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Academic Conference Fund Presentation Abstracts 2015

ACF 2015 January - March Presentations	5
Appleyard, Madison	5
Antvelink, Andrea	5
Bays, Kevin	6
Boker, Leslie	6
Caillaud-Jones, Mallory	7
Christensen, Janet	8
Duke, Catherine	8
Eardley, Dana	9
Edwards, Molly	9
Ferguson, Kyle	10
Gevaart, Lauren	11
Glass, Mitchell	12
Greene, Lacey	14
Hare, Benjamin	14
Hamilton, Sean	15
Hoogmoed, Ryan	15
Jager, Jacob	16
Johnson, Melissa	17
Lendman, Megan	17
Lonsway, Ethan	17
Mackey, Justin	18
Magirl, Andrew	19
McCullough, Caitlin	19
O'Donnell, Lucas	20
Rigueiro, Josue	20
Robeck, Jennifer	21
Robinson, Cody	21
Robke, Rhiannon	22
Roche, Meagan	22

Ruvina, Kristi	23
Schires, Samantha	24
Sobolak, Claire	25
Spruit, Stephanie	26
St. Louis, Scott	27
Talos, Gabrielle	28
Thelen, Noah	29
Torkelson, Katie	30
Weal, Jessica	30
ACF 2015 April - June Presentations	31
Abeare, Mackenzie	31
Bilski, Brandan	32
Brown, Andrew	33
Dahlstrom, Sarah	34
DeHart, Abigail	35
Dunlap, Ashley	36
Harris, Danielle	36
Herpst, Shelby	37
Hines, Kelsey	38
Holtrey, Nathan	39
Kade, Emily	39
Koren, Erin	40
Kuznicki, Michelle	41
Lower, Krzysztof	42
May, Kelsey	43
McCann, Sydney	43
McLaughlin, Nicole	44
O'Neil, Allison	45
Orr, Samantha	46
Pearson, Spencer	47
Rodawold, Megan	48
Rykse, Caitlin	50
Stephens, Brianne	51

Swartz, Marissa.....	51
Thompke, Heather	52
Vega, Jacqueline.....	53
Whinnen, Matthew	54
Yoder, Lauren	54
Zucker, Ari	55
ACF 2015 July - September Presentations.....	55
Beals, Brealyn.....	55
Coburn, Katherine	56
Dotson, Willis.....	56
Esch, Michael.....	56
Kobberstad, Matthew	57
Koch, David	57
Malfroid, Martin	57
Miller, Robert.....	58
Morse, Paul.....	58
Riley, Sean	58
Kathleen, Venhuizen.....	58
ACF 2015 October - December Presentations.....	59
Abeare, Mackenzie.....	59
Armstrong, Eric	60
Brady, Ashley	61
Colaianne, Nicholas.....	62
Faleni, Jessica	63
Franklin, Taylor	63
Janardan, Veena	64
Joffre, Kevin	65
Johnson, Tessa.....	65
Khudhur, Basma	66
Mercado-Idziak, Natosha	66
Musser, Karen	67
Orr, Samantha.....	68
Overway, Casey.....	70

Pollock, Francis	70
Remtema, Zackery	71
Rosenberg, Adam	72
Ruthven, Marissa	72
Rydecki, Krysta	73
Scholtens, Kaitlyn	73
Schumacher-Smith, Kristin	74
Segura, Yarisbel	74
Shady, Justin	74
Swartz, Marissa	75
Ten Haaf, Mark	76
Uhl, Katie	77
Ward, Brittany	78
Westdorp, Eliot	78

ACF 2015 January - March Presentations

Appleyard, Madison

January - March FY15

Society for Applied Anthropology

"Undergraduates Reflect on the Research Encounter: Studying Women's Health at Grand Valley State University"

This paper explores how the process of ethnographic research is experienced by first-time undergraduate researchers. Using both participation-observation in on-campus events and in-depth interviews with members of the local community, student researchers at Grand Valley State University have the opportunity to engage in real world projects. From the perspective of student researchers active in a team-based project focused on women's reproductive health, this paper considers both the challenges and rewards inherent in the ethnographic encounter.

Antvelink, Andrea

January - March FY15

Society for Applied Anthropology Annual Meeting 2015

"Forays in Research: Undergraduates and the Field: Undergraduates as Consulting Ethnographers: Insights from Research on Classrooms; Undergraduates Reflect on the Research Encounter: Studying Women"

Undergraduate students increasingly are engaged in hands-on research, working both independently and as members of research teams to apply anthropology. The papers assembled here discuss the joys and challenges of initial forays into ethnographic research, from the perspective of undergraduate researchers themselves. Examining both the process of research, as well as key findings from their projects, the papers here offer fresh insight into the anthropological endeavor. Forays in Research: Undergraduates and the Field: Undergraduates Reflect on the Research Encounter: Studying Womens Health This paper explores how

ethnographic research is experienced by first-time undergraduate researchers studying women's reproductive health. Through participation-observation in on-campus events and in-depth interviews with members of the university community, students have carried out meaningful data collection and analysis around sensitive issues related to menstruation, pregnancy, and menopause. From the perspective of the student researchers active in this team-based project, this paper considers both the challenges and rewards of the undergraduate ethnographic encounter. Forays in Research: Undergraduates and the Field: Undergraduates as Consulting Ethnographers: Insights from Research on Classrooms An unusual internship opportunity at Grand Valley State University allows undergraduate students to carry out ethnographic research on the use of classroom space. Through participant observation, in-depth interviews with students and professors, and a survey questionnaire, student researchers have discovered a number of classroom space issues that impact teaching and learning. This paper explores these, considering how accessibility, noise, and technological problems are experienced in the classroom.

Bays, Kevin

January - March FY15

North American Saxophone Alliance Regional Conference

"S3J Saxophone Quartet performance"

The North American Saxophone Alliance (NASA) has biennial national conferences and regional conferences in years between those. This year, I have been selected to perform with my saxophone quartet and a brand new duo that was premiered under a year ago. This is an exciting opportunity to not only perform for peers, professors, and specialists in the saxophone community, but to hear other high caliber performances, network, and experience some wonderful professional development.

Boker, Leslie

January - March FY15

Midwest Bisexual Lesbian Gay Allied College Conference (MBLGTACC)

"Access and Inclusion: Our Needs as LGBT and Disabled Participants"

Access and Inclusion: Our Needs as LGBT and Disabled Participants Starting from the social model of disability and the joined history of discrimination on the basis of gender nonconformity, disability, race, and immigration status, this workshop will model practical aspects of accessibility and self-advocacy for a range of disabilities as well as trans needs, and explore mindsets helpful to the inclusion of multiply-marginalized people. LGBT identity-based, ableist, racist, and anti-immigration discrimination hinges on normalization, heteronormativity and homonormativity, and respectability politics that create horizontal hostility and abject groups within LGBTQ communities, and even among people with different kinds of disabilities. These types of oppression are intertwined, and the problems both systemic and individual faced by LGBT, disabled, and multiply marginalized people can be understood as sharing common roots. This workshop will address structural needs that are not currently widely met, self-advocacy and intercommunity solidarity, and concrete strategies for implementing accommodations and creating non-hostile environments for individuals and communities of LGBT (and especially trans and non-binary) people and those with disabilities.

Caillaud-Jones, Mallory

January - March FY15

The Kennedy Center American College Theatre Festival

"I will be performing two scenes and one monologue"

Due to my performance in GVSU's Fall play *The Women of Lockerbie*, I was nominated to perform at the Regional Conference of KCACTF in Milwaukee. This is an extremely important experience that I am honored to be able to be a part of. However, the costs of being able to participate in this conference are very high. I would be tremendously grateful to Grand Valley if they would be able to contribute even a small amount of the funding for the trip. By being a part of this conference I would not only improve my own career in my field, but bring more culture from my experiences back to GVSU's theatre program.

Christensen, Janet

January - March FY15

The Kennedy Center American College Theatre Festival

"I will be performing two scenes and one monologue"

Due to my performance in GVSU's Fall play *The Women of Lockerbie*, I was nominated to perform at the Regional Conference of KCACTF in Milwaukee. This is an extremely important experience that I am honored to be able to be a part of. However, the costs of being able to participate in this conference are very high. I would be tremendously grateful to Grand Valley if they would be able to contribute even a small amount of the funding for the trip. By being a part of this conference I would not only improve my own career in my field, but bring more culture from my experiences back to GVSU's theatre program.

Duke, Catherine

January - March FY15

ACS National Meeting

"The Synthesis and Investigation of a Silole Anion"

Resonance has a central role in organic chemistry, as it is used to understand the relative reactivity and selectivity of many intermediates in reactions. Finding the electronic barrier to rotation around specific bonds can provide a measurement of a system's resonance. But what would happen if a carbon atom was changed to its heavier group 14 neighbor, silicon? Silicon has many similarities, but also many differences that must be taken into account such as size, and electronegativity. One such system we are investigating in this way is the vinyl silole anion, which is analogous to the carbon cyclopentadiene anion. This investigation has started with the difficult synthesis of a vinyl silole derivative, the vinyl tetraphenylsilole anion, and plans to investigate the systems resonance through a series of experiments. We are also looking at this

project from a computational viewpoint, and will present results from various calculations performed with this molecule.

Eardley, Dana

January - March FY15

Michigan Academy of Science, Arts, and Letters (MASAL)

"Beyond interdisciplinary pedagogy: participatory action efforts to address local wicked problems"

In contrast to static, disciplinary problems, many of the issues we face in the world today can be characterized as wicked, as dynamically complex, interdependent, high stakes issues with no simple or obvious definition (let alone any simple or obvious solution). These wicked problems confront us with high levels of uncertainty in situations where both action and inaction carry serious, long-term consequences. Current top-down, siloed, and abstract pedagogical strategies do not provide students with the tools for collaboratively managing such problems. How can we prepare students to tackle large-scale wicked problems within interdisciplinary courses? What pedagogical methods can be used to address interdependent, high-stakes systemic problems? This presentation details one set of answers from both a student and instructor perspective by discussing the design and outcomes of Wicked Problems of Sustainability: an interdisciplinary, community-engaged, upper-division undergraduate course at Grand Valley State University. The inherent challenges of messy inquiry, participatory research, and community engagement will be detailed along with recommendations for meliorating these challenges and thus better preparing students to collaboratively tackle wicked problems within their own communities.

Edwards, Molly

January - March FY15

ACS 249th National Meeting and Exhibition

"I want to be the inquiry guy! How research experiences for teachers transform beliefs about teaching science as inquiry"

I want to be the inquiry guy!: How research experiences for teachers transform beliefs about teaching science as inquiry The current chasm between the need for reformed science instruction and teachers nearly exclusive experiences with traditional, didactic practices has created a nationwide need for professional development (PD) programs that immerse teachers in scientific knowledge construction as it occurs in the field and laboratory. Toward this goal, the Target Inquiry (TI) PD program at Grand Valley State University begins with a research experiences for teachers (RET) to help middle and high school science teachers develop more authentic beliefs about scientific knowledge construction. During the six week summer RET, each TI teacher works on a unique research project with a Grand Valley science faculty member where they review scientific literature, engage in data collection and analysis, and then present their findings at a regional or national conference. In conjunction with this experience, TI teachers also work to modify some of their classroom activities to more closely model for their students the activities they engaged in during their RET. Though such experiences have been found to positively impact teachers, there is still a need to understand how such opportunities affect teachers beliefs about science teaching and learning. To explore how TIs RET influenced teachers beliefs about science instruction and their subsequent classroom practices, post-RET interviews were conducted. Using Pajares and Rokeachs conceptualizations of beliefs, transcribed interviews were coded to identify and classify teachers changing knowledge, emotions, and classroom behaviors related to teaching science as inquiry. The changes in teachers beliefs and attitudes about classroom reform in relation to their pathways of implementation, the features of the RET teachers cited as influential in precipitating these changes, and the implications for designing science PD programs.

Ferguson, Kyle

January - March FY15

American Mathematical Society, Mathematical Association of America

"Classification of Seven-Dimensional Lie Algebras with Six-Dimensional Abelian Nilradical."

This poster is the first in a series that examine seven-dimensional solvable Lie Algebras with a six-dimensional nilradical. Low dimensional solvable Lie Algebra classification started back in 1963 by Mubarakzyanov. They were completely classified up to dimension six. A general theorem asserts that if \mathfrak{g} is a solvable Lie Algebra of dimension n , then the dimension of the nilradical is at least $\frac{n}{2}$. For the seven-dimensional algebras, the nilradical's dimension could be $4, 5, 6$ or 7 . The four and seven dimensional nilradical cases were classified. We examine the six-dimensional nilradical case. In this project we focus on the class where the nilradical is six-dimensional abelian, i.e isomorphic to \mathbb{R}^6 .

Gevaart, Lauren

January - March FY15

National Athletic Trainers' Association 66th Clinical Symposia & AT Expo

"Determining Clinical Usefulness of the ImpACT in Assessing Concussion in High School and Collegiate Athletes: A Systematic Review"

The interest in concussion diagnosis and management has increased as of late. The ImpACT assessment is a widely utilized neurocognitive tool in the high school and collegiate settings. Given its widely accepted use, investigation has occurred examining the many confounding variables that may affect the interpretation and stability of the examination. Objective: To explore the clinical usefulness of the ImpACT and its subcategories in the high school and collegiate settings for the diagnosis of concussions. Data Sources: Literature searches were conducted using PubMed and SPORTDiscus databases. Keywords utilized were ImpACT, sensitivity, specificity, neurocognitive, reliability, and concussion test. Excluded terms were: SCAT, neuropsychological, and dinger. Articles published from 2004 - present were used in this investigation. Study Selection: Studies were gathered based on the inclusion of ImpACT administration in the high school and college population. Four investigations were included in the final analysis and spanned the following areas: sensitivity and specificity in concussion diagnosis, gender differences, test re-test reliability and test validity. Data Extraction: The methodological quality of the selected articles was evaluated independently by two raters using the PEDro scale and had a range from 6-8. Within the four papers data related to sensitivity and

specificity of the overall and subscale scores, positive (PPV) and negative predictive values (NPV), long-term test re-test reliability, gender differences, and the true clinical use of the ImPACT were assessed. Data Synthesis: Stepwise discriminant function analysis and calculated global sensitivity (91.4%) and specificity (69.1%) along with PPV (91.4) and NPV (69.1) were reported. The strength of linear association between variables at baseline 1 and baseline 2 of ImPACT testing was also assessed and motor processing speeds were noted as the most stable at 0.85, followed by reaction time (0.76), visual memory (0.70), verbal memory (0.62), and total symptom scores (0.57). Sex differences were also identified; revealing that females typically report more symptoms than males and performed better on verbal memory scores ($P < .001$) while males performed better on visual memory ($P < .001$). The final investigation revealed the effect of concussion on cognitive performance and showcased sensitivity of 81.9% and specificity value of 89.4%. Conclusions: When properly administered, the ImPACT neurocognitive assessment can assist the athletic trainer with a more holistic interpretation of the concussion. Factors such as the environment, timing, age, and consistency of test delivery have been shown to affect ImPACT outcomes. The clinician, when interpreting and using the data, should consider these variables among others. Based on the present analysis of literature, the ImPACT assessment was deemed clinically useful in both the high school and collegiate settings for the diagnosis of concussion provided the assessment was used properly. The authors endorse its use clinically as an effective resource when managing concussion.

