Graduate Student Celebration

April 17, 2015

Hager-Lubbers Exhibition Hall
Charles W. Loosemore Auditorium

Presented by the Office of Graduate Studies
318C DeVos Center
616-331-7105
www.gvsu.edu/gs
gradstudies@gvsu.edu

in collaboration with the
Graduate Student Association (GSA)

Program

5:00 PM: Refreshments and Social Hour (Hager-Lubbers Exhibition Hall)

6:00-7:30 PM: Awards Presentation Ceremony (Loosemore Auditorium)

- Introduction:
Alaina Clarke, GSA President

- Welcome:
Dr. Jeffrey A. Potteiger, Dean of Graduate Studies

- Graduate Dean's Citation Awards Recognition:
Dr. Jeffrey A. Potteiger, Dean of Graduate Studies,
Dr. John R. Stevenson, Associate Dean of Graduate Studies,
and Steven Lipnicki, Assistant Dean of Students

- Graduate Student Association Faculty Awards Recognition:
Alaina Clarke, GSA President,
Colette Cascarilla, GSA Administrative Officer,
and Selase Asamoa-Tutu, GSA Finance Officer

Award recipients, please note: group photos will be taken immediately following the award ceremony.

Welcome!

Dear members and friends of Grand Valley's graduate community,

Tonight we have the great pleasure to honor individuals who have distinguished themselves in graduate education at Grand Valley State University. The Dean's Citation Awards for Academic Excellence recognizes the accomplishments of our students and faculty and celebrates their achievements. First held in 2006, this proud Grand Valley State University tradition originated through the combined efforts of the members of Graduate Council and the Graduate Program Directors. The Office of Graduate Studies and the Graduate Student Association are co-hosts for this evening's activities.

The Dean's Citation Awards recognize excellence in academic performance in several categories. Graduate students are nominated for these awards by staff or faculty members, advisors, graduate program directors, and departmental chair or school directors. The Dean of Graduate Studies reviews the nominees and approves the final selection. Each recipient receives a certificate of recognition and a graduate honors cord, which may be worn at commencement. Additionally, we honor several of our graduate faculty members who have distinguished themselves in mentoring and serving our students at Grand Valley. Their dedication helps to create a rich and vibrant learning environment.

Grand Valley State University is proud of the accomplishments of these graduate students and faculty members. I wish each and every one of our award winners a successful future.

Congratulations to all!

Jeffrey A. Potteiger, Ph.D., FACSM
Dean of Graduate Studies
Grand Valley State University

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GRADUATE DEAN'S CITATIONS FOR ACADEMIC EXCELLENCE
Winter 2015

ACADEMIC EXCELLENCE IN THE DEGREE PROGRAM

Seidman College of Business

- Rachel C. Lenger, Accounting
- AnandaKrishnan Ganapathy Muthusamy, Business Administration

College of Community & Public Service

- Heather N. DeCoster, Health Administration
- Sarah Reamon, Public Administration

College of Education

- Jeffrey A. Keson, Higher Education

Padnos College of Engineering & Computing

- Daniel R. Slaughter, Computer Information Systems
- Christopher J. Theisen, Medical and Bioinformatics

College of Health Professions

- Erica A. O'Neal, Physical Therapy
- Justine R. Koglin, Speech-Language Pathology

College of Liberal Arts & Sciences

- Devin N. Jones, Biology
- Jessica L. Lucas, Biostatistics
- Kendall M. Dubois, Cell and Molecular Biology
- Kelley R. Monterusso, Communications
- Lisa A. Burgess, English

Kirkhof College of Nursing

- Katelyn J. Bailey, Nursing

OUTSTANDING DOCTORAL DISSERTATION

Kirkhof College of Nursing

- Lucy L. Ledesma, Nursing

OUTSTANDING MASTER'S THESIS

Padnos College of Engineering & Computing

- David Qorashi, Computer Information Systems
- Priya Balasubramanian , Engineering

College of Liberal Arts & Sciences

- Lindsey-Ann L. Schulte, Biology
- James R. LaFleur, Cell and Molecular Biology
- Deirdre A. Toeller-Novak, English

OUTSTANDING MASTER'S FINAL PROJECT

College of Community & Public Service

- Kyaw Zin Win, Health Administration

College of Health Professions

- Cailee A. Gallagher, Lyndsay K. Hammond, and Lauren M. Webster , Physical Therapy

