial distribution of invasive vs. native species. This research thus focuses on the spatial clumping of native and invasive shrubs in two southeast Michigan forests – the Graves Farm at Michigan International Speedway and Adrian College's Dawson Arboretum. If the enemies release hypothesis is at work, invasive species should be able to be more heavily clustered without suffering from negative density dependence from disease organisms. Meanwhile, native species would suffer more heavily from death due to disease as they became more tightly clustered.

**Session 27**

Peelle 207

2:00-2:20

**Carolyn Wirtz & Hayden Garlick**  
*Building The Oxcart***Mentor: Linda Learman****Ribbon: Developing Creativity**

For another year, the Oxcart editorial and graphic design teams faced unique challenges to produce the 2014-2015 issue of the Oxcart Literary and Arts Magazine. The editorial staff sifted through various works to select only the most creative and unique pieces for the magazine. Each year, the staff struggles to construct the Oxcart's ever changing identity that appears to be contingent on the pieces selected for that year's issue. The staff faced a new struggle of low submission numbers. In addition to the challenging task of shaping the Oxcart's identity, the staff was forced to adapt the timeline and work towards broadening the magazine's interest. The Oxcart Ribbons of Excellence presentation will discuss the challenge the staff faced of building interest while simultaneously working to generate this year's issue. The Oxcart panel consists of Co-Head Editors Hayden Garlick and Carolyn Wirtz. First, the panel will discuss the challenge of low submission numbers and how the staff adapted. Second, the panel will illustrate how the current issue is shaped by its submissions. To conclude, the panel will answer any questions. As in years past, this Ribbons of Excellence presentation calls on the Developing Creativity Ribbon as its cornerstone of conception. To encompass this ribbon, sample pages of the latest issue will be on display for each of the audience members to survey.

2:30-2:50

**Ryan Gieseler**  
*What Location in Adrian Provides the Best Coffee?***Mentor: Michael Claus****Ribbon: Thinking Critically**

The average American spends approximately \$1,100 annually on coffee, accounting for about 2% of the average annual income. People should be sure that they are getting the most out of their coffee. Preferences depend solely upon the person consuming the brew, however, we set out to determine the best brewed coffee available in Adrian. This study will analyze coffee brewed from approximately ten places found in Adrian which will include McDonalds, Tim Hortons, Morning Fresh, Burger King, Starbucks, Bigby, Wesco, Skillet, Wendy's and Bulldog Beanery. These coffees will be analyzed for caffeine content, pH, titratable acidity, temperature, copper content and the quantity of insoluble solids. These components individually and combined greatly influence the taste of coffee which is why a grading scale will be set in order to rank these coffees from the most favorable to the least favorable for each category. We will also assess the cost per ounce to determine which coffee provides the most cost efficient brew. The overall goal of this experiment is to determine the most desirable components for the consumer to best fit their overall taste preferences. Each of these places will have different methods of brewing the coffee which is why each pot will be different from one to the next. This project incorporates "Thinking Critically" as it develops a testable hypothesis that can be used to provide information about the quality of an aspect in life that many people indulge in on a daily basis. From the information gathered, a quantitative analysis can be produced to better understand the contents that contribute to a truly great tasting cup of coffee.

**Session 27**

Peelle 207

3:00-3:20

**Garrett Gabalis***Reading vs. Writing: A Study of Perceptions on Literacy***Mentor: Linda Learman****Ribbon: Crossing Boundaries and Disciplines**

Students will be asked to participate in a short survey about reading or writing preferences, and they will be asked to indicate their intended field of study. Students will be told not to put their names on their responses. All students will remain anonymous. The data gathered from this study will be used to compare student preferences with fields of study and to compare data with that of a preliminary study. The data derived from comparisons along with other points of interest from the data will be presented during Ribbons of Excellence Day. The purpose of this study and presentation is to look at the possible implications of student preferences and correlations to the students' field of study.

**Session 28**

Jones 110

2:00-2:20

**Nicholas Oderio***Wind Variability of the H-alpha Line of Epsilon Orionis***Mentor: Greg Thompson****Ribbon: Thinking Critically**

Epsilon Orionis, the middle star in Orion's Belt, absorbs and emits light radiation due to hydrogen being emitted by star. As hydrogen is released from the star, wind at or near the surface blows the hydrogen off of the star, which is then ionized by UV light emitted by the star. The hydrogen ions then recombine with the lost electrons to create the H-alpha light, some of which is absorbed and the rest emitted. Due to the dynamic nature of the wind, variations in the emission/absorption pattern are detected. This presentation will discuss whether this variability is random or periodic and what each possibility may imply about the star Epsilon Orionis.

**Session 29**

Chapel

3:30-4:20

**AX**  
*Induction Ceremony*

Alpha Chi is a national honor society that accepts only the top 10 percent of juniors, seniors and graduate students in all academic fields. Alpha Chi was founded in 1922 with the purpose of honoring academic excellence and exemplary character in college and university students. In addition to being an elite honors society, Alpha Chi also offers the opportunity for students to present annually at a national convention and awards \$60,000 a year in 26 scholarships and fellowships to individual members enrolled in full-time study.

Alpha Chi's name is derived from the initial letters of the Greek words *alethia*, meaning truth, and *xapakthp*, meaning character. The official shield bears a lamp of learning and the initials AX in raised letters. In the induction ceremony today, you will see these two virtues are symbolized in the Society's official colors – sapphire blue, depicting truth and emerald green, victory. Knowledge, the basis of truth and character, is symbolized by gold and candlelight. The motto of Alpha Chi is, "You shall know the truth, and the truth shall make you free." John 8:32.

Since its inception in 1922, over 400,000 members have joined this society nationally. The Michigan Alpha chapter here at Adrian College is the oldest chapter in Michigan, established in 1964. This year, we are celebrating our 51<sup>st</sup> Anniversary. Those being inducted today will join over 500 current and alumni members in the Michigan Alpha chapter of Alpha Chi.

Please join us in celebrating the accomplishments of these students as they are welcomed into this prestigious national honor society.



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