Glass, Mitchell

January - March FY15

National Athletic Trainers Association 66th Clinical Symposia & AT Expo

"Pre-participation Electrocardiography as part of the Pre-participation Physical Examination: A Systematic Review"

Pre-participation Electrocardiography as part of the Pre-participation Physical Examination: A Systematic Review Glass MA, Hatzel BM: Grand Valley State University, Allendale, MI
Context: Sudden cardiac death (SCD) in athletes most often occurs in those with underlying heart abnormalities that haven't been identified during the pre-participation exam (PPE). In the

US, the PPE recommendations include a cardiovascular (CV) medical history and physical examination (H/P). The ability of the CV medical history and H/P to identify cardiac abnormalities has been questioned for some time. There is debate as to whether mandatory electrocardiography (EKG) testing should be added to the PPE. Objective: To determine whether an EKG as part of the standard PPE for young athletes is a cost effective and diagnostically appropriate option. Data Sources: Searches were conducted using Proquest, Ovid Journals, Academic Search Premier, and ScienceDirect with key words: sudden cardiac death, hypertrophic cardiomyopathy, electrocardiogram, athletic pre-participation exam, sensitivity, specificity, and cost- effectiveness. Limits included peer-reviewed studies less than 30 years old and English language. Study Selection: Studies were initially chosen based on the inclusion of relevant information in the title or abstract, which were: athletic PPE guidelines, SCD prevalence and associated CV conditions, diagnostic effectiveness of EKG screening in detecting SCD-related abnormalities, and cost-effectiveness of cardiac screening methods. A subsequent evaluation of the full-text articles resulted in 11 original studies being selected for inclusion spanning 3 specific areas (CV Screening Procedures, Diagnostic Capabilities of EKG, and Cost Effectiveness of EKG). Data Extraction: The methodological quality of selected articles was evaluated independently by two raters using the PEDro scale and ranged from 4-8. Data related to sensitivity, specificity and cost effectiveness were extracted and utilized. Data Synthesis: Related to CV screening protocols; an EKG-mandated protocol decreased the incidence of SCD by 89% in young competitive athletes (YCA) vs. the general population while also bringing person years from 3.6/100,000 to 0.4/100,000 in YCA. Diagnostic capabilities showed that H/P + EKG = 99.8% sensitivity, EKG alone = 90.9% sensitivity while H/P alone was 45.5% sensitive. Others reported sensitivity to range from 60-70%, specificity to be 97.8%, with false positives equaling 2.2%. Cost-effectiveness of implementing mandatory EKG testing showed \$44,000/year of life saved in comparison to the AHA- recommended H/P at \$84,000/year of life saved. Conclusions: One of the main arguments against PPE EKG testing historically is that it has a low specificity, which is negatively associated with cost-effectiveness as unnecessary referrals are made due to higher false positives. It has been suggested that adjusting diagnostic criteria to be more representative of YCAs can increase specificity to as high as 97.8%. Despite numerous variations in study methods and results, the data generally suggests that PPE EKG

testing has the potential to be an acceptable and cost-effective addition to the PPE and ultimately decreases SCD.

Greene, Lacey

January - March FY15

Broadening the Horizon of the Criminal Justice Sciences: Looking Outward Rather than Inward

"A Theoretical Approach to Mentor Training: An Analysis of Change in Relational Perception of Student Mentors"

This yearly meeting will focus on providing a wide range of topics that will widen the scope of criminal justice scholars ideas of criminal justice. Presenters will touch on topics such as methods of training, methods of handling diverse areas, methods of reporting, and many others. This conference will push attendees to think outside of the box and look at new and innovative methods to make the criminal justice system stronger on many levels.

Hare, Benjamin

January - March FY15

National Trumpet Competition

"Trumpet Ensemble Performance"

The Grand Valley State University Trumpet Ensemble will be competing in the small ensemble division at the 2015 National Trumpet Competition at Messiah College, March 19-21. This is an invite only competition for which the GVSU trumpet ensemble auditioned for and was invited to compete and represent the Grand Valley trumpet studio, the GVSU music department, and GVSU itself. Among other trumpet ensemble competitors, there will be present at this competition Curtis Institute of Music and Eastman School of Music. The National Trumpet Competition also consists of high school, undergraduate, and graduate solo competitions, as well as a large trumpet ensemble competition. The Competition also has scheduled many masterclasses and clinics by prestigious professional trumpet educators and performers. The

GVSU trumpet ensemble will be performing Erik Moraless five people trumpet ensemble piece, X1.

Hamilton, Sean

January - March FY15

2015 American Physical Society March Meeting

"Origins of Nonlinearity in Superconductive Passive Circuits"

The distinct origins of even and odd order nonlinear behavior in type II cuprate superconductors have yet to be fully elucidated. Microwave intermodulation distortion (IMD) was examined in a YBCO superconducting thin-film hairpin resonator at 840 MHz. Measurements of the temperature dependence of IMD near TC support the view that the nonlinear Meissner effect is responsible for the occurrence of both 2nd and 3rd order IMD tones near TC as well as their suppression in an applied magnetic field. However, at lower reduced temperatures (T/TC less than 0.95), where the influence of the nonlinear Meissner effect is less pronounced, 3rd order IMD is unaffected by a static magnetic field, while 2nd order IMD decays exponentially after a static magnetic field is removed with a temperature dependent time constant. It is apparent that the magnetically induced remnant vortex state contributes to the 2nd order nonlinearity, but not to the 3rd order nonlinearity, and that this effect is diminished close to TC due to degradation of the remnant vortex state.

Hoogmoed, Ryan

January - March FY15

249th American Chemical Society National Meeting and Exposition

"Optimization of fragment inhibitors for the class D β -lactamase OXA-24"

Since the discovery of the penicillin, β -lactam antibiotics have emerged as the preferred and most widely used antimicrobial agents. However, due to the overuse of β -lactam antibiotics, bacteria have become resistant to the therapeutics. The principle mechanism by which bacteria acquire

resistance is through the expression of β -lactamase enzymes. Of the four known classes of β -lactamases (A-D), the class D enzymes are the most diverse and pose a threat to the carbapenems, which are considered to be last resort β -lactam antibiotics. Currently, all clinically used inhibitors fail to effectively inhibit the class D β -lactamases. The ineffective inhibition occurs because the inhibitors contain the same β -lactam ring scaffold found in β -lactam antibiotics. In order to address this serious problem, molecular docking was used to identify novel inhibitors for the class D β -lactamase OXA-24. Two commercially-available chemical fragments with KI values of less than 5 mM were discovered and their structures in complex with OXA-24 were determined to 1.67 Å and 1.78 Å resolution. To optimize these fragment inhibitors, analogs were ordered and tested for inhibition of OXA-24. The insights gained from the fragment inhibitors and analogs will be used to develop a new series of novel β -lactamase inhibitors.

Jager, Jacob

January - March FY15

Kennedy Center American College Theatre Festival

"Preliminary Audition/Irene Ryan Scholarship Competition"

I'm planning to attend the American College Theatre Festival Region 3 Conference. I have been selected to go to Milwaukee to compete for scholarships in the Irene Ryan Scholarship Competition. I was nominated to go for my performance in THE COMEDY OF ERRORS in the Fall 2014 Shakespeare Festival at GVSU. At the festival I will compete in a preliminary audition where I will perform a 3-minute scene. If advanced, I will do an additional 2-minute scene in the semi-final round. If advanced once more to the final round, I will perform my first two scenes along with a 1-minute monologue. My actual presentation is my performance which relates to my field of study; acting. Because of this the only bibliography I can give is of the shows of which I'm taking pieces to perform. While in Milwaukee, I will make valuable connections with students, professors, and active artists in the theatrical field. This will be a fantastic networking opportunity as well as a chance for me to earn scholarship money.

Johnson, Melissa

January - March FY15

Family Enterprise Case Competition

"GVSU Family Business Team"

Not just one presentation - four presentations. The Family Enterprise Case Competition is a highly professional and competitive event with participants from all over the world, who've learned to analyze and explain problems and solutions for arguably one of the most important facets of the world economy - family owned businesses.

Lendman, Megan

January - March FY15

Atmospheres: Climate, Equity and Community in Photography

"Four Bars of Open Mic"

This project is set in four different bars around Grand Rapids, Michigan including the Flamingo Lounge, Tip Top, Rockys, and Putt Putts . Sam Kenny is the primary host for an open mic scene that encourages people everyday throughout the week to express themselves musically in a social atmosphere. I have been attending these events for over a year and have seen and felt personal growth within every other participant. Performing music in front of an audience is exhilarating because it gives those who dare to do so a chance to give others a deeper meaning, a more musical and abstract form of communicating expression. I invite you, the viewer, to contemplate the value of expression through music and imagery. For when people join in song, there is something special about it, I am sure of it.

Lonsway, Ethan

January - March FY15

National Trumpet Competition

"Trumpet Ensemble Performance"

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Mackey, Justin

January - March FY15

Kennedy Center American College Theatre Festival

"Irene Ryan Competition"

I have been selected as an Irene Ryan Nominee for the Kennedy Center American College Theatre Festival for my performance in Grand Valley's Theatre Department's production of "Sex and the Supernatural". I will be competing at the KC/ACTF along with students from schools all around the Midwest region. The competition will consist of a preliminary audition in which I will be performing a three minute scene with a partner. If advanced, I will move on to the semi-final round wherein I will be performing the same scene along with a contrasting two minute scene. If advanced again, I will move on to the final round of auditions wherein I'll be performing the same two scenes along with a one minute monologue. Also, whilst attending this conference I will be participating in workshops related to my area of study and future career field and watching several plays produced by different colleges in the region.

Magirl, Andrew

January - March FY15

Great Lakes Athletic Trainers' Association Annual Meeting and Symposium

"Femoroacetabular Dislocation with Accompanied Ligamentum Teres and Acetabular Labral Involvement: A Case Report"

The onset of injury for athletes can be traumatic and outcomes vary based on severity and whether or not surgical intervention is required. We present a case study detailing the diagnosis and management of a 16-year old football player who suffered a femoroacetabular dislocation with associated acetabular labral and ligamentum teres involvement. Dislocation can occur anteriorly or posteriorly and urgent reduction is necessary to reduce the risk of avascular necrosis of the femoral head. The athlete opted not to undergo surgery and subsequently received rehabilitation to prepare him for return to participation. The athlete returned to play with an improved physical profile, but continued to have pain upon return to play. Upon reassessment it was determined that the physical rehabilitation could not overcome the damage caused by the injury and that the athlete required surgery.

McCullough, Caitlin

January - March FY15

South Central Society for Eighteenth Century Studies

"The Wars Within Jean d'Alembert : The Competitor and the Mathematician"

Jean leRond d'Alembert, a French mathematician from the 18th century, was an inventive, insightful mathematician in addition to being a literary genius. As the co-editor of the Encyclopedia, his focus was split between the literary world in which he worked to create the first book which incorporated knowledge from all fields and his mathematical discoveries. As a mathematician, his work was often unclear and misunderstood by most around him due to multiple interests as well as his desire to be recognized as one of the best in the field, a desire which ironically was the root of his lack of recognition in the history of mathematics. d'Alembert often would work on many mathematical concepts that were understood by only a few in the

mathematical world, which were incredibly insightful and forward thinking. d'Alembert was aware of the value of his mathematical work, but knew that other mathematicians were also making similar discoveries. With this added competition, d'Alembert's mathematical work would often be unclear and in need of additional information in order to be formally accepted in the mathematical world. In such a competitive atmosphere, d'Alembert's contemporaries, particularly the famous German mathematician Euler, would replicated d'Alembert's work in order to publish their own, more formalized findings, which resulted in those mathematicians being credited with the mathematical discoveries, despite the fact that their discoveries hinged on d'Alembert's previous insights. Through my research, I delved deeply into d'Alembert's life and mathematical discoveries in order to clearly identify with which mathematical discoveries his haste proved to be detrimental to his lasting, mathematical legacy.

O'Donnell, Lucas

January - March FY15

National Trumpet Competition

"X1"

We are a trumpet ensemble made up of five individuals. Janet Christensen, Ben Hare, Denton Grant, Lucas O'Donnell, and Ethan Lonsway. We auditioned and made it into the National Trumpet Competition. The National Trumpet Competition is an annual competition between schools for top trumpet ensembles and best soloists. There are also clinics that will be taking place. We need money for gas, food, and shelter. This competition will help spread the influence of Grand Valley State University. It is also a good opportunity for us to interact with trumpet players from other schools, network with potential future employer's and co workers, and see how our trumpet program compares to programs from all over the Country. It is a tremendous opportunity for us and the school.

Rigueiro, Josue

January - March FY15

Family Enterprise Case Competition - University of Vermont

"FECC competition"

Hello, We are a group of bright, up and coming laker leaders. We are taking our talents to compete in a worldwide business competition in Vermont, and representing the amazing university that grand valley is. Please consider our request. Thank you, Josue D. Rigueiro

Robeck, Jennifer

January - March FY15

Family Business Case Competition

"GVSU FECC Team"

In this Family Business Case Competition each team reads through a case, analyzes it through models, and gives a presentation in front of judges along with their recommendations. A case is read and prepared before arriving in Vermont and another case is given to each team there, where they have four hours to prepare for another presentation. The competition includes about eighteen different teams from ten different countries.

Robinson, Cody

January - March FY15

Kennedy Center American College Theatre Festival (KCACTF)

"Preliminary Auditions"

I have been selected as an Irene Ryan Nominee for the Kennedy Center American College Theatre Festival for my performance in Grand Valley's Theatre Department's production of "Beyond Therapy". I will be completing at the KCACTF along with students from schools all around the Midwest region. The competition will consist of a preliminary audition in which I will be performing a three minute scene with a partner. If advanced, I will move on to the semi-final round wherein I will be performing the same scene along with a contrasting two

minute scene. If advanced again, I will move on to the final round of auditions wherein I'll be performing the same two scenes along with a one minute monologue. Also, whilst attending this conference I will be participating in workshops related to my area of study and future career field and watching several plays produced by different colleges in the region. The pieces I will be presenting will be the following: The opening scene for "Kin" by Doran Bathsheba A scene from "After All" by Kiara Pipino and A monologue from Indorrs/Outdoors by Kenny Finkle

Robke, Rhiannon

January - March FY15

Pittcon

"Real-Time Histamine Measurements In Vivo Using Fast-Scan Cyclic Voltammetry"

Within the central nervous system, histamine (HA) is involved in numerous brain functions including awakening, the control of pituitary hormone secretion, and cognitive functions. In recent studies, altered levels of HA has been speculated to be involved in brain diseases such as Alzheimers, Parkinsons, and depression. While the general HA pathway originating from the cell bodies in the tubermammillary nucleus (TM) is generally understood, its similar electrochemical signature to other compounds such as adenosine and hydrogen peroxide has made it difficult to characterize in vivo. Using an optimized histamine-sensitive waveform with fast-scan cyclic voltammetry (FSCV) has now enabled us to better understand the innervations of HA within the mouse brain. In this work we utilize our novel waveform and FSCV at highly sensitive carbon fiber micro electrodes in combination with pharmacological analysis to measure HA levels in the substantial nigra reticular (SNr), cerebral cortex (CX), and ventral pallidum (VP) via stimulation of the HA cell bodies in the tuberomammillary nucleus (TM). We demonstrate that robust in vivo detection of HA using FSCV can be used to effectively study, characterize, and implicate the identification of a precise chemical profile of HA in future studies.

Roche, Meagan

January - March FY15

2015 SfAA Annual Conference

"Saracen Souvenirs and Islam: The Crusades, Memory, and Contemporary French Identity"

Recently, France's Muslim immigrant population has substantially increased, creating tension between Islam and what France defines as distinctly French. The question of national identity makes France's history with Islam in the Crusades (and Reconquista) particularly relevant. With the Crusades marking the reclamation of an imagined European identity, this history connects to the perceived Islamic threat in modern times. Tourism surrounding this history both engages and represents contemporary understandings, with responses varying from fantastical simplification to vandalization. This study explores France's contemporary identity crisis fought in the retelling of history at tourist sites linked to the Crusades.