College of Liberal Arts & Sciences

- Ryan M. Sheick, Cell and Molecular Biology

OUTSTANDING PUBLICATION

College of Liberal Arts & Sciences

- James R. LaFleur, Cell and Molecular Biology

EXCELLENCE IN SERVICE TO THE COMMUNITY OR PROFESSION

College of Community & Public Service

- Ted J. Alberts, Health Administration

College of Health Professions

- Patrick J. Lawrence, Physical Therapy

Kirkhof College of Nursing

- Julie C. Cooper, Nursing

EXCELLENCE IN LEADERSHIP AND SERVICE TO GVSU

College of Community & Public Service

- Heather N. DeCoster, Health Administration
- Simeon J. Switzer, Public Administration
- Nick S. Bayer, Social Work

College of Education

- V'Lecea R. Hunter, Higher Education

College of Liberal Arts & Sciences

- Katie E. Whittington, Biostatistics
- Lisa A. Burgess, English

PROMOTING DIVERSITY AND INCLUSION AT GVSU

College of Community & Public Service

- Alaina G. Clarke, Public Administration

College of Education

- Kayla A. Jones, Higher Education

College of Health Professions

- Alicia J. Marquis, Physical Therapy

Congratulations to all of the Winter 2015
Graduate Dean's Citation Award Recipients!

GRADUATE STUDENT ASSOCIATION FACULTY AWARDS
Winter 2015

OUTSTANDING FACULTY MENTOR AWARD

College of Education

- Russ Barneveld, Graduate Teaching Certificate Field Coordinator

College of Health Professions

- Susan Cleghorn, Assistant Professor of Occupational Therapy

Congratulations to the Winter 2015
Graduate Student Association Faculty Award Recipients!

GRADUATE DEAN'S CITATION FOR ACADEMIC EXCELLENCE IN THE DEGREE PROGRAM
Winter 2015

Seidman College of Business

- **Rachel C. Lenger, Master of Science in Accounting**

  The Faculty of the School of Accounting is pleased to nominate Rachel for this award. During her time at GVSU she has been a member of the Frederick Meijer Honors College, and Beta Alpha Psi, the honors organization for accounting and finance students. Her performance in the MSA program has been excellent and she has a maintained a near-perfect GPA in her coursework. During her time in the program, Rachel has also completed an internship with Crowe Horwath, working in both the audit and tax areas. She has been offered a position in Crowe Horwath's audit department starting in September 2015.

- **AnandaKrishnan Ganapathy Muthusamy, Master of Business Administration**

  AnandaKrishnan distinguished himself in the classroom through his exceptional preparation for class meetings, relevant and insightful comments and questions in class, and excellent writing skills. Even more impressive, he won a project management case competition as part of a Grand Valley team. Additionally, he was on the winning Grand Valley team for the statewide Mergers and Acquisitions case competition. The faculty noted "it is a pleasure to work with individuals like AnandaKrishnan – students who are clearly engaged and active learners." He possesses strong conceptual and research skills, including intellectual curiosity and a desire to "dig for details."

College of Community & Public Service

- **Heather N. DeCoster, Master of Health Administration**

  Heather has, through enormous dedication and effort in her studies, achieved success in all of her classes by always taking on demanding topics and complex research projects. Her case study on the use of telemedicine for

establishing medical homes in rural areas (for which she was awarded a Presidential Research Grant) is only one of many examples of her successfully challenging herself with real-world issues in her coursework. During her time in the program, Heather successfully completed an internship for Mercy Health St. Mary's Human Resources and is an incoming Executive Fellow at Spectrum Health Systems.

- **Sarah Reamon, Master of Public Administration**

  Sarah is an exceptional student who has a perfect GPA to date. More importantly, she has consistently demonstrated critical thinking, leadership, and collegiality by helping her classmates. Sarah is well deserving of this award. Sarah is currently the Social Media and Communications Coordinator at SowHope, a nonprofit organization focused on the needs of women living in extreme poverty. She is a member of SowHope's Marketing and Public Relations Committee and assisted with the organization's rebranding process.

College of Education

- **Jeffrey A. Keson, Master of Education in Higher Education**

  Jeff continues to impress the faculty in the Higher Education program with his critical thinking and writing skills, his passion for serving students, and his commitment to student services and higher education. In addition to his stellar academic work Jeff holds a graduate assistantship in the GVSU Student Academic Success Center, where his work has focused on first-generation college students. He has also served as an LSS 180 course facilitator and completed an internship at Morehead State University in the Office of Inclusion and Equity. The faculty are "very proud of Jeff's accomplishments and wish to recognize him with this prestigious award."

