**[ACF 2015 January - March Presentations](#_Toc447117187)**

[***Appleyard, Madison 1***](#_Toc447117188)

[***Antvelink, Andrea 1***](#_Toc447117189)

[***Bays, Kevin 2***](#_Toc447117190)

[***Boker, Leslie 2***](#_Toc447117191)

[***Caillaud-Jones, Mallory 3***](#_Toc447117192)

[***Christensen, Janet 4***](#_Toc447117193)

[***Duke, Catherine 4***](#_Toc447117194)

[***Eardley, Dana 5***](#_Toc447117195)

[***Edwards, Molly 5***](#_Toc447117196)

[***Ferguson, Kyle 6***](#_Toc447117197)

[***Gevaart, Lauren 7***](#_Toc447117198)

[***Glass, Mitchell 8***](#_Toc447117199)

[***Greene, Lacey 10***](#_Toc447117200)

[***Hare, Benjamin 10***](#_Toc447117201)

[***Hamilton, Sean 11***](#_Toc447117202)

[***Hoogmoed, Ryan 11***](#_Toc447117203)

[***Jager, Jacob 12***](#_Toc447117204)

[***Johnson, Melissa 13***](#_Toc447117205)

[***Lendman, Megan 13***](#_Toc447117206)

[***Lonsway, Ethan 13***](#_Toc447117207)

[***Mackey, Justin 14***](#_Toc447117208)

[***Magirl, Andrew 15***](#_Toc447117209)

[***McCullough, Caitlin 15***](#_Toc447117210)

[***O'Donnell, Lucas 16***](#_Toc447117211)

[***Rigueiro, Josue 16***](#_Toc447117212)

[***Robeck, Jennifer 17***](#_Toc447117213)

[***Robinson, Cody 17***](#_Toc447117214)

[***Robke, Rhiannon 18***](#_Toc447117215)

[***Roche, Meagan 18***](#_Toc447117216)

[***Ruvina, Kristi 19***](#_Toc447117217)

[***Schires, Samantha 20***](#_Toc447117218)

[***Sobolak, Claire 21***](#_Toc447117219)

[***Spruit, Stephanie 22***](#_Toc447117220)

[***St. Louis, Scott 23***](#_Toc447117221)

[***Talos, Gabrielle 24***](#_Toc447117222)

[***Thelen, Noah 25***](#_Toc447117223)

[***Torkelson, Katie 26***](#_Toc447117224)

***[Weal, Jessica 26](#_Toc447117225)***

**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 womens 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 womens 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 Pajaress 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 Niradical."

This poster is the first in a series that examine seven-dimensional solvable Lie Algebras with a six-dimensional niradical. 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 niradical 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 havent 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 -lactamase OXA-24"

Since the discovery of the penicillin, ²-lactam antibiotics have emerged as the preferred and most widely used antimicrobial agents. However, due to the overuse of ²-lactam antibiotics, bacteria have become resistant to the therapeutics. The principle mechanism by which bacteria acquire resistance is through the expression of ²-lactamase enzymes. Of the four known classes of ²-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 ²-lactam antibiotics. Currently, all clinically used inhibitors fail to effectively inhibit the class D ²-lactamases. The ineffective inhibition occurs because the inhibitors contain the same ²-lactam ring scaffold found in ²-lactam antibiotics. In order to address this serious problem, molecular docking was used to identify novel inhibitors for the class D ²-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 order 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 ²-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 socal 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 foreword 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 clinic 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 preforming a three minute scene with a partner. If advanced, I will move on to the the semi-final round wherein I will be preforming 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 preforming 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, Frances Muslim immigrant population has substantially increased, creating tension between Islam and what France defines as distinctly French. The question of national identity makes Frances 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 Frances 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 Taha1, 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, Ive 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 wasnt 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.