Ruvina, Kristi

January - March FY15

SICB Annual Meeting 2015

"An Investigation of the Intrinsic and Extrinsic Influences on the Aggressive Behavior of Crayfish"

Aggressive (i.e. agonistic) interactions play a significant role in the establishment of a social hierarchy in many species. Hierarchies and rank within them can greatly influence the quality of life of an animal and are often necessary to obtain valuable resources such as food, shelter, and mates. Several influences have been identified as important in determining aggressive hierarchy formation in crayfish, however the relative significance of these factors has yet to be determined. This study compares several aggressive influences, including previous winning or losing experiences, prior shelter possession, starvation, olfaction obstruction, and control treatments to determine which of these factors affect aggressive interactions to the greatest extent. The analysis will reveal which of these effects is strongest when directly confronted against one another. Each crayfish received one of the above treatments and then interacts with another size-matched crayfish that received a different treatment. All trials were recorded and then analyzed

using a blind analysis scheme that utilized a behavioral ethogram to quantify the intensity of aggressive interactions and the eventual agonistic bout outcome.

Schires, Samantha

January - March FY15

Biennial Meeting of SRCD 2015

"Cross-Cultural Study of Toddlers Emotion Regulation Strategies in a Waiting Task: A comparison between US and Israeli Toddlers"

Cross-Cultural Study of Toddlers Emotion Regulation Strategies in a Waiting Task: A comparison between US and Israeli Toddlers Samantha Schires, Stephanie Spruit, Liron Afek¹, Raghda Tahal, Wolfgang Friedlmeier, & Alison McNulty Grand Valley State University, Allendale, MI, USA ¹University of Haifa, Israel Abstract for SRCD 2015 Submission During the transition from toddlerhood to preschool age, children begin developing the ability of self-regulation (Calkins, 2007). Emotion self-regulation is associated with social competence, emotional well-being, and psychological functioning (Thompson & Goodwin, 2007). This study explores toddlers negative emotion expression and regulatory attempts in a waiting task in a cultural perspective, comparing European American with Israeli Arab and Jewish toddlers. We expected that independent strategies like distraction are the most effective strategies to down-regulate negative affect. Toddlers can also turn to the mother but the effectiveness may depend on mothers sensitive reactions to the toddlers request (Ekas et al., 2011). Aggressive behavior and focus on delay object will be most ineffective and rather up-regulate toddlers negative affect. The European American (EA) and Israeli-Jewish cultures are individualistic (Hofstede & Hofstede, 2005) but European American mothers put more emphasis on independence training in toddlerhood (Rosenthal & Roer-Strier, 2001). In spite of a modernization process, young Israeli-Arab children are still expected to be obedient and disciplined and high emotion control is required (Haj-Yahia, 1995). We expected that EA toddlers will express negative affect more than Israeli-Jewish and both groups more than Israeli-Arab toddlers. We also predicted that EA toddlers use more independent strategies, whereas both Israeli groups refer more to their mother to regulate their negative affect. EA toddlers (n = 51; 26 boys) and Israeli toddlers (Israeli-Jewish

n = 30; 16 boys and Israeli-Arab n = 30; 16 boys) participated in a waiting task. A cookie was placed on the table and the child had to wait until the mother finished the survey (4 minutes). Toddlers behavior was coded in 5s intervals for frequency and intensity of emotion expressions (0-3) as well as for 8 strategies condensed into three main regulatory attempts: Independent self-regulatory strategies (distraction, turning attention away from delay object, and self-comforting), mother-dependent strategies (comfort seeking and information gathering) and nonadaptive strategies (verbal or behavioral aggression and focus on delay). According to preliminary results (only 15 Arab toddlers are coded so far), EA children showed stronger sadness expression but contrary to our prediction , Israeli-Arab toddlers displayed higher intensity of anger expression. As expected, EA children used independent strategies more often than Israeli-Jewish and both Israeli groups showed mother-dependent strategies more often (see Table 1). Nonadaptive strategies occurred more often for EA children. As a proxy for effectiveness of strategies, we computed correlations between frequency/intensity of affect and strategies. The independent strategies were negatively related with sadness and anger for EA and Israeli Jewish (see Table 2) validating their effectiveness. Mother-dependent strategies were negatively correlated with positive affect and positively associated with anger for Jewish toddlers, which suggests that those strategies were less effective to down-regulate negative affect. It is likely that mothers were unresponsive to their children by focusing on their own task. Nonadaptive strategies were positively related with sadness for EA toddlers which partly validates the ineffectiveness by rather up-regulating the toddlers sadness. Overall, we found a rather ambivalent pattern for the EA toddlers as they displayed a mixture of nonadaptive and independent strategies. Israeli-Jewish toddlers referred to mothers which was not as effective, and Israeli-Arab toddlers used independent and mother-dependent strategies to cope with the delay situation.

Sobolak, Claire

January - March FY15

Chicago: Great Lakes/ Great Ideas

"Using Hand Samples, Geologic Maps, and Google Earth to Teach the Geology of Hawaiian Shield Volcanoes"

Identification and the significance of extrusive igneous rocks are commonly taught separately from types of volcanoes, volcanic products, and map reading skills. In this lesson we model a new approach. Using seven samples collected on the island of Hawaii we use a series of questions to guide students to looking at multiple types of data and visualizations. Students connect the hand sample to a map unit on the geologic maps that provides additional details. Students can quantify the geometry of the unit and the type or source of volcanic event. Measurements can be made from the paper map or from Google earth. Students can fly to specific locations to see photographs purposely added for this activity.

Spruit, Stephanie

January - March FY15

Biennial Meeting of Society for Research in Child Development 2015

"Cross-Cultural Study of Toddlers Emotion Regulation Strategies in a Waiting Task: A comparison between US and Israeli Toddlers"

During the transition from toddlerhood to preschool age, children begin developing the ability of self-regulation (Calkins, 2007) which is associated with social competence, emotional well-being, and psychological functioning (Thompson & Goodwin, 2007). This study explores toddlers negative emotion expression and regulatory attempts in a waiting task in a cultural perspective, comparing European American with Israeli Arab and Jewish toddlers. We expected that independent strategies like distraction are the most effective strategies to down-regulate negative affect. Toddlers can also turn to the mother but the effectiveness may depend on mothers sensitive reactions to the toddlers request (Ekas et al., 2011). Aggressive behavior and focus on delay object will be most ineffective and rather up-regulate toddlers negative affect. The European American (EA) and Israeli-Jewish cultures are individualistic (Hofstede & Hofstede, 2005) and emphasize independence training. In spite of a modernization process, young Israeli-Arab children are still expected to be obedient and disciplined and high emotion control is required (Haj-Yahia, 1995). We expected that EA and Israeli-Jewish will express negative emotions more than Israeli-Arab toddlers. We also predicted that EA and Israeli-Jewish toddlers use more independent strategies, whereas Israeli-Arab toddlers refer more to their

mother to regulate their negative affect. EA toddlers (n = 51) and Israeli toddlers (Israeli-Jewish n = 30 and Israeli-Arab n = 30) participated in a waiting task (about 50% boys). A cookie was placed on the table and the child had to wait until the mother finished the survey (4 minutes). Toddlers behavior was coded in 5s intervals for frequency and intensity of emotion expressions (0-3) as well as for 8 strategies condensed into three main regulatory attempts: Independent self-regulatory strategies (distraction, turning attention away from delay object, and self-comforting), mother-dependent strategies (comfort seeking and information gathering) and nonadaptive strategies (verbal or behavioral aggression and focus on delay). According to preliminary results (only 15 Arab toddlers are coded so far), EA children showed stronger sadness expression but contrary to our prediction, Israeli-Arab toddlers displayed higher intensity of anger expression. EA children used independent strategies more often than Israeli-Jewish and both Israeli groups showed mother-dependent strategies more often (see Table 1). Nonadaptive strategies occurred more often for EA children. As a proxy for effectiveness of strategies, we computed correlations between frequency/intensity of affect and strategies. The independent strategies were negatively related with sadness and anger for EA and Israeli Jewish (see Table 2) validating their effectiveness. Mother-dependent strategies were negatively correlated with positive affect and positively associated with anger for Jewish toddlers, which suggests that those strategies were less effective to down-regulate negative affect. Nonadaptive strategies were positively related with sadness for EA toddlers which partly validates the ineffectiveness by rather up-regulating the toddlers sadness. Overall, we found a rather ambivalent pattern for the EA toddlers as they displayed a mixture of nonadaptive and independent strategies. Israeli-Jewish toddlers referred to mothers which was not as effective, and Israeli-Arab toddlers used independent and mother-dependent strategies to cope with the delay situation.

St. Louis, Scott

January - March FY15

46th Annual Meeting of the American Society for Eighteenth-Century Studies

"Big Data and the Search for Balanced Insight in the Digital Humanities: Macroscopic and Microscopic Reading of Citation Strategies in the Encyclopédie of Diderot (and Jaucourt), 1751-1772"

Consisting of seventeen text volumes and eleven volumes of engraved illustrations over seventy-seven thousand articles and twenty-one million words the Encyclopédie (1751-1772) remains a monumental contribution to Western literature for its promotion of free inquiry into all areas of knowledge and human endeavor. At least one hundred and forty contributors produced this massive corpus, but perhaps due in part to the pressures under which they worked passages borrowed from other texts are occasionally included in Encyclopédie articles without attribution to their true authors or even acknowledgment as quotation. This is a major shortcoming for which the Encyclopédie has been criticized since its very inception. Even so, its accessible framing of philosophical and political ideas with lasting importance make the Encyclopédie a work of enduring interest for cultural historians and literary scholars, some of whom are now utilizing digital technology to develop new insights on the colossal text. My Student Summer Scholars research builds upon the groundbreaking work of Dan Edelstein, Robert Morrissey, and Glenn Roe in the burgeoning field of the digital humanities. By utilizing the search capabilities offered with a digitized version of Diderots Encyclopédie, I find that the carefully designed macroscopic methodology of Edelstein and his colleagues must be tempered by ongoing microscopic analysis of digitized source material. The use of sequence alignment programs and massive online databases can yield important new insights in cultural history, but these findings must be balanced by close reading of documents relevant to the research question(s) at hand.

ADDITIONAL BUDGET INFORMATION: I ask for \$65.00 to cover the registration fees both for the general conference (\$40.00) and for a digital humanities workshop that will occur therein (\$25.00). Additionally, I ask for \$200 for meals so that the \$55 fee for a professional networking dinner will be covered.

Talos, Gabrielle

January - March FY15

2015 Annual Meeting of the Society for Applied Anthropology

"Undergraduates Reflect on the Research Encounter: Studying Womens Health at Grand Valley State University"

Undergraduates Reflect on the Research Encounter: Studying Womens Health at Grand Valley State University Gabrielle Talos, Andrea Antvelink, Madison Appleyard This paper explores how the process of ethnographic research is experienced by first-time undergraduate researchers studying womens reproductive health. Through participation-observation in on-campus events and in-depth interviews with members of the local community, students have carried out meaningful data collection and analysis around sensitive issues related to menstruation, pregnancy, and menopause. More important than the findings of this research, however, are the methodological lessons students learn through their hands-on participation in research. From the perspective of the student researchers active in this team-based project, this paper considers both the challenges and rewards inherent in the undergraduate ethnographic encounter.

Thelen, Noah

January - March FY15

Academy of Economics and Finance Annual Conference

"The Value Premium, the Piotroski Methodology and the January Seasonal"

Value investing strategies seek to find securities that have unfairly beaten down by the market and which will outperform as the market corrects. Academic studies have shown that value securities as identified by high book-to-market ratios or low price-to-earnings ratios do outperform the market on a risk-adjusted basis. But individual investors trying to exploit the value premium face the potential of the value trap, investing in securities with low book-to-market ratios that are in serious financial difficulties and will not outperform. Piotroskis (2000) methodology provides a potential solution to this dilemma by providing a screen based on accounting data to find true value securities. This screening method was effective in Piotroskis sample period, but Woodley, Jones and Reburn (2011) find the method to be ineffective in a later sample period. In this paper we investigate whether the shift in the effectiveness in the Piotroski method by examining shifts in the January effect and shifts in the screening variables. We find that the January seasonal in value securities remains strong but that it has always worked against the effectiveness of Piotroskis screen.

Torkelson, Katie

January - March FY15

South Central Society for Eighteenth-Century Studies Conference 2015

"The article FEMME in Diderot and d'Alembert's Encyclopédie"

The article FEMME in Diderot and d'Alembert's Encyclopédie stands in stark contrast to the values presented in other articles. The Encyclopédie was a keystone for the French Enlightenment; championing equality, critical thinking, and reason, among many other values, it was largely a radical work. However, its article on women is overwhelmingly traditionalist in its views. This presentation will incorporate previous and new scholarship on the ways in which the article portrays women in eighteenth-century France.

Weal, Jessica

January - March FY15

2015 SPE National Conference, Atmospheres: Climate, Equity and Community in Photography

"Exploring a Lost Art"

My family lightheartedly calls me Project Girl, a nickname I earned years ago. From the beginning, I've been so curious, always looking to get my hands dirty, blood pumping, and gears turning. Once my world was introduced to the camera, I quickly realized it was the perfect tool to guide my exploration and charisma. The camera accompanied me on all sorts of adventures and allowed me to visually communicate my passions, and by engaging with different mediums and having to master a new craft with each, photography further allowed me to exercise that desire for hands-on learning. Initially, digital was all I knew, but it wasn't long before I began to pursue different photographic approaches. Film served as the gateway to my most recent endeavor. It helped me better understand light instead of putting my trust into the meter within the camera. It also taught me to slow down when photographing and highlighted the importance of framing or waiting for the right moment. I enjoyed having these new limitations as they made me a smarter photographer. Using a medium other than digital meant working without the

comfort of having a rapid fire shutter to fall back on. My procedure had completely changed, as did my appreciation and sense of reward for what I was creating.((Moving forward, I sought out a process from an even earlier time. This photographic method is called wet plate collodion, and dates back to the 1800s, before film was invented. Wet plate collodion involves making a silver emulsion on aluminum to become light sensitive. It requires a plate to be coated, sensitized, exposed and developed within a fifteen minute span. Given this, your workspace has to be near your darkroom. On top of the existing limitations this creates a new challenge for me to work around. My body of work Exploring a Lost Art is a series of tintype portraits. It will allow me to expand upon my photographic skills, personal growth, as well as intellectual understanding of photography as a whole. It is my hope to encourage others with my work to look back at the roots of their passions, step outside their comfort zones, and learn new methods that may lead them to new adventures.