Padnos College of Engineering & Computing

- **Daniel R. Slaughter, Master of Science in Computer Information Systems**

  The faculty of the School of Computing and Information Systems enthusiastically recommend Daniel for this award. He is a model student, so far achieving a perfect 4.0 GPA in his coursework. He is completing his Master's project, which involves modeling of 3D shapes in a web browser. At

GVSU, Daniel is a Senior Web Developer with the Institutional Marketing office, where he develops and implements web-based applications. He was also recognized by the GVSU Administrative/Professional committee with an Innovation Award in 2014.

- **Christopher J. Theisen, Master of Science in Medical and Bioinformatics**

Christopher has proven himself as an elite student in the Medical and Bioinformatics program. In addition to excelling academically and in his graduate assistantship position, he has excelled in a variety of activities outside the classroom. He has spent an enormous amount of time providing high-quality contributions for research projects, which has resulted in several academic conference presentations and poster publications. He has also served as manager of the technical labs for an introductory graduate course. Christopher has been a great asset to the program.

College of Health Professions

- **Erica A. O'Neal, Doctor of Physical Therapy**

Erica is an outstanding student. She has shown academic excellence in didactic coursework, laboratory coursework, and clinical coursework. During her time in the graduate program, she has served as a graduate assistant for both the College of Health Professions Student Services office and the Physical Therapy Department. Erica is also a Physical Therapist Coordinator for the GVSU Community Outreach Initiative. She is inquisitive and a skilled problem solver. The faculty of the graduate program are certain she will be an outstanding addition to the physical therapy profession.

- **Justine R. Koglin, Master of Science in Speech-Language Pathology**

Justine has excelled across academic and clinical coursework in the highly intensive Speech-Language Pathology graduate program. Her commitment to excellence in everything she does was recognized and commented on by her professors and community preceptors. Justine is humble and "unassuming but brilliant" in her ability to establish rapport with clients, delivering the best treatment session possible. She learns and grows from every opportunity and assignment. The faculty are very proud of Justine, and know that she will do great things for the profession and as a Laker for a Lifetime.

College of Liberal Arts & Sciences

- **Devin N. Jones, Master of Science in Biology**

  Devin has taken on a rigorous course plan in the graduate program, and her willingness to fully engage with the course material is apparent. Along with her classwork, Devin has exhibited academic skills outside of the classroom that surpass the usual expectations for students. While at GVSU, she published one manuscript coming from research from her undergraduate work and currently has a manuscript resulting from her thesis research in review. Devin has also engaged with the broader scientific community through grant writing and presentations at international conferences. She is clearly going on to great things, and will make GVSU proud.

- **Jessica L. Lucas, Master of Science in Biostatistics**

  Jessica has an incredible attention for detail that is exemplified in all of her work. Her written documents are always superb and she is very thorough and thoughtful in all presentations. She has a tireless work ethic that is contagious; other students are motivated by her strong desire to succeed. Jessica has also been an integral part of the Statistical Consulting Center (SCC) for the past two years as a graduate assistant. Following a very successful summer 2014 internship involving predictive modeling and analytics at Meijer, she has moved on to now work there permanently as a Marketing Analytics Analyst after graduation.

- **Kendall M. Dubois, Master of Science in Cell and Molecular Biology**

  The faculty are unanimously nominating Kendall for this award. She has maintained an outstanding 4.0 GPA in a demanding sequence of courses in the Professional Science Master's in Biotechnology program. In addition to outstanding academic performance, she carried out a successful internship at the Spectrum Health Translational Research facility at Cooper's Landing. Kendall's experience in translational research paved the way for her position in a new biotechnology start-up company, where she will also be able to utilize the skills she developed by completing the graduate certificate in Clinical Research Trials Management.

- **Kelley R. Monterusso, Master of Science in Communications**

  Kelley is among the rarest of graduate students who, immediately upon entering the graduate program, developed a formal plan for integrating her coursework into her career aspirations. Although the faculty hope that each student can achieve this level of insight, it is evident that Kelley is a model for careful thought and planning, and bringing a plan to fruition. It is also notable that Kelley displays a level of research excellence rarely equaled, and, thus far, not surpassed by others. She takes on a new research problem methodically, and with the kind of inspiration that usually results in the discovery of new ideas and questions. Clearly, Kelley is richly deserving of this award.

- **Lisa A. Burgess, Master of Arts in English**

  Lisa's academic work continues to be both engaging and original. One of Lisa's particular strengths in her writing is her willingness to invite in a variety of voices and ideas, keeping them organized and productive while she develops her own argument. This is the same skill that makes her a valuable member of a seminar and no doubt makes her a great teacher as well. Overall, Lisa's writing shows a mature, independent thinker able to manage a large research topic, and focus and develop a complex argument with style and elegance. She has consistently proven to be a flexible, talented, hardworking scholar and a gifted writer.