ACF 2015 April - June Presentations

Abeare, Mackenzie

April - June FY15

62nd Annual American College of Sports Medicine Conference

"Hand and Forearm, But Not Neck Cooling, Reduces Thermophysiological and Perceptual Strain Following Passive Hyperthermia"

Combined hand and forearm cooling effectively attenuates hyperthermia during exercise, and improves recovery between bouts of exercise in an uncompensable heat stress environment. Neck cooling can also be effective in reducing thermoregulatory strain during exercise in high ambient temperatures or with sufficient magnitude of cooling. PURPOSE: To determine the effect of active cooling on temperature, heart rate and thermal sensation following passive hyperthermia. METHODS: Eleven healthy participants (22 ± 5 y; 173 ± 10 cm; 71.8 ± 15.1 kg) were passively heated to 39°C rectal temperature (T_{re}) by 40°C whole-body immersion. They were then removed from the water and sat quietly in a room ($24.6\pm 0.8^{\circ}\text{C}$ and $49.8\pm 6.3\%$ rh) and used either a 2.6 m² commercially available cooling towel wrapped against the surface of their neck

(NT), hand and forearm immersion in $10.5 \pm 1.3^\circ\text{C}$ water (H) or cooled passively (C) until T_{re} reached 38°C . Heart rate, T_{re} , mean skin temperature (T_{sk}), and thermal sensation (TS) were measured pre and post whole-body immersion, and every 5 min during cooling. Nude body mass was measured before and after each trial. One and two way repeated measures ANOVA were used to determine differences across time and between groups. RESULTS: Time to cool was faster ($p < 0.01$) with H (24 ± 7 min) compared to C and NT (C: 37 ± 13 min; NT: 38 ± 9 min). There were T_{re} interaction effects (time and condition, $p < 0.01$) at 10 min cooling with H ($38.7 \pm 0.3^\circ\text{C}$) compared to NT ($39.0 \pm 0.2^\circ\text{C}$) and C ($38.9 \pm 0.2^\circ\text{C}$), and at 15 min cooling with H ($38.4 \pm 0.4^\circ\text{C}$) when compared to NT ($38.7 \pm 0.2^\circ\text{C}$) and C ($38.7 \pm 0.3^\circ\text{C}$). There was also a lower T_{sk} ($p < 0.05$) when using H ($34.5 \pm 2.7^\circ\text{C}$) compared to NT ($34.9 \pm 2.9^\circ\text{C}$) and C ($34.7 \pm 2.8^\circ\text{C}$). Mean heart rate during recovery was lower ($p < 0.01$) when using hand cooling (96 ± 19 beats $\cdot\text{min}^{-1}$) compared to both neck towel cooling (107 ± 20 beats $\cdot\text{min}^{-1}$) and control (105 ± 22 beats $\cdot\text{min}^{-1}$). Perceived TS was found to be lower ($p < 0.01$) with H (4.1 ± 1.7) compared to NT and C (NT 4.7 ± 1.4 ; C 4.6 ± 1.5). Across the duration of each of the trials, there was no significant difference in body mass change. CONCLUSION: Neck towel cooling was found to be an ineffective hyperthermia recovery strategy. However, hand and forearm cooling effectively reduced thermal strain and recovery time, along with decreasing heart rate and improving perceptual responses.

Bilski, Brandan

April - June FY15

National Association of Communication Centers Conference

"Critical Pedagogy in the Speaking Center: An Advocacy Oriented Approach"

As an epicenter of communication research, exploration, and praxis Speaking Centers serve as prime conduits for the emancipation and exploitation of both tutors and students seeking consultation services. When we examine Speaking Centers within the emerging tradition of critical pedagogy (CP) and consider our goals beyond the institutional expectations we access a more effective and fruitful pedagogical framework within which to approach our research and practice. Here we shall explore the dominating pedagogy now guiding educational practice, outline the subtle ways Speaking Centers inevitably challenge the toxic cooptation of inquiry by

the commodification of knowledge, and outline core ways in which foundation in CP expand the poignancy of our consultations within Speaking Centers and on University campuses on the whole. This paper serves as a rhetorical deconstruction of the meta-narratives that tacitly uphold Speaking Center functions. Once we critically examine the motivations behind the institutional nature of Speaking Centers we see the need for a proactive discourse about the scarcity of speech and the social forces that reinforce the chronic fear and inability to speak publicly. Without this advocacy oriented engagement we fail to acknowledge the challenges of our time as explorers and explicators of rhetoric and speech instruction.

Brown, Andrew

April - June FY15

Conversations & Encounters: Exploring Ethics in the Writing Center

"Asking too much? Ethical Concerns of Growing Demands on Employees in a Growing Center"

In the pedagogy of nearly every writing center lies the desire to help as many writers as possible, with whatever assignment they're working on, no matter what stage of the writing process they find themselves in. If writing centers are successful in this mission, then it is a reasonable assumption to make that they will see a continual increase in the number of students they work with, which will necessitate a growth in the number of hours and appointments available to students. Depending on the size and nature of the university and campus, these hours may be spread out over many locations or classrooms, adding to the difficulty of scheduling needs and concerns, likely resulting in an increase in the number of student employees that a center needs to hire. Provided the university provides the center with the funds and spaces necessary, the difficulties that remain fall to the consultants themselves, asking them to work early morning or late night hours, travel between campuses or locations, or be mentally active for much longer than a typical nine to five workday. For staffs that utilize lead consultants, they may have additional needs like supervising late night or weekend shifts, adding to the personal difficulty that their schedule necessarily places on them. However, this raises a serious ethical question: at what point does it become too much to ask of consultants to accommodate student need? In this roundtable discussion, we will describe the scheduling processes used at GVSU, the growing

student needs of our university, the expansion of the writing centers hours and locations, and the policies that impact how and where employees are scheduled. We will also debate the ethical principles behind potentially putting the service provided to the student above the personal well-being of the staff of writing consultants, who are students themselves.

Dahlstrom, Sarah

April - June FY15

Midwestern Psychological Association

"Personal Values and Financial Success of Emerging Adults"

Purpose Many young adults today face substantial threats to their financial well-being. Online shopping and the credit card system present many ways to engage in risky financial behaviors. The aim of this study is to examine predictors for young adults financial behaviors, and how these in turn affect financial well-being and life satisfaction. According to Shim et al. (2009), early financial socialization from parents, school, or work predicts current financial behaviors and attitudes of emerging adults. We aim to expand these findings by examining whether ones values are predictive of financial behaviors and how current financial behaviors are linked to financial and domain-specific life satisfaction. Procedure The sample consists of approximately 300 freshmen college students. Personal values were assessed with the Portrait Value Questionnaire developed by Schwartz et al. (2001) which asks similarity judgments with oneself for each of 40 short portraits. For the financial behaviors component, students rated four different positive financial behaviors (i.e., track monthly expenses, spend within budget, save money each month for the future, invest for long-term financial goals) and they also answered questions about financial satisfaction and domain-specific life satisfaction. Results Preliminary results show significant correlations between the values of security, conformity, and tradition and students tracking of monthly expenses ($r=.28$, $r = .17$, $r=.22$; $ps<.05$). Furthermore, students who reported saving money each month are those who put lower emphasis on the values of stimulation ($r=-.18$, $p<.05$), and hedonism ($r=-.19$, $p<.05$). Positive correlations were also found between students long-term investment and their values of tradition, benevolence and security ($r=.18$, $r=.17$, and $r=.20$; $ps<.05$). Significant relationships were found between financial

behaviors and financial well-being, as well as between financial well-being and satisfaction with school and education, health, friends and social life, self, and general life-satisfaction.

Conclusions and implications Students who scored highly on the values of security, conformity, tradition, and benevolence were more likely to have positive financial behaviors such as saving for the future and tracking monthly expenses. Financial well-being seems to affect ones greater life satisfaction. References Schwartz, S. H., Melech, G., Lehmann, A., Burgess, S., Harris, M., & Owens, V. (2001). Extending the cross-cultural validity of the theory of basic human values with a different method of measurement. *Journal of Cross-Cultural Psychology*, 32(5), 519-542. Shim, S., Barber, B., Card, N., Xiao, J., & Serido, J. (2009). Financial socialization of first-year college students: The roles of parents, work, and education. *J Youth Adolescence*, 39, 1457-1470.

DeHart, Abigail

April - June FY15

Pacific University Undergraduate Philosophy Conference

"The Philanthropy Machine"

Imagine the Philanthropy Machine: mathematically complex and capable of making perfectly logical evaluations while using all available information to aid in decision-making processes. The Philanthropy Machine is so powerful that the humanitarian efforts of both agencies and individuals worldwide utilize it for maximizing the efficacy of their giving. It is high-powered enough to immediately identify the greatest human need and allocate the funds necessary. The Philanthropy Machine would presumably eliminate the Identifiable Victim Effect (I.V.E.), which refers to the tendency of humans to donate to a specific and identifiable person as opposed to a large group in need. But, what may be lost when a direct link is removed between donor and cause? Neuroethicists have taken up these questions of empathy and rationality when applied to the I.V.E., and whether empathy prevents logical philanthropic decisions. In this paper I will argue that, in the field of neuroethics, moral sentimentalism should be taken more seriously. Moral sentimentalist philosophers like David Hume and Adam Smith provided careful work on

the analysis of empathy (what they called sympathy). Empathy, as they conceived it, would involve an attempt to understand the emotional and logical rationale behind every decision.

Dunlap, Ashley

April - June FY15

Midwestern Psychological Association Conference

"Personal Values and Financial Success of Emerging Adults"

This study examines relationships between the values of emerging adults and their current financial behaviors. Three hundred freshmen college students participated in a survey. Findings suggest significant relations between specific values and positive financial behaviors, and the latter are linked to financial well-being and broad domains of life satisfaction. Students who scored highly on the values of security, conformity, tradition, and benevolence were more likely to have positive financial behaviors such as saving for the future and tracking monthly expenses. Financial well-being seems to affect ones greater life satisfaction.

Harris, Danielle

April - June FY15

National Conference for Undergraduate Research

"DDS/DGEBA Epoxy Used as a Model for Studying Polymer Confinement in Polymer Nanocomposites"

An interesting class of materials is polymer nanocomposites (PNC). Essentially, PNCs are polymer matrices with nanoparticles dispersed within it. These nanoparticles provide a surface for attachment within the polymer, potentially resulting in alterations of macroscopic properties, such as conductivity, hardness, and flame-retardence. This change in attachment can also alter microscopic properties, such as voids in the polymer. Since the polymer made of diglycidyl ether bisphenol A (DGEBA) with 4,4-diaminodiphenyl sulfone (DDS) hardener has been well studied, it is an ideal model system for studying polymer attachment to silica nanoparticles (15-20 nm in

diameter for this study). Using Positronium Annihilation Lifetime Spectroscopy (PALS), we can study these voids by analyzing the lifetime of positronium (the bound state of an electron and its antiparticle, a positron) which tends to localize in the voids of the polymer matrix. We will investigate how the polymer attachment changes with respect to temperature as well as nanoparticle concentrations. We also plan to develop a method to determine nanoparticle distribution within the polymer.

Herpst, Shelby

April - June FY15

Midwestern Psychological Annual Meeting

"Effects of Parenting Style on Students"

Effects of Parenting Style on Students Financial Socialization Purpose Financial socialization is the process by which adolescents develop their own knowledge, beliefs, values, behaviors, and norms that influence their subsequent financial practices (Danes, 1994). Parents play a critical role in shaping their childrens financial skills and attitudes through modeling, reinforcement, and intentional teaching (Danes & Haberman, 2007). Previous studies showed that parents who are perceived as displaying healthy financial behavior and engaged in direct teaching during adolescence were more highly regarded as financial role models by their children during the first year in college (Shim et al., 2010). However, very few studies looked at how family processes, such as parenting style, affect the degree of influence parents have on their childrens financial behaviors. In this study, we will use parenting dimensions (e.g., responsiveness and psychological control) to investigate their predictive influence on childrens financial behaviors/satisfaction. Procedure The sample consists of approximately 300 first-year students. Students evaluated maternal and paternal responsiveness, psychological control, behavioral control, and autonomy support (scales adapted by Soenens, Vansteenkiste, Luyckx, & Goossens, 2006). For the financial behaviors component, students evaluated their engagement in four different positive financial behaviors (track monthly expenses, spend within budget, save money each month for the future, and invest for long-term financial goals). They also answered three items with regard to their satisfaction with financial issues. Results Preliminary results showed

that children's behavior of tracking monthly expenses correlated significantly with fathers responsiveness/support, expectation of behavior, and monitoring of behavior ($r=.24$, $r=.28$, $r=.33$; all p s $< .05$). These three dimensions also had a significant effect on whether children saved for the future ($r=.25$, $r=.20$, $r=.20$; all p s $< .05$). The mothers monitoring behavior was only related with tracking monthly expenses ($r=.25$, $p<.01$). Conclusions and Implications: Our results show that perceived paternal parenting style has a greater impact on financial socialization of children than maternal parenting style. Results will be discussed using a developmental perspective.

References Danes, S. M. (1994). Parental perceptions of children's financial socialization. *Journal of Financial Counseling and Planning*, 5, 127-146. Danes, S. M., & Haberman, H. R. (2007). Teen financial knowledge, self-efficacy, and behavior: A gendered view. *Journal of Financial Counseling and Planning*, 18(2), 48-60, 98-99. Soenens, B., Vansteenkiste, M., Luyckx, K., & Goossens, L. (2006). Parenting and adolescent problem behavior: An integrated model with adolescent self-disclosure and perceived parental knowledge as intervening variables. *Developmental Psychology*, 42(2), 305-318.

Hines, Kelsey

April - June FY15

NACC

"The Knowledge Market: A study of group salience"

The Knowledge Market (KM) is a unique service to a midsize Midwestern University that enables three consulting services (e.g., Writing Center, Speech Lab, & Research Consultants), to congregate in the same space to provide collaborative tutoring. The purpose of this research is to measure and compare the perceptions of the KM staff attitudes toward their primary services as well as attitudes toward the larger Knowledge Market. In particular, this study applies Social Identity Theory to these groups and aims to explore the undergraduate consultants feelings regarding prototypes, leadership, metacontrast and group cohesion within their primary service and within the KM. This research concludes with the hypothesis that each individual will identify stronger with their own particular service group than the larger KM. A discussion and

implications of findings are offered. Keywords: Social Identity Theory, group salience, group cohesion, undergraduate consultants

Holtrey, Nathan

April - June FY15

East Central Writing Centers Association (ECWCA).

"Establishing a Common Ground: A Discussion of Open Dialogue on Beliefs and Controversial Issues in Student Writing"

In theory, the writing center is meant to be a location for open, one on one conversations with a student about their writing. But what happens when a student and consultant's fundamental beliefs oppose each other for an argumentative/persuasive essay? Using renowned theorist David Bohm's essays as a starting point, we will discuss the importance of having an open dialogue with students, considering controversial topics and audience, and whether maintaining neutrality or engaging with personal beliefs is appropriate.

Kade, Emily

April - June FY15

Midwestern Psychological Association 2015 Annual Meeting

"Analog Parenting Task Revised: Validity and Responses to Video vs. Still Images"

The original Analog Parenting Task (APT) (Zaidi et al, 1989; Russa & Rodriguez, 2010) is an established instrument that assesses risk for harsh, physically aggressive parenting by displaying a visual stimulus of child behavior for which a parenting response is selected. The purpose of this study was to validate two revised versions of the APT instrument with updated child images presented in either video (V) or still (S) format. Stills were single frame images taken from the corresponding video clip. Validity of the revised APT was evaluated over two consecutive semesters using independent samples for each revised version (n=261; n=251). In each case, undergraduate participants from the available subject pool viewed the images and selected

strategies to address each child behavior. As shown on Table 1, both versions of the revised APT showed evidence of validity by correlating in expected directions with other measures of physical abuse potential (e.g., Adult-Adolescent Parenting Inventory-2 (AAPI-2) and Attitudes Toward Spanking (ATS)). In addition a series of independent samples T-tests were used to allow preliminary comparison of disciplinary strategies selected in response to the still and video image APT versions. APT physical discipline was significantly greater in the V condition (M=9.79, SD=5.04) than in the S condition (M=1.93, SD=3.36; $t(510)=20.67$, $p = .000$). APT non-physical to physical escalation scores in the V condition (M=7.02, SD=3.44) were also higher than these scores in the S condition (M=1.18, SD=2.19; $t(510)=22.77$, $p = .000$). Participants selected more physical disciplinary responses in the V condition (M=2.08, SD=3.22; $t(510)=6.87$, $p = .000$) than in the S condition (M=.57, SD=1.38) as an initial response to child behavior. This same pattern held for physical discipline responses if the child persisted in the behavior ($t(510)=23.63$, $p = .000$; V condition M=7.71, SD=3.52; S condition M=1.36, SD=2.43). With regard to gender differences, in the V condition women (M=7.43, SD=3.43) had significantly higher total escalation non-physical to physical scores ($t(258)=-.275$, $p = .006$) than men (M=6.23, SD=3.30). These data provide evidence of validity for both the still and video versions of the APT revised. In addition, they suggest that a more realistic video image portrayal of child behavior may evoke physical disciplinary responses and disciplinary escalation at higher rates than corresponding still images.