Kirkhof College of Nursing

- **Katelyn J. Bailey, Doctor of Nursing Practice**

  Katelyn has demonstrated outstanding achievement in the doctoral program at GVSU. Her diligence in her work is evident by: the quality contributions she has made to online discussions; her work with a community coalition to facilitate enactment and evaluation of their goal to have a community-wide childhood obesity prevention program; and her developing capacity as a leader. The scholarliness of her work is evident in her grade point average and in the written and verbal presentation of her doctoral project dissertation. Katelyn epitomizes the roles of the doctorally-prepared advance practice nurse – a scholar, an innovator and an advocate for children's health.

GRADUATE DEAN'S CITATIONS FOR OUTSTANDING DOCTORAL DISSERTATION
Winter 2015

Kirkhof College of Nursing

- **Lucy L. Ledesma, Doctor of Nursing Practice**
  - **Dissertation Title:** Implementation of Motivational Interviewing in a Multidisciplinary HIV Clinic in an Academic Medical Setting
  - **Dissertation Committee:** Dr. Patricia Schafter (Chair) - Kirkhof College of Nursing, Dr. Andrea Bostrom - Kirkhof College of Nursing, Dr. Joan Borst - School of Social Work, and Edna Estrella - Mercy Health Special Immunology Services

  Lucy's dissertation, the culmination of her time in the graduate program, is evidence of her outstanding accomplishments. The dissertation is based on a project that involved: engagement with an agency to identify areas for improvement in care practices; to develop a literature review that supports both the need for change and the evidence of potentially effective practices that might be initiated in the clinical site; to posit a theoretical foundation for the work and an implementation model to guide the change process; to facilitate the change process; and, to evaluate its effectiveness.

  Lucy accomplished this at an exceptional level. Her written dissertation and oral presentation captured each of the elements. In particular, the review of the literature was extensive and well-organized. She synthesized the information gained on which to build the implementation. With her use of theoretical frameworks, she created a model specific to the project. Her dissertation demonstrates the qualities of excellence as a scholar, health professional, and leader. Lucy is an example of the excellence that GVSU graduates demonstrate as community and national leaders.

ABSTRACT

Purpose: People living with HIV (PLWH) struggle with medication adherence. Antiretroviral therapy (ART) requires greater than 95% adherence to prevent HIV drug resistance and treatment failure. Motivational interviewing (MI) is an effective counseling method designed to enhance health behavior change. This project determined the effectiveness of a two-day introductory MI training course on participant MI knowledge, perception of MI effectiveness, perception of client behavior change, and likelihood of MI use in a Midwest outpatient HIV clinic.

Participants: Seven clinical and non-clinical members of the multidisciplinary care team completed the two-day MI training course. Approximately 82% of the participants had never used MI previously.

Methods and Materials: This evidence-based practice project used a one-group, pretest-posttest design using the Motivational Interviewing Survey.

Analysis: Data analysis included descriptive statistics, Wilcoxon signed-ranks test for matched pairs, and Kendall's tau rank correlation coefficient.

Results: Forty-one percent of the 17 care team members participated in the MI educational intervention. There was a significant change in the MI Survey score after completion of the training course (Mdn ⊚ = 13.00, $Z = -2.375$, $p = .018$). All seven participants reported that they would use MI in their daily work after attending the MI training.

Impact: These findings suggest that a two-day introductory MI course is effective in improving MI knowledge, perception of MI effectiveness, perception of behavior change, and likelihood of MI use. The findings from the MI Survey and the implementation process contributed sustainability recommendations to use MI to promote ART adherence within this practice setting.

GRADUATE DEAN'S CITATIONS FOR OUTSTANDING MASTER'S THESIS
Winter 2015

Padnos College of Engineering & Computing

- **David Qorashi, Master of Science in Computer Information Systems**
  - **Thesis Title:** Exploring Alternative Control Modalities for Unmanned Aerial Vehicles
  - **Thesis Committee:** Dr. Jonathan Engelsma (Chair) - School of Computing and Information Systems, Dr. Hans Dulimarta - School of Computing and Information Systems, Dr. Jamal Alsabbagh - School of Computing and Information Systems

  David's thesis explores the use of hand gestures to control the flight of a remote controlled drone. Unmanned Aerial Vehicles (UAV's) are becoming widely available and yet are notorious difficult for amateurs to control. David's study is aimed at investigating alternatives to the conventional controls with the goal of increasing the safety of the pilot and bystanders, as well as minimizing potential damage to the equipment.

  David has maintained a near-perfect GPA while working as a full-time graduate assistant in the Mobile Applications and Services Lab. David is among the very best CIS graduate students here at GVSU.

ABSTRACT

Unmanned aerial vehicles (UAVs), commonly known as drones, are defined by the International Civil Aviation Organization (ICAO) as an aircraft without a human pilot on board. They are currently utilized primarily in the defense and security sectors but are moving towards the general market in surprisingly powerful and inexpensive forms. While drones are presently restricted to non-commercial recreational use in the USA, it is expected that they will soon be widely adopted for both commercial and consumer use. Potentially, UAVs can revolutionize various business sectors including private security, agricultural practices, product transport and maybe even aerial advertising. Business Insider foresees that 12% of the expected $98 billion cumulative global spending on aerial drones through the following decade will be for business purposes. At the moment, most drones are controlled by some sort of classic joystick or d-pad model remote controller. While drone manufactures have improved the overall controllability of their products, most drones shipped today are still quite challenging for inexperienced users to pilot. In order to help mitigate the controllability challenges and flatten the learning curve, gesture controls can be utilized to improve piloting UAVs.

The purpose of this study is to develop an improved and more intuitive method of flying UAVs by supporting the use of hand gestures, and other non-traditional control modalities. The goal is to employ and test an end-to-end UAV system that provides an easy-to-use control interface for novice drone users. The expectation is that by implementing gesture-based navigation, the novice user will have an overall enjoyable and safe experience quickly learning how to navigate a drone with ease, and avoid losing or damaging the vehicle while they are on the initial learning curve.

- **Priya Balasubramanian, Master of Science in Engineering**
  - **Thesis Title:** Automated classification of EEG signals using component analysis and support vector machines
  - **Thesis Committee:** Dr. Samhita Rhodes (Chair) - School of Engineering, Dr. Paul Fishback - Department of Mathematics, Dr. Robert Bossemeyer - School of Engineering, and Dr. Kost Elisevich - Spectrum Health Division of Neurosurgery

Priya's thesis represents a milestone in the continuing collaboration between faculty in the School of Engineering and Department of Mathematics at GVSU, with the Division of Neurosurgery at Spectrum Health. Her work is also being prepared for presentation at the October 2015 Annual Meeting of the Biomedical Engineering Society in Tampa, FL.

Priya's thesis continued the faculty's research, focusing on accurate detection of epileptic seizure activity. Currently this work requires trained epileptologists, who painstakingly process hours of electroencephalogram data visually to identify patterns of epilepsy in multielectrode recordings. Using sophisticated and advanced signal processing techniques, Priya designed a machine learning algorithm that can automate the process and separate epileptic from non-epileptic data in minutes. This will streamline the epileptologist's time and potentially reduce the time to surgery since surgeons will be able to identify regions of epileptogenesis earlier.

Priya's superb technical skills, diligence, and methodical approach in problem solving made her an excellent researcher. This fact is truly reflected in her final thesis.

ABSTRACT

Epileptic seizures are characterized by abnormal electrical activity occurring in the brain. EEG records the seizures demonstrating changes in signal morphology. These signal characteristics, however, differ between patients as well as between different seizures in the same patient. Epilepsy is managed with anti-epileptic medications but in some extreme cases surgery might be necessary. Non-invasive surface electrode EEG measurement gives an estimate of the seizure onset but more invasive intra-cranial electrocorticogram (ECoG) are required at times for precise localization of the epileptogenic zone. *Continued on next page.*

The epileptogenic zone can be described as the cortical area targeted for resection to render the patient symptom free. Epileptologists use the "evolution" of aberrant signals for identifying epileptic seizures and the epileptogenic zone is identified by concentrating on the area contributing to the onset of seizure. This process is done by visually analyzing hours of ECoG data. The signal morphology during an epileptic seizure is not very different from abnormal discharges noticed in ECoG data thereby complicating signal analysis for the epileptologists.

This thesis aims to classify the ECoG channel data as epileptic or non-epileptic using an automated machine learning algorithm called support vector machines (SVM). The data will be decomposed into various frequency bands identified by wavelet transform and will span the range of 0-30Hz. Statistical measures will be applied to these frequency bands to identify features that will subsequently be used to train SVM. This thesis will further investigate feature reduction using multivariate analysis methods to train the SVM and compare it to the performance of classification when all the features were used to train SVM.