Koren, Erin

April - June FY15

Conversations & Encounters: Exploring Ethics in the Writing Center

"Tact in the Writing Center: The Good, the Bad, the Ugly"

One of the toughest jobs as a writing consultant is finding the balance between communicating to a student what they need to do to improve as writers and doing so in a way that provokes confidence, builds rapport with the student, and expresses respect for a diverse range of abilities-including writing proficiency, communication skills, and willingness to receive criticism. While this task may seem daunting enough, adding on the additional criteria of accomplishing all of this

within a thirty-minute time frame makes it appear near impossible. Nevertheless, by using considerate, clever, and sensitive techniques, such as employing delicate and thoughtful judgment to modify the content of the message to make it less insulting (Pearl, Donahue & Bryan, 1985) to the writer, writing consultants can conquer even the toughest issues, including explaining to a student why they need to cite their sources and how to use non-offensive language within their pieces. With our round table presentation, we plan to present research-based techniques on how to avoid displaying superior skill (Foster, 1975). Our presentation will utilize Brown and Levinson's (1987) specific politeness strategies and the negative politeness strategy set forth by Mackiewicz and Thompson (2013). Both approaches address how to handle difficult consultations, such as those with unconfident or complaining students. We will supplement these methods with both personal anecdotes of interpersonal strategies, including simply asking a student how he or she would like the consultation to transpire, as well letting the student know that it is recognized that he or she put forth time and effort in their writing, and those from our coworkers at the Frederick Meijer Center for Writing and Michigan Authors at Grand Valley State University. It is our hope that a lengthy discussion will open up about the best, and maybe the not so great, encounters that other members of our field have experienced, creating a beneficial aggregate of knowledge and approaches. Our goal is for everyone to gain insight about strategies that can help in tough situations and to realize that they may not have been alone in the struggles, or the triumphs, that they have experienced.

Kuznicki, Michelle

April - June FY15

East Central Writing Centers Association 2015 Conference

"All of My Poems Begin with Profanities : The Ethical Considerations of Working with Poets in the Writing Center"

Writing Centers deal with a variety of writing genres from historical research papers to portfolios of poetry. While a majority of pieces that consultants work with are founded in professional and technical forms, the creative writing genre is equally important for consultants to be comfortable working with. With the growth of popularity of creative writing pieces, Writing Centers should

expect their numbers of creative writers to grow. When considering poetry many consultants feel overwhelmed, or unprepared to work with the piece because they lack training, or understanding of the genre. It is important to keep an open discussion during the consultation with a student if the genre is unfamiliar to the consultant. Beyond this, it is equally essential that Writing Centers train and prepare consultants to be able to discuss poetry while maintaining an ethical perspective as this genre is increasing. In this workshop, we will discuss how to work with poetry, and also the ethical line that consultants can cross during a consultation when working with a creative piece. Creative oriented consultants must ensure they are not crossing the line into partial authorship, and technical focused consultants must consider their unfamiliarity of creating writing genres when entering a session. In our presentation, we will lead a session that focuses on the interdisciplinary techniques necessary in consulting that are universally designed, but also applicable to the realm of poetry. This discussion will include samples from multiple genres in order to compare and contrast different techniques consultants would use in accordance to each genre and interchangeable qualities of these approaches. Following a miniature workshop of the different genres, a conversation about the ethicality and necessity of creatively knowledgeable consultants will expand attendees consulting toolbox. Consultants will leave with a better idea of how to approach poetry in consultations with questions and topics they can openly discuss with the student no matter what background they come from. Attendees will also gain experience in critiquing a poetry piece, and acquire language that is appropriate for the genre, as well as the presence of poetry growing in Writing Centers.

Lower, Krzysztof

April - June FY15

Solo Exhibition at Craft House

"Accelerating the new Cosmic order"

(Project statement) Accelerating the new Cosmic order - The new Cosmic order is spatial, spiritual, social, and mystical. It is energized by capitalism, the future, architecture, and dreams. The new Cosmic order situates itself in relationship to global and local construction companies, real estate investment firms, and corporate research and development. The new Cosmic order is

made up of organic-kale-eating-vegan activists and philanthropists, jeans-and-hoody-wearing social entrepreneurs and executives, and Macbook-Pro-owning-coffee-shop-dwelling creatives and freelancers. Most individuals in the new Cosmic order embody all of these characteristics simultaneously.

May, Kelsey

April - June FY15

East Central Writing Centers Association 2015 Conference

"Ima College Student, Too"

Students who come to higher education from backgrounds where academic English is not the language spoken at home are not given equal opportunities in the classroom to demonstrate their mastery of the material. Language use directly affects the routes students take to communicate their ideas and understanding to professors, but there is a disconnect between students background and academic English. Many of these minority students learn to adapt on their own, but we see others of these students in our writing centers. This issue has thus far been unaddressed in professional development opportunities. My workshop would take the material I researched and present it to interested consultants and staff members. Then, participants would role play as students from different regions and cultural backgrounds with previously-created assignment sheets. This would allow participants to empathize with students of different backgrounds. At the end of the workshop, we would discuss ways to improve our writing centers and acceptance on campus of different forms of English.

McCann, Sydney

April - June FY15

East Central Writing Centers Association Conference

"Asking Too Much? Ethical Concerns of Growing Demands on Employees in a Growing Center"

In the pedagogy of nearly every writing center lies the desire to help as many writers as possible, with whatever assignment they're working on, no matter what stage of the writing process they find themselves in. If writing centers are successful in this mission, then it is reasonable to assume that they will see a continual increase in the number of students they work with, which will necessitate a growth in the number of hours and appointments available to students. Depending on the size and nature of the university and campus, these hours may be spread out over many locations or classrooms, adding to the difficulty of scheduling needs and concerns, likely resulting in an increase in the number of student employees that a center needs to hire. So long as the university provides the center with the funds and spaces necessary, the difficulties that remain fall to the consultants themselves, asking them to work early morning or late night hours, travel between campuses or locations, or be mentally active for much longer than a typical nine to five workday. Staffs that utilize lead consultants may have additional needs, such as supervising late night or weekend shifts, which ultimately increases the personal difficulty that their schedule necessarily places on them. Governing all of this is the reality that writing consultants are students themselves, who need time to do homework, study, and practice self-care. However, this raises a serious ethical question: at what point does it become too much to ask of consultants to accommodate student need? In this roundtable discussion, we will describe the scheduling processes used at GVSU, the growing student needs of our university, the expansion of the writing centers hours and locations, and the policies that impact how and where employees are scheduled. We will then discuss specific situations where scheduling needs conflicted with convenience of consultant schedules, and we will conclude the presentation debating the ethical principles that are in question when the personal well-being of student employees and the dedication to serving all students wherever and whenever is necessary.

McLaughlin, Nicole

April - June FY15

East Central Writing Centers Association

"Tact in the Writing Center: The Good, the Bad, the Ugly"

One of the toughest jobs as a writing consultant is finding the balance between communicating to a student what they need to do to improve as writers and doing so in a way that provokes confidence, builds rapport with the student, and expresses respect for a diverse range of abilities—including writing proficiency, communication skills, and willingness to receive criticism. While this task may seem daunting enough, adding on the additional criteria of accomplishing all of this within a thirty-minute time frame makes it appear near impossible. Nevertheless, by using considerate, clever, and sensitive techniques, such as employing delicate and thoughtful judgment to modify the content of the message to make it less insulting (Pearl, Donahue & Bryan, 1985) to the writer, writing consultants can conquer even the toughest issues, including explaining to a student why they need to cite their sources and how to use non-offensive language within their pieces. With our round table presentation, we plan to present research-based techniques on how to avoid displaying superior skill (Foster, 1975). Our presentation will utilize Brown and Levinsons (1987) specific politeness strategies and the negative politeness strategy set forth by Mackiewicz and Thompson (2013). Both approaches address how to handle difficult consultations, such as those with unconfident or complaining students. We will supplement these methods with both personal anecdotes of interpersonal strategies, including simply asking a student how he or she would like the consultation to transpire, as well letting the student know that it is recognized that he or she put forth time and effort in their writing, and those from our coworkers at the Frederick Meijer Center for Writing and Michigan Authors at Grand Valley State University. It is our hope that a lengthy discussion will open up about the best, and maybe the not so great, encounters that other members of our field have experienced, creating a beneficial aggregate of knowledge and approaches. Our goal is for everyone to gain insight about strategies that can help in tough situations and to realize that they may not have been alone in the struggles, or the triumphs, that they have experienced.

O'Neil, Allison

April - June FY15

Annual ACSM 2015

"Core Muscle Activation During Unstable Leg Extension Using a Water-Filled Training Tube"

Creating muscle instability may be an effective means of training for stability. Instability may be achieved using an unstable surface or load. **PURPOSE:**The purpose of this study was to assess the degree of muscle instability created during a seated leg extension using a novel unstable load (slosh tube) under three different conditions. **METHODS:**Eight men (age= 19.9± 1.6y, ht=178.8 ± 8.9cm, mass= 103.3 ± 48.5kg, Leg Ext 1RM= 136.5 ± 15.9kg) and eight women (age= 20.1 ± 1.1y, ht=164.9 ± 9.8cm, mass= 62.9 ± 12.2kg, Leg Ext 1RM= 91.5 ± 15.5kg) completed three, 30s trials of leg extension using an 11.4 kg tube partially filled with water. A central valve allowed three conditions of water movement: 50% open, 100% open, and a stable, balanced valve setting. The valve settings allowed for different water flow dynamics, creating movement during the lift. Subjects completed 8-10 repetitions (20 reps/min) within each condition using a counter-balanced design. Muscle activation was assessed on the right side, with bipolar surface electrodes placed over the vastus lateralis, vastus medialis, rectus abdominus and paraspinal muscles. Integrated EMG was measured (1,000Hz/s) for each repetition and converted to a %MVC for each muscle. Instability was determined using the coefficient of variation across repetitions. A two way repeated measures ANOVA (gender, condition, gender x condition) with post hoc t-tests was used to examine concentric contractions only. **RESULTS:** : Percent MVC activated for the vastus lateralis was significantly greater in women (81.8 ±52.7%) compared to men (48.0 ±27.8%) across all conditions. No differences in % MVC were seen for vastus medialis, rectus abdominus, and paraspinal muscles. There were no differences in instability for any muscle or condition, however abdominal instability was trending toward differences between men(CV= 24.8 ±15.9) and women (CV= 30.5 ± 28.3 p= .06). **CONCLUSIONS:** We conclude that utilizing an 11.4kg unstable device during seated leg extension does not result in significant instability, however it does result in greater vastus lateralis activation in women compared to men. A heavier load may be required to create the desired unstable conditions for core muscle activation.

Orr, Samantha

April - June FY15

ACSM's 62nd Annual Meeting, 6th World Congress on Exercise is Medicine® and World Congress on the Basic Science of Exercise Fatigue

"Cognitive and Motor Skill Performance Are Improved By Active Cooling Following Passive Hyperthermia"

Hyperthermia causes a number of deleterious effects including decreased exercise performance and mental acuity. Neck cooling and hand and forearm cooling are both effective in attenuating heat strain during exercise in hot environments. However, only limited research exists on the effectiveness of either cooling methods on cognitive and motor skill performance following whole-body hyperthermia. **PURPOSE:** To investigate the effect of two active cooling modalities on cognitive and motor skill performance following passive hyperthermia. **METHODS:** Eleven healthy participants (6 females and 5 males; 22 ± 5 y; 173 ± 10 cm; 71.8 ± 15.1 kg) were passively heated to 39°C rectal temperature (T_{re}) by 40°C whole-body immersion. They were then removed from the water and sat quietly in a room ($24.6\pm 0.8^{\circ}\text{C}$ and $49.8\pm 6.3\%$ rh) and used either a 2.6 m^2 commercially available cooling towel wrapped against the surface of their neck (NT), hand and forearm immersion in $10.5\pm 1.3^{\circ}\text{C}$ water (H), or cooled passively (C) until T_{re} reached 38°C . Simple reaction time, Stroop word color, time to complete a trail-making task (TMT), and time to screw three nuts on three bolts (N&B) were measured pre and post whole-body immersion and every 15 min during the cooling phase. One and two-way repeated measures ANOVA were used to determine differences across time and between conditions. **RESULTS:** Reaction time was faster ($p<0.05$) with H (349 ± 41 ms) compared to both NT (364 ± 60 ms) and C (380 ± 65 ms). Success in the Stroop word color test was improved ($p<0.05$) when using NT (31 ± 3) but not H (31 ± 4) compared to C (29 ± 4). Neither hand and forearm cooling nor neck cooling improved TMT ability. Time to complete the N&B task trended towards an improvement ($p=0.06$) with H (39.4 ± 11.4 s) but not NT (43.1 ± 12.0 s) compared to C (45.5 ± 12.4 s). **CONCLUSION:** Reaction time and color-word interference ability were found to improve with hand and forearm cooling and neck cooling, respectively.

Pearson, Spencer

April - June FY15

62nd Annual American College of Sports Medicine Conference

"Core Muscle Activation During Unstable Leg Extension Using a Water-Filled Training Tube"

Creating muscle instability may be an effective means of training for stability. Instability may be achieved using an unstable surface or load. **PURPOSE:**The purpose of this study was to assess the degree of muscle instability created during a seated leg extension using a novel unstable load (slosh tube) under three different conditions. **METHODS:**Eight men (age= 19.9± 1.6y, ht=178.8 ± 8.9cm, mass= 103.3 ± 48.5kg, Leg Ext 1RM= 136.5 ± 15.9kg) and eight women (age= 20.1 ± 1.1y, ht=164.9 ± 9.8cm, mass= 62.9 ± 12.2kg, Leg Ext 1RM= 91.5 ± 15.5kg) completed three, 30s trials of leg extension using an 11.4 kg tube partially filled with water. A central valve allowed three conditions of water movement: 50% open, 100% open, and a stable, balanced valve setting. The valve settings allowed for different water flow dynamics, creating movement during the lift. Subjects completed 8-10 repetitions (20 reps/min) within each condition using a counter-balanced design. Muscle activation was assessed on the right side, with bipolar surface electrodes placed over the vastus lateralis, vastus medialis, rectus abdominus and paraspinal muscles. Integrated EMG was measured (1,000Hz/s) for each repetition and converted to a %MVC for each muscle. Instability was determined using the coefficient of variation across repetitions. A two way repeated measures ANOVA (gender, condition, gender x condition) with post hoc t-tests was used to examine concentric contractions only. **RESULTS:** : Percent MVC activated for the vastus lateralis was significantly greater in women (81.8 ±52.7%) compared to men (48.0 ±27.8%) across all conditions. No differences in % MVC were seen for vastus medialis, rectus abdominus, and paraspinal muscles. There were no differences in instability for any muscle or condition, however abdominal instability was trending toward differences between men(CV= 24.8 ±15.9) and women (CV= 30.5 ± 28.3 p= .06). **CONCLUSIONS:** We conclude that utilizing an 11.4kg unstable device during seated leg extension does not result in significant instability, however it does result in greater vastus lateralis activation in women compared to men. A heavier load may be required to create the desired unstable conditions for core muscle activation.

Rodawold, Megan

April - June FY15

2015 ECWCA Conference

"Whose Service is it Anyway?: Examining the Ethics of Efficiency"

It has been almost two years since Grand Valley State University opened its brand new library to students. From its early beginnings, the Mary Idema Pew Learning and Information Commons was designed and built around a common space, known as the Knowledge Market. The Knowledge Market houses three collaborative peer-tutoring services: the Writing Center, the Speech Lab and the Research Consultants. Over the last three semesters, the three different services have been working together in the same space towards a common goal: empowering students on their way to becoming better writers, smarter researchers, and more confident presenters. The Knowledge Market has been largely successful in this endeavor, and that success has come from the efficiency of the services working together. At first glance, the efficiency of three services working together may not seem to have many ethical implications, but there are a variety of topics we feel are pressing for discussion. Through a roundtable presentation/conversation, we hope to focus on one question from multiple angles: how do our services work best together to empower students? The first portion of our presentation will be introducing the Knowledge Market, its basic functions, and the ethics of common situations unique to our three-service work environment, including: " How do we hold joint consultations (two consultants from the same or different services working with one student) without overpowering the student? " How do we tactfully execute referrals (e.g., a student needs help finding sources but went to a writing consultant) so that the student doesn't feel like they're being handed off? We will also be discussing the ethics behind how the services interact with each other. Since the goal is also to ensure that both the student and consultant are satisfied, having three services in one place necessitates a certain type of professional conduct, and questions have surfaced such as: " How do we maintain professionalism in a more open and relaxed environment? " Do the services have jurisdiction over the others if someone steps out of line? " Is a system of checks and balances necessary for success and respect? " What is the most effective strategy to communicate each other about work related issues? Through our discussion we also hope to learn from other university writing centers. How have they utilized collaboration? How do they work with libraries? Are speech and presentation help seen as something entirely separate? Where does research come in? We ultimately wish to utilize the

different perspectives in attendance to provide answers to our own questions, as well as suggest strategies and ideas that other writing centers may implement in the future.

Rykse, Caitlin

April - June FY15

East Central Writing Centers Association

"Whose Service is it Anyway?: Examining the Ethics of Efficiency in the Knowledge Market"

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Stephens, Brianne

April - June FY15

East Central Writing Centers Association - Conversations & Encounters: Exploring Ethics in the Writing Center

"Learning Disabilities in the Writing Center"

There are a multitude of variables at play in the student-consultant relationship that can be potential obstacles for communication and success in a writing consultation. One such variable is that of learning disabilities. This presentation will discuss the ethics at play in a consultation with a student who has a learning disability. Background information will be given on the learning disabilities that consultants may come into contact with, but the presentation will largely focus on how consultants can best navigate these sometimes tricky consultations. Another question asked will be how a writing center can best train its employees for working with students with learning disabilities. The goal is to provide audience members with tools that will equip them to better serve these students so that they too can become more confident, competent, and autonomous writers.

Swartz, Marissa

April - June FY15

Midwest Political Science Association 2015

"Economic Context and Civic Engagement: the Effects of Localism in Four Michigan Cities"

The economic structure of a city affects the civic well-being of its residents. The degree of localism in an economy affects the areas social capital, contributing to the development of its civic institutions. I examine the relationship between localism and social capital in case studies of four Michigan cities: Flint, Grand Rapids, Kalamazoo, and Pontiac. A more local, or independent economic structure, is resilient to harmful effects of globalization. Local business leaders support civic institutions. Bridging social capital flourishes, creating a civically engaged population. Big-business dominated economic structures, on the other hand, foster an unstable environment and are relatively more susceptible to the effect of global economic forces. The heart of a localitys economic structure, thus, provides insight into the development of a citys civic institutions.

Thompke, Heather

April - June FY15

Midwestern Psychological Annual Meeting

"Effects of Parenting Style on Students' Financial Socialization"

Effects of Parenting Style on Students Financial Socialization Purpose Financial socialization is the process by which adolescents develop their own knowledge, beliefs, values, behaviors, and norms that influence their subsequent financial practices (Danes, 1994). Parents play a critical role in shaping their childrens financial skills and attitudes through modeling, reinforcement, and intentional teaching (Danes & Haberman, 2007). Previous studies showed that parents who are perceived as displaying healthy financial behavior and engaged in direct teaching during adolescence were more highly regarded as financial role models by their children during the first year in college (Shim et al., 2010). However, very few studies looked at how family processes, such as parenting style, affect the degree of influence parents have on their childrens financial behaviors. In this study, we will use parenting dimensions (e.g., responsiveness and psychological control) to investigate their predictive influence on childrens financial behaviors/satisfaction. Procedure The sample consists of approximately 300 first-year students.

Students evaluated maternal and paternal responsiveness, psychological control, behavioral control, and autonomy support (scales adapted by Soenens, Vansteenkiste, Luyckx, & Goossens, 2006). For the financial behaviors component, students evaluated their engagement in four different positive financial behaviors (track monthly expenses, spend within budget, save money each month for the future, and invest for long-term financial goals). They also answered three items with regard to their satisfaction with financial issues. Results Preliminary results showed that childrens behavior of tracking monthly expenses correlated significantly with fathers responsiveness/support, expectation of behavior, and monitoring of behavior ($r=.24$, $r=.28$, $r=.33$; all $ps < .05$). These three dimensions also had a significant effect on whether children saved for the future ($r=.25$, $r=.20$, $r=.20$; all $ps < .05$). The mothers monitoring behavior was only related with tracking monthly expenses ($r=.25$, $p<.01$). Conclusions and Implications: Our results show that perceived paternal parenting style has a greater impact on financial socialization of children than maternal parenting style. Results will be discussed using a developmental perspective.

References Danes, S. M. (1994). Parental perceptions of children's financial socialization. *Journal of Financial Counseling and Planning*, 5, 127-146. Danes, S. M., & Haberman, H. R. (2007). Teen financial knowledge, self-efficacy, and behavior: A gendered view. *Journal of Financial Counseling and Planning*, 18(2), 48-60, 98-99. Soenens, B., Vansteenkiste, M., Luyckx, K., & Goossens, L. (2006). Parenting and adolescent problem behavior: An integrated model with adolescent self-disclosure and perceived parental knowledge as intervening variables. *Developmental Psychology*, 42(2), 305-318.

Vega, Jacqueline

April - June FY15

2015 ECWCA Conference

"Whose Service is it Anyway?: Examining the Ethics of Efficiency in the Knowledge Market"

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Speech Lab and the Research Consultants. Over the last three semesters, the three different services have been working together in the same space towards a common goal: empowering students on their way to becoming better writers, smarter researchers, and more confident presenters. The Knowledge Market has been largely successful in this endeavor, and that success has come from the efficiency of the services working together. At first glance, the efficiency of three services working together may not seem to have many ethical implications, but there are a variety of topics we feel are pressing for discussion. Through a roundtable presentation/conversation, we hope to focus on one question from multiple angles: how do our services work best together to empower students?

Whinnen, Matthew

April - June FY15

East Central Writing Center Association 2015 Conference

"Beyond Ethics: Resolving Conflict Through Human Practice"

Ethics provide us with a set of principles to resolve conflicts that we encounter in the writing center on a daily basis. It is this simple task that becomes increasingly complex when one tries to figure out which ethics or set of principles is the correct one to use. This may lead to a debate on the philosophical level, but often it is only resolved in our practice. Using Marx's ontology and method as well as concrete examples of conflicts, it will be argued in this presentation that rather than debate which ethics should be used in the writing center, we should examine the structures that pull our practices in different directions.

Yoder, Lauren

April - June FY15

87th Annual Meeting of the Midwestern Psychological Association

"Does self-objectification hinder women's experience of peak motivational states?"

Objectification theory posits that living in a culture that objectifies women leads girls and women to adopt an observers perspective on the self, resulting in self-objectification. This is proposed to cause many consequences including diminished ability to reach peak motivational states, or flow, due to a disruption in focused attention. In the current study, we examined whether exposure to ideal images could affect the ability to experience flow among women who were high vs low on trait self-objectification. It was found that participants low in trait self-objectification who viewed ideal images experienced more flow than those women who viewed neutral images; for women high in trait self-objectification there was no difference between image conditions.

Zucker, Ari

April - June FY15

National Association of Communication Centers Conference

"The relationship between learning styles, feedback, and feedback satisfaction"

This paper explores the relationship between learning styles, feedback, and feedback satisfaction. The proposed hypothesis is that diverse feedback is more effective and more satisfying than non-diverse feedback. To test this hypothesis, research was conducted using both feedback styles. Student satisfaction of this feedback was compared between two groups. This paper is intended to stand on the shoulders of the previous research done by David Kolb and his development of the Experiential Learning Theory (1984), and to further develop the ideas presented by Brown, King, and Venette (2014). Results are applicable and relevant to communication centers and their consultants. Consultants who are able to give well-rounded and diverse feedback should be able to better assist their clients by increasing their capacity to understand and grow in the communication center environment.

ACF 2015 July - September Presentations

Beals, Brealyn

July – September FY15

Mathematical Association of America (MAA) MathFest

"Graph Theoretic Models of Interdependent Preferences in Referendum Elections"

No Abstract.

Coburn, Katherine

July – September FY15

248th American Chemical Society (ACS) National Meeting

"Investigation of a multidentate carbamoylphosphine oxide compound and its ability to separate lanthanide and actinide metals"

No Abstract.

Dotson, Willis

July – September FY15

International Music Curs Vila de L'Olleria (CIMVO) 2014

"GVSU Trumpet Ensemble Performance"

No Abstract.

Esch, Michael

July – September FY15

Midwest Undergraduate Computational Chemistry Conference

"Carbonmonoxy Myoglobin Vibrational Frequency Investigation"

No Abstract.

Grant, Denton

July – September FY15

International Music Curs Vila de L'Olleria (CIMVO) 2014

"GVSU Trumpet Ensemble Performance"

No Abstract.

Kobberstad, Matthew

July – September FY15

European University of Saxophone

"Solo performance"

No Abstract.

Koch, David

July – September FY15

International Music Curs Vila de L'Olleria (CIMVO) 2014

"GVSU Trumpet Ensemble"

No Abstract.

Malfroid, Martin

July – September FY15

International Music Curs Vila de L'Olleria (CIMVO) 2014

"GVSU Trumpet Ensemble"

No Abstract.

Miller, Robert

July – September FY15

International Music Curs Vila de L'Olleria (CIMVO) 2014

"GVSU Trumpet Ensemble"

No Abstract.

Morse, Paul

July – September FY15

248th American Chemical Society (ACS) National Meeting

"Differences in bridge length of bidentate phosphoryl ligands regarding f -element complexes"

No Abstract.

Riley, Sean

July – September FY15

248th American Chemical Society (ACS) National Meeting

"Facile Synthesis of Arylsulfonates and Exploration of their Use in Sonogashira and Ullman Cross-Coupling Reactions"

No Abstract.

Kathleen, Venhuizen

July – September FY15

248th American Chemical Society (ACS) National Meeting

"Designing inquiry based organic chemistry laboratory procedures to promote critical thinking"

No Abstract.

ACF 2015 October - December Presentations

Abeare, Mackenzie

October – December FY15

62nd Annual American College of Sports Medicine Conference

"NECK COOLING IS INEFFECTIVE IN REDUCING PHYSIOLOGICAL AND PERCEPTUAL STRAIN FOLLOWING PASSIVELY-INDUCED HYPERTHERMIA"

Combined hand and forearm cooling effectively attenuates hyperthermia during exercise, and improves recovery between bouts of exercise in an uncompensable heat stress environment. Neck cooling can also be effective in reducing thermoregulatory strain during exercise in high ambient temperatures or with sufficient magnitude of cooling. **PURPOSE:** To determine the effect of active cooling on temperature, heart rate and thermal sensation following passive hyperthermia. **METHODS:** Eleven healthy participants (22 ± 5 y; 173 ± 10 cm; 71.8 ± 15.1 kg) were passively heated to 39°C rectal temperature (T_{re}) by 40°C whole-body immersion. They were then removed from the water and sat quietly in a room ($24.6\pm 0.8^{\circ}\text{C}$ and $49.8\pm 6.3\%$ rh) and used either a 2.6 m^2 commercially available cooling towel wrapped against the surface of their neck (NT), hand and forearm immersion in $10.5\pm 1.3^{\circ}\text{C}$ water (H) or cooled passively (C) until T_{re} reached 38°C . Heart rate, T_{re} , mean skin temperature (T_{sk}), and thermal sensation (TS) were measured pre and post whole-body immersion, and every 5 min during cooling. Nude body mass was measured before and after each trial. One and two way repeated measures ANOVA were used to determine differences across time and between groups. **RESULTS:** Time to cool was faster ($p<0.01$) with H (24 ± 7 min) compared to C and NT (C: 37 ± 13 min; NT: 38 ± 9 min). There were T_{re} interaction effects (time and condition, $p<0.01$) at 10 min cooling with H ($38.7\pm 0.3^{\circ}\text{C}$) compared to NT ($39.0\pm 0.2^{\circ}\text{C}$) and C ($38.9\pm 0.2^{\circ}\text{C}$), and at 15 min cooling with H ($38.4\pm 0.4^{\circ}\text{C}$) when compared to NT ($38.7\pm 0.2^{\circ}\text{C}$) and C ($38.7\pm 0.3^{\circ}\text{C}$). There was also a lower T_{sk} ($p<0.05$) when using H ($34.5\pm 2.7^{\circ}\text{C}$) compared to NT ($34.9\pm 2.9^{\circ}\text{C}$) and C ($34.7\pm 2.8^{\circ}\text{C}$). Mean heart rate

during recovery was lower ($p < 0.01$) when using hand cooling (96 ± 19 beats \cdot min $^{-1}$) compared to both neck towel cooling (107 ± 20 beats \cdot min $^{-1}$) and control (105 ± 22 beats \cdot min $^{-1}$). Perceived TS was found to be lower ($p < 0.01$) with H (4.1 ± 1.7) compared to NT and C (NT 4.7 ± 1.4 ; C 4.6 ± 1.5). Across the duration of each of the trials, there was no significant difference in body mass change. CONCLUSION: Neck towel cooling was found to be an ineffective hyperthermia recovery strategy. However, hand and forearm cooling effectively reduced thermal strain and recovery time, along with decreasing heart rate and improving perceptual responses.

Armstrong, Eric

October – December FY15

2014 Annual GSA Meeting

"MODELING P-T-TIME PATHS WITHIN THE CHUNKY GAL MOUNTAIN FAULT, CENTRAL BLUE RIDGE, NORTH CAROLINA"

The terrane-bounding Chunky Gal Mountain Fault (CGMF) in the Southern Appalachian Central Blue Ridge forms part of the boundary of the Buck Creek-Chunky Gal mafic-ultramafic complex. Fault movement during peak Taconian metamorphism (~460 Ma) may have emplaced this ocean crustal fragment. Four fault zone samples represent variations in protolith, assemblage, and strain. Complex garnet zoning profiles help constrain the fault zone P-T path. Sample L3 is a Bt-rich ultramylonite with Grt, Pl, Kfs, and Ms porphyroclasts. JR22, 13-3b and 13-5a are from a more aluminous exposure; all contain Bt, Pl porphyroclasts, and abundant rounded to eye-shaped Grt?s with fibrous Sil inclusions near the rim. JR22 and 13-5a are protomylonites; the matrix of JR22 is rich in coarse Sil whereas 13-5a has Ky and Ms. 13-3b is migmatitic with the largest Grt?s and matrix Ky. All samples have accessory Ilm, Rt, and Mnz. Textural observations suggest a progression from Sil to Ky and Ilm to Rt stabilities. Large Grt?s are mostly inclusion free with Mg-rich, Ca-poor inclusion-rich cores and fibrolite inclusions in some rims. Core to rim profiles display a distinct drop in Ca (a Ca-poor 'moat') and a modest Mg increase. Outward from the 'moat', this trend reverses with increasing Ca and Mn and decreasing Mg toward the rim. T-P conditions estimated using TWQ suggest minimum peak conditions of 750-800oC, 0.6-0.7 GPa within the Sil stability field. Grt rims equilibrated within

the Ky stability field at ~550-600 oC, 0.7-0.8 GPa. Equilibrium assemblage diagrams created with Theriak-Domino (TD) using whole-rock geochemistry suggest similar T-P conditions. TD models of Grt isopleth thermobarometry yield a counterclockwise P-T path. The initial (core-?moat?) stage generates decreasing pressure (~0.1GPa) with a slight increase (~10oC) in temperature. ?Moat? to rim preserves a nearly isothermal spike in pressure followed by a distinct, near-isobaric temperature decrease. The pressure spike may indicate loading across the CGMF during peak metamorphism. Work is in progress to better constrain P-T path models by accounting for Grt fractionation with approaches that model Grt growth and diffusion. These efforts must account for early diffusional re-equilibration of Grt profiles. Some preliminary results are consistent with initial P-T path estimates.