Results show that channel data classification using trained SVM that did not undergo feature reduction performed better with 98% sensitivity but needed more runtime than the SVM algorithms that was trained using reduced features. For high frequency analysis of frequencies between 60-500Hz, the results show the same sensitivity yet less specificity when compared to the classification using lower frequency range of 0-30Hz.

The results seen in this thesis show that support vector machines classifiers can be trained to classify the data as epileptic or non-epileptic with good accuracy. Even though training the classifiers took almost two hours, it was still noticeably less than other machine learning algorithms such as artificial neural networks. The accuracy of this algorithm can be improved with changes to the data segment length, size of training matrix, accuracy of epileptic and non-epileptic data, and amount of data used for training.

College of Liberal Arts & Sciences

- **Lindsey-Ann L. Schulte, Master of Science in Biology**
  - **Thesis Title:** Evolution of Invasive Species in Response
  - to Management: Potential for Herbicide Resistance in Watermilfoil
  - **Thesis Committee:** Dr. James McNair (Chair) - Annis Water Resources Institute/Biology Department, Dr. Carl Ruetz - Annis Water Resources Institute/Biology Department, Dr. Tim Evans - Biology Department, and Dr. Ryan Thum - Montana State University

Lindsey completed her research at the Annis Water Resources Institute and successfully defended on April 3, 2015. Her research is definitely of publishable quality, and two manuscripts will be submitted to in peer-reviewed journals in the near future.

Lindsey's research deals with a fundamental issue that is important in the management of invasive aquatic plants in inland lakes– rapid contemporary evolution of herbicide resistance. Though well known in agricultural systems, the problem of rapidly evolved herbicide resistance has never been documented in managed lakes and its possibility has been discounted by most managers. More broadly, the issue of rapid contemporary evolution is of great current interest in the fields of evolution and population genetics, so the audience for Lindsey's research includes lake managers as well as basic researchers. All of her research is based on well-designed experiments and rigorous statistical analysis, and so is very solid.

ABSTRACT

Herbicides are commonly used to control invasive plants. But while agricultural weed scientists have focused intensively on herbicide resistance, little is known about its importance in non-agricultural settings. Hybrid Eurasian watermilfoil (*Myriophyllum spicatum* x *M. sibiricum*) is an invasive aquatic plant that is frequently managed with herbicides across the northern tier of the United States. In this thesis, we consider the potential of natural populations of this taxon for evolving resistance to 2,4-dichlorophenoxyacetic acid (2,4-D), the most commonly used systemic herbicide for controlling hybrid Eurasian watermilfoil. *Continued on next page.*

According to well-established theory from the field of quantitative genetics, evolutionary change in a trait between parents and offspring as a result of natural or artificial selection requires both genetically- based variation of the trait among parents (heritable variation) and differential survival and/or reproduction among parents with different values of the trait (selection differential). Using a laboratory herbicide assay, we tested for differences in vegetative growth and its response to 2,4-D exposure among distinct genotypes collected from natural populations. We found heritable variation in growth and in its response to 2,4-D exposure, indicating that heritable variation required for 2,4-D resistance evolution is present in natural populations of hybrid Eurasian watermilfoil. We also considered whether herbicide application in a natural lake creates a selection differential, the second component necessary for evolution or herbicide resistance. Using a point-intercept survey, we collected plants before and after the lake was treated with herbicides. We then conducted a laboratory 2,4-D assay on the watermilfoil collected during the two time periods. We found increased growth rates and reduced sensitivity to 2,4-D among plants collected post-treatment compared to the pre-treatment plants (all from the parental generation), indicating that herbicide exposure creates a selection differential among plants with different growth rates and 2,4-D sensitivities.

Taken together, our results indicate that the components necessary for 2,4-D resistance evolution (i.e. heritable variation and a selection differential) are present in natural populations subject to management. Due to time limitations, the additional step of demonstrating that an evolutionary response actually occurs could not be taken in this study but would be an appropriate topic for a future Master's thesis.

- **James R. LaFleur, Master of Science in Cell and Molecular Biology**
  - **Thesis Title:** Computational Modeling of β5-β6 Carbapenemase Loop in Wild Type and Selected Mutants of OXA-24 Class D β-Lactamase
  - **Thesis Committee:** Dr. Agnieszka Szarecka (Chair) - Department of Cell and Molecular Biology, Dr. Christopher Lawrence - Department of Chemistry, and Dr. David Leonard - Department of Chemistry

James' thesis research represents a significant advance in our understanding of the molecular and structural mechanisms behind how bacterial enzymes are quickly evolving in response to the selection pressure of antibiotics.