Brady, Ashley

October – December FY15

Geological Society of America Fall Meeting

"NUTRIENT DYNAMICS IN A STORMWATER MANAGEMENT COMPLEX AT GRAND VALLEY STATE UNIVERSITY, ALLENDALE, MICHIGAN"

Grand Valley State University (GVSU) is a liberal arts university located in western Michigan with approximately 25,000 students. The university was founded in 1960 as a commuter campus. The infrastructure needed to support the students and cars has resulted in large amounts of stormwater runoff which impacts nearby ravine systems. Stormwater management structures have been implemented since the early 2000s to reduce offsite impacts. In 2011, a 44-acre stormwater management complex was completed. Over the summer of 2012, automated water samplers were used collect suspended solids and nutrient data to evaluate the overall efficiency of the newly constructed detention ponds. Completion of the detention ponds decreased stormwater input into one of the largest ravines by roughly 25 percent. Over 200 samples were analyzed for orthophosphate, nitrate, and chloride during rain events and between rain events, to determine baseline conditions. Samples were collected at the inlet and outlet of the stormwater management complex. Baseline conditions were observed during periods of little precipitation and used for comparison of nutrient concentrations. Average orthophosphate concentrations

decreased from 0.58 ppm at the inlet to 0.21 ppm at the outlet. Average nitrate concentrations decreased from 1.95 ppm at the inlet to 0.45 ppm at the outlet, and may be due to fertilizer-derived nutrients. Average chloride concentration increased from 133.5 ppm at the inlet to 189.8 ppm at the outlet, likely due to water evaporation as water moved through the stormwater management complex. Chloride and orthophosphate concentrations may be elevated due to irrigation water derived from a well in the Marshall Formation aquifer. Rain event samples were taken at 5-minute intervals during periods of precipitation greater than 0.1 inches per hour. Average orthophosphate concentrations decreased from 0.12 ppm at the inlet to 0.02 ppm at the outlet. Average nitrate concentrations decreased from 0.73 ppm at the inlet to 0.51 ppm at the outlet. Average chloride concentration increased from 24.46 ppm at the inlet to 72.67 ppm at the outlet. Rain event concentrations of orthophosphate, chloride, and nitrate were generally lower than baseline conditions due to dilution of the water in the stormwater management complex.

Colaianne, Nicholas

October – December FY15

Geological Society of America Annual Conference

"Comparison of two suspended sediment analysis methods"

Comparison of two suspended sediment analysis methods Grand Valley State University (GVSU) is a liberal arts university located on 1,322 acres to the west of the Grand River in western Michigan. Deep ravines have been eroded into the glacial sediments on which the campus is built resulting in a ravine system east of campus which flows into the Grand River. Since the construction of the GVSU campus, beginning in 1960, the amount of impermeable surface has increased resulting in increased storm water runoff and peak flows in the ravines. Lag time between the start of a rain event and the arrival of runoff in the ravine system has decreased. Erosion caused by the increased peak flow and decreased lag time has resulted in widespread slope stability problems, some near campus buildings and structures. In fall 2013, a prominent historic bridge was temporarily closed due to unstable footings. Runoff measurement, sampling, and water quality analysis in the ravines has been ongoing since 2006. Over 900 samples have been analyzed for total suspended sediment (TSS), using a modified EPA method

ESS 340.2. In effort to find a more efficient method for determining sediment loads samples previously analyzed using the EPA method were reanalyzed using a modified version of the ASTM Standard Test Method D 3977-97 (suspended solid concentration (SSC)). The SSC method is simpler and faster, especially when samples have high sediment concentrations. The TSS method allows preservation of the sample, is more widely used by wastewater treatment facilities, and is more compatible with performing other water quality measurements. The SSC method requires fewer steps and there is less chance for analytical error while processing samples, however it requires Total Dissolved Salts (TDS) data for comparison with TSS data. In order to compare the two analysis methods a random subsample from 600 previously analyzed samples taken from 2011 to 2013, as well as non-randomized samples collected in 2014 were reanalyzed. Preliminary results comparing the TSS and SSC method for random samples and 42 non-random samples suggest that the TSS method underestimates the suspended sediment content, particularly for lower sediment concentrations. The TSS method may be less accurate at lower concentrations due to sampling bias resulting from sample size; and the potential for analytical errors due to scale precision.

Faleni, Jessica

October – December FY15

MiWLA Conference 2014

"Developing Graphic Organizers For Your Classroom: The Conversation Continues"

Graphic organizers can help language teachers and learners develop greater awareness of the types of oral tasks speakers are expected to successfully handle. In this session, participants will briefly review the parameters used to evaluate oral proficiency. They will review and categorize several graphic organizers covering a range of proficiency levels and topics. Finally, they will draft sample organizers to display in their own classrooms.

Franklin, Taylor

October – December FY15

Michigan Premiere Public Health Conference

"A Compare and Contrast of Health Care in Kenya, Africa and the United States: Grand Valley State University's Interdisciplinary Service Learning Program"

The objective of this research is to investigate the best practice initiatives of healthcare involved from a developing country's perspective at both the Tigoni District Hospital and Wema Clinic located in Kenya. There are three key parts that went into researching best practices and they are outlined as follows: Part one includes the hands-on portion of research which was collected by shadowing and observing numerous medical professionals while on a Community Service Learning Trip in Kenya this summer. This included keeping a record of each patient observed during the three weeks spent volunteering. Part two is a case study of the patients seen and an examination of the major issues observed during the initial data collection at the hospitals. Finally, part three includes both an investigation and comparison of best practice policies found to be put in place in both Kenya and the United States.

Janardan, Veena

October – December FY15

2014 ASCB/IFCB Meeting

"Identifying the c-MET phosphorylation site regulated by CD82 in prostate tumor cells"

CD82 (KAI), a metastasis tumor suppressor protein is under-expressed in prostate as well as several other types of metastatic cancers. It inhibits cancer metastasis, but the mechanism through which regulation happens remains unclear. Various pathways are being explored in this lab, including regulation of c-MET, a growth factor receptor observed to have increased activation in tumor cells. CD82 and c-MET do not co-localize, suggesting that CD82 indirectly downregulates c-MET. To be expressed, c-MET first needs to bind to its ligand, HGF. This growth factor encourages phosphorylation of c-MET, consequently activating it. C-Met has four tyrosine phosphorylation sites that include p-Tyr 1003, p-Tyr 1234/1235, p-Tyr 1349 and p-Tyr 1365. Knowing how each phosphorylation site of c-Met affects downstream signaling event, our lab is focused in identifying which site is regulated by CD82. Another tetraspanin, CD151 that

promotes tumor progression and metastasis has been shown to associate with c-Met and the integrins, CD82 associates with. We are currently exploring the levels and expression of CD151 and its association with c-Met in the presence and absence of CD82. This we believe will provide additional insight into how CD82 overall regulates c-Met and prevents prostate tumor metastasis.

Joffre, Kevin

October – December FY15

American Association for Teaching and Curriculum 2014 Conference

"Identifying the Characteristics of an Ideal Reading Intervention Program for Teen Mothers"

No Abstract.

Johnson, Tessa

October – December FY15

Psychonomic Society Annual Meeting

"Comparative Decision Making: Age Differences in Stopping Rule Selection"

The purpose of this study is to assess whether adolescents, ages ranging from 8-17, adhere to Stopping Rule Selection Theory (SRS), which hypothesizes that a decision maker is able to use multiple stopping rules for a variety of decision tasks. We compared decision making strategies among children and adults via a computerized, deferred decision making task. The objective was to make a decision to buy or not to buy a product based on the recommendations consulted. The first goal is to investigate how source reliability affects the number of recommendations consulted and the accuracy of the decision. The second goal is to observe how the dynamics of stopping rule selection changes across age groups, and whether the decision making departs from the optimal. Results showed striking differences in the number of reviews consulted and in accuracy with respect to changes in source reliability and subject age.

Khudhur, Basma

October – December FY15

The 2014 American Society for Cell Biology Annual Meeting

"Biological testing of novel telomerase inhibitors"

Normal cells are limited in the number of times they can divide by the caps on the ends of their chromosomes, called telomeres. These caps are supposed to become degraded over time, eventually signaling the cell to die when they become too short. During the summer of 2013, three novel compounds were made via synthesis of cinnamoyl chloride derivatives. These three compounds all contain active sites that are identical to those identified on BIBR 1532, a known telomerase inhibitor, with one key difference in the element attached to the aromatic ring. These three compounds were tested for anticancer properties on metastatic prostate cancer cell lines. Their efficacy will be compared against that of BIBR 1532 to determine if this novel compound would prove to be an adequate cancer treatment. If these compounds prove to be telomerase inhibitors, it would be a breakthrough as to how BIBR 1532 functions, and could potentially lead to a more effective cancer treatment. While the compounds were tested using metastatic prostate cancer cells, these potential treatments have applications in both breast and pancreatic cancers as well.

Mercado-Idziak, Natosha

October – December FY15

Annual Meeting of the Society for Neuroscience

"Embryonic lead exposures cause learning deficits in adult male and female zebrafish"

The zebrafish has become a useful organism for studying the effects of environmental contaminants on the neurobehavioral development of an organism due to its short generation times, high numbers of eggs per female, ease of breeding, and short developmental periods before hatching. The present study investigated the effects on learning due to embryonic exposure to lead (Pb²⁺) in adult male and female zebrafish using avoidance conditioning as the

behavioral paradigm. Adult zebrafish were trained to associate light with shocks in a fish shuttle-box consisting of a water-filled tank separated by a barrier into two equal compartments. A trial began with the onset of light on the side of the fish's location and the manually raised barrier; 12 seconds later repetitive electrical shocks were administered. Fish initially swam through the barrier after receiving several shocks. After repeated trials, fish learned to swim from the lighted end to the dark end before the administration of shocks to avoid the body shock, which is called avoidance response. Two days later, fish were tested for avoidance responses. In Experiment 1, adult male zebrafish that were exposed to 0, 0.1, 1, or 10 μM Pb^{2+} as embryos (2-24 hours post fertilization) were trained and tested for avoidance responses. The results showed that male zebrafish hatched from embryos exposed to no lead learned avoidance responses during training and showed significantly increased avoidance responses during testing. Male zebrafish hatched from embryos exposed to Pb^{2+} showed no significant increases in avoidance responses from training to testing. In Experiment 2, adult female zebrafish that were exposed to an identical exposure regimen as in Experiment 1 were trained and tested for avoidance responses. The results showed that female zebrafish hatched from embryos exposed to no lead learned avoidance responses during training and showed increased avoidance responses during testing, while female zebrafish hatched from embryos exposed to Pb^{2+} showed no significant changes in avoidance responses from training to testing. The pooled results of both experiments showed that embryonic Pb^{2+} exposure produced learning impairments in a concentration-dependent manner. (Supported by NIEHS grant ES04184 and GVSU grant-in-aid)

Musser, Karen

October – December FY15

Geological Society of America (GSA)

"Using textural and EBSD data to characterize strain and kinematic variations within the Chunky Gal Mountain Fault, Southern(Appalachian Blue Ridge province, North Carolina"

In its type exposure, the terrane-bounding Chunky Gal Mountain Fault separates strongly foliated amphibolite from biotite paragneiss. The fault zone includes several NE-trending, steeply SE dipping ~ 1m wide mylonitic shear zones with apparent normal movement suggested

by deflected foliation. Lineation orientations and shear sense from kinematic indicators vary within the zones, including steep lineations with normal kinematics and shallow NE-plunging lineations with either dextral or sinistral movement. Detailed strain and kinematic analysis is critical to understanding this complex fault zone. We focus here on a sample suite of Grt-Bt gneisses within shear zone L for which we have constraints on timing and metamorphic conditions of movement. All shear zone L samples possess a shallow elongation lineation. L6 from the shear zone center is typical of the mylonites and preserves sinistral kinematics. L3 (sinistral) and L4 (dextral) are ultramylonites from the SE and NW margins, respectively. L7 is a protomylonite (dextral), collected several cm NW of the shear zone. Quartz is extensively recrystallized; some larger grains contain subgrains and/or are flattened oblique to foliation. Quartz microstructures are mostly typical of regime 3 dislocation creep or transitional from regime 2 to 3 in lower strain domains. Quartz ribbon width varies from 0.05 mm in ultramylonite up to ~1 mm in lower strain domains. Feldspar porphyroclasts display undulose extinction and subgrain development with local fine recrystallization along some margins and tails. Textural variations appear to reflect differences in strain (e.g. ultramylonite protomylonite) rather than kinematics. Quartz CPO measured in several domains per sample using EBSD display asymmetry consistent with textural kinematic interpretations. Quartz c-axis orientations vary from cross girdle to single girdle patterns with increasing strain. Maxima near Z are consistent with basal and rhomb slip. CPO patterns are consistent with regime 3 dislocation creep. Cross girdle patterns suggest a significant component of pure shear in all but the highest strain domains. Our observations suggest that deformation took place at relatively high temperatures (>5-600oC) and samples with opposite kinematics deformed under similar deformation conditions.

Orr, Samantha

October – December FY15

Midwest Regional Chapter of the American College of Sports Medicine

"COGNITIVE AND MOTOR SKILL PERFORMANCE IS NOT IMPROVED BY NECK COOLING FOLLOWING PASSIVELY-INDUCED HYPERTHERMIA "

COGNITIVE AND MOTOR SKILL PERFORMANCE IS NOT IMPROVED BY NECK COOLING FOLLOWING PASSIVELY-INDUCED HYPERTHERMIA Samantha C. Orr, Mackenzie L. Abeare, Ross A. Sherman. Grand Valley State University, Allendale, Michigan. Hyperthermia causes a number of deleterious effects including decreased exercise performance and mental acuity. However, little research has determined the effectiveness of neck cooling on cognitive and motor skill performance. PURPOSE: To investigate the effect of neck cooling on cognitive and motor skill performance following passively-induced hyperthermia. METHODS: Six healthy people (age 24 ± 7 yrs, height 171 ± 10 cm, body mass 70.8 ± 12.3 kg) volunteered for the study. All participants were immersed in warm water (40°C) until core body temperature (T_{rec}) reached 39°C , at which point they were removed and cooled using either a neck towel (NT) or sat quietly (CON) until T_{rec} reached 38°C . Every 15 min, T_{rec} , simple reaction time, Stroop word colors, time to complete a trail-making task, and time to screw three nuts on three bolts were measured. Nude body mass was also measured before and after each trial. Paired t-tests and repeated measures ANOVA were used to determine differences across time and between groups. RESULTS: There were no significant changes in cognitive or motor skill performance as a result of inducing hyperthermia. Furthermore, there were no significant changes in cognitive and motor skill performance when comparing CON or NT cooling, or across time (see Table 1.). Time to reach T_{rec} of 38°C was not faster with neck cooling (CON 35 ± 13 min; NT 36 ± 12 min), however body mass was found to have significantly ($p < 0.01$) reduced (pre 70.8 ± 12.3 kg, post 70.3 ± 12.1 kg). Table 1. Mean (\pm SD) time to complete simple reaction time, trail-making and nut-and-bolt tasks, and number of correct Stroop word colors during neck towel (NT) and passive (CON) cooling following passively-induced hyperthermia.

Cognitive Task	Cooling	Time (min)	Time (min)	Time (min)	Time (min)	Time (min)	Time (min)	Time (min)	Time (min)
Reaction time (ms)	0	CON	0	NT	15	CON	15	NT	End
Reaction time (ms)									
Stroop word colors (#)									
Trail-making (s)									
Nut-and-bolt (s)									

CONCLUSION: Cognitive and motor skill performance was not negatively affected by passively-induced hyperthermia to 39°C , nor was it improved during recovery with application of a cooling neck towel. Further research needs to establish the role of hyperthermia on more sensitive and challenging cognitive and motor skill tasks, as well as then examining the impact of different cooling strategies on those tasks.

Overway, Casey

October – December FY15

National Women's Studies Association 2014: Feminist Transgressions

"The Portrayal of Gender and Disability in Pharmaceutical Advertisements for Arthritis"

How are disability, health, and gender portrayed in the United States pharmaceutical advertisements? This qualitative study explored how advertisements for arthritis prescription medications support and create gender through messages of health and ability. Arthritis was selected due to the prevalence and debilitating nature of this disorder which disproportionately affects women. Pharmaceutical advertisements were analyzed to explore how societys standards and norms, including hegemonic masculinity and emphasized femininity, are portrayed. Findings of this study reflect that there are more depictions of women as able-bodied and disabled, the healthy and able-bodied appear in nature, and overall the depictions represent gender norms.

Pollock, Francis

October – December FY15

Michigan's Premier Public Health Conference

"Grand Valley State University and Volunteer Solutions, Kenya, Africa- An Interdisciplinary Service Learning Approach."

Grand Valley State University has adopted a service learning immersion program to bring health care students to Kenya, Africa to work in hospitals and health clinics. This international partnership allows an interdisciplinary group of health students the opportunity to experience hands-on health care from a developing countrys prospective. We will describe the best practices for our international partnership development, define how the partnership is a total immersion for students in a global health setting, explain the GVSU/Kenya projects goals, objectives and outcomes and discuss the sustainability of our project. The audience will gain knowledge on the impact of global health experiences for future health care employees (students), a competence of

a sustainable project incorporated in an international health care setting and the knowledge to support the ideas of global health initiative as part of a service learning/health care education at the collegiate level. An assessment of student pre and post travel surveys will be discussed to highlight the impact of the international partnership, immersion and overall global experience from a student perspective. Lessons learned and highlights from the partnership will also be included.

Remtema, Zackery

October – December FY15

2014 Annual Geological Society of America (GSA) Meeting

"MESOSCOPIC ANALYSIS OF BRITTLE DAMAGE ZONES, STE. GENEVIEVE FAULT ZONE, OZARK PLATEAU, MISSOURI"

MESOSCOPIC ANALYSIS OF BRITTLE DAMAGE ZONES, STE. GENEVIEVE FAULT ZONE, OZARK PLATEAU, MISSOURI Zack Remtema, Grand Valley State University, Geology, Allendale, MI 49403 John Weber, Grand Valley State University, Geology, Allendale, MI 49403 The Ste. Genevieve Fault forms the border between the Ozark Plateau, structurally high and sharp on its NE side, and the Illinois Basin. The 200 km long WNW-trending Ste. Genevieve Fault Zone extends from southeastern Missouri, across the Mississippi River into southern Illinois. Net slip across the fault zone is ~7 km. Two main periods of faulting (Middle Devonian, and late Mississippian/early Pennsylvanian time, with minor post-Pennsylvanian movement), have been suggested, but new Earthscope data suggest that small earthquakes may still occur in this zone. This mid-continental fault zone is generally deeply weather and poorly exposed and difficult to study at the sub-macroscopic scale. We study the relative timing and kinematics of a beautifully exposed suite of mesoscopic structures (cataclastic deformation bands, fault cores) in a well-developed, intense brittle damage zone that is sub-parallel and related to the Ste. Genevieve Fault Zone. The brittle structures are developed in the basal Cambrian LaMotte Sandstone at Pickle Creek Recreation Area in the uplifted and exhumed SE Ozark block of the Ste. Genevieve Fault. Our descriptions, and provisional chronology and kinematics of the main structures are as follows: 1) an early set of subhorizontal deformation

bands (kinematics to be determined; possibly related to early layer-parallel shortening) are cut by 2) N60W-striking, NE- and SW-(steeply) dipping, nearly pure dip-slip, normal-sense shear deformation bands and normal faults, and 3) NE-striking, subvertical, dilational deformation bands and joints. We are currently developing and testing two working tectonic models: 1) The Ozarks have gone/are going structurally up and over the Illinois Basin along a giant Laramide-style NE-verging (SW-dipping) basement thrust, whose surface expression is today the steeply dipping Ste. Genevieve Fault. Accordingly, the Ozark Dome is the extended (stretched) fault-propagation fold at surface associated with this deep thrust. 2) The Ozarks form/formed in the uplifted footwall of a NE-dipping normal fault whose surface expression today is the steeply dipping Ste. Genevieve Fault. To test the two models we plan to collect additional outcrop data at new localities and to refine our chronological/kinematic analysis.

Rosenberg, Adam

October – December FY15

Lilly National Conference On Evidenced-Based Teaching and Learning

"A Case Study: How to restructure a teaching website to improve global and digital presence."

This paper is about a team of students and faculty who receive almost a half a million dollars per year grant from Google Grants Pro to advertise their websites. Google also provides the group with detailed analytics which show the effectiveness of the websites. The group in the past restructured one of its other teaching websites in accordance with Google analytics to improve the effectiveness of the website. As a consequence the group decided to do the same for its Data Workplace web site (www.gvsu.edu/workplacedata). This paper is a summary of the changes that were made to: a. the content of the website b. the advertising campaign of the website and c. how these changes improved the analytics.

Ruthven, Marissa

October – December FY15

American Speech-Language-Hearing Association Annual Conference

"The Relation of Dialect Density and Executive Functioning in School Age Speakers of African-American English"

The correlations between dialect density and executive functioning (shifting, working memory, inhibition) in school-age speakers of African-American English were assessed. No significant correlations were found between dialect density and executive functioning. This may suggest that within-language code switching does not present the same cognitive load as between-language code switching.

Rydecki, Krysta

October – December FY15

2014 Society for Judgment and Decision Making's Annual Conference

"Higher Costs Warrant a Variety of Stopping Rules for Decision Making"

The critical step facing every decision maker is when to stop collecting evidence and make a decision. Decision making models usually utilize one stopping rule. We proposed a model for selecting from a set of multiple stopping rules in the same task (stopping rule selection, SRS, theory). We tested the model in an optional decision task in which subjects were asked to buy or reject products based on recommendations. The results revealed that subjects opened more recommendations and used a wider variety of stopping rules for more expensive than for less expensive products without sacrificing the response accuracy.

Scholtens, Kaitlyn

October – December FY15

American Speech Language Hearing Association Convention

"The Relation Between Dialect Density & Executive Functioning in School-Age Speakers of African-American English"

Aspects of executive functioning, such as inhibition and cognitive flexibility, are reportedly facilitated by bilingualism, potentially resulting from the need to suppress/activate one language

based on social context (Bialystok & Viswanathan, 2009). Studies of cognitive processes in bidialectal children are sparse and suggest a cognitive switch cost. Terry, Hendrick, Evangelou, and Smith (2010) found that mismatches between AAE and MAE weakened performance on mathematical reasoning tests, posing a cognitive load on working memory. There remains a need to fill the gap in understanding the cognitive mechanisms influencing code-switching in bidialectal speakers.

Schumacher-Smith, Kristin

October – December FY15

MiWLA Conference 2014

"Developing Graphic Organizers for Your Classroom: The Conversation Continues"

Developing Graphic Organizers For Your Classroom: The Conversation Continues Graphic organizers can help language teachers and learners develop greater awareness of the types of oral tasks speakers are expected to successfully handle. In this session, participants will briefly review the parameters used to evaluate oral proficiency. They will review and categorize several graphic organizers covering a range of proficiency levels and topics. Finally, they will draft sample organizers to display in their own classrooms

Segura, Yarisbel

October – December FY15

Michigan's Premier Public Health Conference

"Grand Valley State University and Volunteer Solutions, Kenya, Africa- An Interdisciplinary Service Learning Approach."

No Abstract.

Shady, Justin

October – December FY15

The 2014 American Society for Cell Biology/IFCB Meeting

"Identifying the c-MET Phosphorylation Site Regulated by CD82 in Prostate Tumor Cells"

CD82 (KAI), a metastasis tumor suppressor protein is under-expressed in prostate as well as several other types of metastatic cancers. It inhibits cancer metastasis, but the mechanism through which regulation happens remains unclear. Various pathways are being explored in this lab, including regulation of c-MET, a growth factor receptor observed to have increased activation in tumor cells. CD82 and c-MET do not co-localize, suggesting that CD82 indirectly downregulates c-MET. To be expressed, c-MET first needs to bind to its ligand, HGF. This growth factor encourages phosphorylation of c-MET, consequently activating it. C-Met has four tyrosine phosphorylation sites that include p-Tyr 1003, p-Tyr 1234/1235, p-Tyr 1349 and p-Tyr 1365. Knowing how each phosphorylation site of c-Met affects downstream signaling event, our lab is focused in identifying which site is regulated by CD82. Another tetraspanin, CD151 that promotes tumor progression and metastasis has been shown to associate with c-Met and the integrins, CD82 associates with. We are currently exploring the levels and expression of CD151 and its association with c-Met in the presence and absence of CD82. This we believe will provide additional insight into how CD82 overall regulates c-Met and prevents prostate tumor metastasis.

Swartz, Marissa

October – December FY15

Lilly Conference On Evidenced-Based Teaching and Learning

"A Case Study: How to Restructure a Teaching Website to Improve Global and Digital Presence."

The paper examines a case study involving students and faculty restructuring a teaching website to increase its overall digital and global presence. With the help of Google through Google Grants Pro, the students and faculty are given the ability to develop the website further, as almost

half a million dollars per year grant is given to the team; this grant is used to enhance the relationship between the website content and detailed analytics that directly relates to the purpose of the website. The paper presents the transformation of a teaching website, increasing not only its digital and global presence, but increasing its overall purpose throughout the world.

Ten Haaf, Mark

October – December FY15

94th Anniversary Meeting of the Classical Association of Mid-West and South (Southern Section)

"Aristotle and the Polis in Menander's *Dyskolos*"

ABSTRACT ARISTOTLE AND THE POLIS IN MENANDER'S DYSKOLOS It has long been argued that Menandrian plays align with Aristotelian classifications of drama (Post 1938; Munteanu 2002), and that Menander's portrayals of ethical problems and their solutions seem to have their origins exclusively in Peripatetic philosophy (Tierney, 1936; Quinn, 2001). I examine Menander's *Dyskolos*, and specifically the nature of the misanthrope Knemon through the lens of Aristotelian doctrines in the *Politics* and the *Nicomachean Ethics* pertaining to social interaction and obligation. Aristotle argues teleologically that humans, since they have the ability to speak and teach and judge, are obliged to use such faculties for the benefit of the other, and that the use of these faculties finds its greatest fulfillment within the social context of the polis. It has been argued that Aristotelian explanations of the psychological and cognitive processes, which govern action and reaction in social situations, also align with the behavior of Menandrian comedic characters (Cinaglia, 2012). The model is consistent with Knemon, the principal character in the *Dyskolos*. In the *Dyskolos*, Knemon seems in no way to act according to Aristotelian principles which cultivate "the good life", choosing instead a life of social withdrawal punctuated by fits of rage hurled against any stranger who dares to draw near. He hates all of humanity, believing all to be incapable of charity, and he neglects his own family, which he has failed to keep together. In the prologue, Menander uses the word ἀνθρώπου (anthrōpou) to describe Knemon, a double meaning: first, Knemon is far from man physically, remote, because he has quarantined his property from all who do not belong to his household; the stronger use of the word, "inhuman" or "savage", fits

the plot of the play and the arc of Knemon's character. I argue that Knemon, while he neglects the naturally human tasks of conversation and social activity, cannot be called fully human. Through the course of the play, however, Knemon's opinion about humanity is altered, and when marriage is arranged for his daughter, he allows his family with Knemon himself to be united to another. In this way, he receives a new status as an active member of the polis, influenced by new family members who seek to improve him. Menander presents the ethical development of Knemon into a functional, political person. The manner in which it is achieved is harmonious with Aristotle's teachings regarding the teleology of human nature, the psychology of social decision making, and the importance of the polis.

SELECT BIBLIOGRAPHY Cameron, R. 'Aristotle's Teleology', *Philosophy Compass* 5/12 (2010) 1096-1106. Cinaglia, V. 'Aristotle and Menander on How People Go Wrong', *The Classical Quarterly* 62, (2012), 553-556 at 553. Fortenbaugh, W. W. 'Menander's Perikeiromene: Misfortune, Vehemence, and Polemon', *Phoenix*, Vol. 28, No. 4 (1974) 430-443. Kenny, A. *Aristotle on the Perfect Life* (Oxford, 1992) 35-36. Konstan, D. *Greek Comedy and Ideology* (Oxford, 1995), 106. Kraut, R. *Aristotle on the Human Good* (Princeton, 1989), 115-116. Pellegrin, P. 'Aristotle's Politics', in C. Shields (ed.), *The Oxford Handbook of Aristotle* (Oxford, 2012), 558-585, at 568. MacCary, W. T. 'Menander's Soldiers: Their Names, Roles, and Masks', *The American Journal of Philology*, Vol. 93, No.2 (Apr., 1972), 279-298. Munteanu, D. 'Types of Anagnorisis: Aristotle and Menander', *Wiener Studien*, 115 (2002) 111-126 Post, L. A. 'Aristotle and Menander', *Transactions and Proceedings of the American Philological Association*, Vol. 69 (1938) 1-42. Prosperi, M. 'The Masks of Menander', *RES: Anthropology and Aesthetics* 26 (1994), 22-31 at 26. Roberts, J. 'Excellences of the Citizen and of the Individual', in G. Anagnostopoulos, *A Companion to Aristotle* (Chichester, 2009), 555-565, at 563. Taylor, C. C. W. 'Politics', in J. Barnes, *The Cambridge Companion to Aristotle* (Cambridge, 1995), 233-258 at 238. Tierney, M. 'Aristotle and Menander', *Proceedings of the Royal Irish Academy, Section C: Archaeology, Celtic Studies, History, Linguistics, Literature*, Vol 43 (1935) 241-254. Quinn, T. S. 'Aristotle, Comedy and Menander', *The Classical Bulletin* 77.1, (2001) 3-18.

Uhl, Katie

October – December FY15

2014 American Society for Cell Biology (ASCB)/IFCB Meeting

"Biological Testing of Novel Telomerase Inhibitors"

Normal cells are limited in the number of times they can divide by the caps on the ends of their chromosomes, called telomeres. These caps are supposed to become degraded over time, eventually signaling the cell to die when they become too short. During the summer of 2013, three novel compounds were made via synthesis of cinnamoyl chloride derivatives. These three compounds all contain active sites that are identical to those identified on BIBR 1532, a known telomerase inhibitor, with one key difference in the element attached to the aromatic ring. These three compounds were tested for anticancer properties on metastatic prostate cancer cell lines. Their efficacy will be compared against that of BIBR 1532 to determine if this novel compound would prove to be an adequate cancer treatment. If these compounds prove to be telomerase inhibitors, it would be a breakthrough as to how BIBR 1532 functions, and could potentially lead to a more effective cancer treatment. While the compounds were tested using metastatic prostate cancer cells, these potential treatments have applications in both breast and pancreatic cancers as well.

Ward, Brittany

October – December FY15

2014 Annual Geological Society of America (GSA) Meeting

"THE CORDELL FORMATION AT SEUL CHOIX POINT, UPPER MICHIGAN:
IMPLICATIONS FOR SILURIAN (LLANDOVERY-WENLOCK)
PALEOENVIRONMENTS"

No Abstract.

Westdorp, Eliot

October – December FY15

Michigan World Language Association Conference 2014

"Developing Graphic Organizers For Your Classroom: The Conversation Continues"

I will be attending the MIWLA Conference (Michigan World Language Association) on October 23, 2014 in Lansing, MI. Our presentation is over oral proficiency in foreign language students and is entitled, "Developing Graphic Organizers For Your Classroom: The Conversation Continues".