His thesis work represents a significant part of a publication by GVSU faculty, including his research mentor, Dr. Agnieszka Szarecka, and faculty from the Department of Chemistry. The manuscript has been accepted for publication.

While working on his thesis, James has also completed a successful graduate assistantship, including lab supervision and research assistance. He is also a Nurse Technician for Spectrum Health Butterworth Hospital.

James is also the recipient of the Dean's Citation Award for Excellence for Outstanding Publication from the Department of Cell and Molecular Biology.

ABSTRACT

Beta-lactamases are bacterial enzymes that mediate one of the major antibiotic resistance mechanisms. Class D (OXA) beta-lactamases have been evolving rapidly over the last decade and are characterized by a remarkable diversity of sequence and antibiotic profiles. OXA-24 is of particular importance among class D enzymes as it is able to hydrolyze carbapenems, the newest and most important family of beta-lactam antibiotics that are used to treat complicated infections caused by resistant strains. One of the OXA-24 variants, a single amino-acid Pro→Ser mutant, is also able to hydrolyze third generation cephalosporins - in addition to carbapanems. In this study we employed Molecular Dynamics simulations of OXA-24 wild type and P227S mutant to elucidate the mechanism of this remarkable expansion of catalytic profile observed in the mutant. Our data show that the mutation affects significantly the enzyme's dynamics - both local and global. The overall flexibility of the loop harboring the mutation is reduced and the new hydrogen bond center impacts the entire hydrogen bond network in this region. We also show a change in the loop conformational ensemble: although the flexibility of the loop is reduced, the new conformational states of the affected loop facilitate cephalosporin binding. These results allow us to better understand the dynamics-based mechanisms of evolution of function in class D beta-lactamases.

❖ **Deirdre A. Toeller-Novak, Master of Arts in English**

- **Thesis Title:** The Depiction of the Holocaust within the Theme of Escape in Michael Chabon's *The Amazing Adventures of Kavalier & Clay*
- **Thesis Committee:** Dr. Rob Franciosi (Chair) - Department of English, Dr. Rachel Anderson - Department of English, and Dr. Martin Shichtman - Eastern Michigan University

Deirdre's thesis is a wide-ranging, insightful, and original work. Michael Chabon's *The Amazing Adventures of Kavalier and Clay* has drawn considerable critical attention, yet no one has offered the kind of sustained treatment of the literary-cultural issue which Deirdre establishes as central to the novel – how to depict the Holocaust "in a work that is not ostensibly about the Holocaust, but one which never escapes it."

To write this thesis she not only had to master a 600-page winner of the Pulitzer Prize, but to extend her knowledge far beyond its confines. Whether addressing the Golden Age of comic books, the fate of Jews during the Hitler years, American responses to that fate, or the culture of New York City during the 1940s, Deirdre always keeps Chabon's marvelous book in the forefront and always offers insights that are both fresh and perceptive. She concludes that *The Amazing Adventures of Kavalier and Clay* "stimulates a unique and valuable understanding of the Holocaust's place in post-World War II America." Her thesis presents an equally valuable understanding of that novel.

ABSTRACT

Escape sounds like a ram's horn throughout Michael Chabon's The Amazing Adventures of Kavalier and Clay, looming large in the lives of his mostly Jewish characters. Only one, Josef Kavalier, is intimately tied to and escapes the Holocaust which destroys his entire family. The horrors of the Holocaust, however, cast a shadow that hovers over nearly every chapter of Chabon's 636-page novel. For most of the novel's other characters, intent on plotting their own escapes, the events of the Holocaust remain 4,000 miles away. Americans, Jew and gentile, politically astute and clueless, laborer and capitalist, prefer to maintain a safe distance in mind and in fact. While the Jews of Europe struggle to escape from the ghettos, boxcars, and death in the camps, the Americans of Kavalier & Clay take refuge in glamourous New York City with its big bands, surrealist art and Golden Age of comic books. *Continued on next page.*

ABSTRACT

Critical opinion about how the Holocaust should be portrayed and to what end, varies widely. The work of Jewish-American fiction authors, such as Michael Chabon, who were not alive when Allied forces liberated the camps, has generated new and thoughtful avenues of criticism. "Will this lead to a trivialization of Holocaust memory," Christoph Ribbat asks, "Or will these popular genres open the discourse of memory by making it more democratic and more accessible?" (206).

At the heart of scholarly work surrounding Chabon's Pulitzer Prize winning novel are questions about his depiction of the Holocaust in a work that is not ostensibly about the Holocaust, but one which never escapes it. In this thesis, I explore Chabon's critique of America's response to the plight of Europe's Jews through the exploits of the Escapist, a golem-like comic book character designed to kill Hitler and defeat the Nazis. I examine his purpose in framing his novel within the Golden Age of the comic book industry and the avant-garde cultural life of New York City while the Nazis created a swath of deadly destruction in their march across Europe. Central to my thesis is the theme of escape in the lives of the major characters as well as its role as an established policy in America with regard to the war in Europe.

This thesis expands the critical conversation about Chabon's The Amazing Adventures of Kavalier & Clay, most particularly within the theme of escape, which has not been widely explored. I argue that Kavalier & Clay makes an important contribution to Holocaust literature in its portrayal of America's attempt to escape from an early and effective response to Hitler's attempt to annihilate the entire Jewish population. I argue that Kavalier & Clay is a novel that constitutes a thoughtful tribute to Holocaust victims through the frames of a comic book and a hero called the Escapist, and it is a call to Americans to consider their responsibility in the face of today's ongoing worldwide atrocities and civil injustices. Readers of The Amazing Adventures of Kavalier and Clay are encouraged to look more deeply into the Holocaust for signposts and lessons as America continues to face questions of moral and ethical responsibility for its promises of liberty and justice for all. Through his novel, Chabon stimulates a unique and valuable understanding of the Holocaust's place in post-World War II America.

GRADUATE DEAN'S CITATION FOR OUTSTANDING MASTER'S FINAL PROJECT
Winter 2015

College of Community & Public Service

- **Kyaw Zin Win, Master of Health Administration**
  - **Project Title:** Barriers to Healthcare for Myanmar Refugees in Grand Rapids, MI
  - **Project Advisor:** Dr. Lara Jaskiewicz - School of Public, Nonprofit and Health Administration

  Kyaw took the initiative to job shadow health care clinicians at Spectrum Health, where he learned about a local refugee community from his country of Myanmar. The refugees faced some barriers to accessing care, so he presented to the primary care residents on the challenges they may face in providing care to Myanmar refugees. Then, he decided to conduct a research project to identify specific challenges that population faces in the Grand Rapids area.

  Kyaw identified and built relationships with the pastors of churches serving the Myanmar refugee population, obtaining their support and permission to conduct his research survey at their churches. Kyaw was awarded a Presidential Research Grant to cover the cost of translating his survey into both Burmese and one of the ethnic group languages. Ultimately he successfully collected surveys from 144 refugees, a population that is suspicious of authority and consists of multiple ethnic (and language) groups.

  Kyaw will be presenting his research at the GRMEP Research Day in April 2015, and has submitted an abstract to the American Public Health Association's 2015 meeting.

College of Health Professions

The Department of Physical Therapy has selected three recipients of this semester's Outstanding Final Project Award as part of a group project.

- **Cailee A. Gallagher, Lyndsay K. Hammond, and Lauren M. Webster, Doctor of Physical Therapy**
  - **Project Title:** Effects of Power Mobility Training in Young Children with Multiple, Severe Impairments: A Case Series
  - **Project Advisor:** Dr. Lisa Kenyon - Department of Physical Therapy

- **Cailee A. Gallagher, Doctor of Physical Therapy**

  Cailee graduated with distinction from the University of Michigan with a Bachelor of Science in Movement Science. Her clinical experiences in the PT program at GVSU include Borgess Medical Center, St. Joseph Mercy Health System, and Physiotherapy Associates. She also completed a graduate assistantship with the Department of Physical Therapy and served as the Race Director for the 18th Annual Wheel Run Together 5K race for runners and hand cyclists.

- **Lyndsay K. Hammond, Doctor of Physical Therapy**

  Lyndsay entered the PT program at GVSU after completing her undergraduate degree in Exercise Science. She completed clinical experiences at Bronson Lifestyle and Improvement Research Center, Schwab Rehabilitation Hospital, and Spectrum Blodgett Hospital. Lyndsay has volunteered in Mercy Health Saint Mary's Parkinson's disease exercise class and GVSU's Parkinson's PowerUP exercise class.

- **Lauren M. Webster, Doctor of Physical Therapy**

  Lauren completed a Bachelor of Science in Health Sciences at Oakland University prior to her admission to the PT program at GVSU. She completed clinical experiences at Beaumont Health Center, St. John Providence Medical Center, and Pennock Health Services. She is an Executive Board Member of the Physical Therapy program's graduate student group and volunteers at the GVSU PT Pro-Bono Clinic.

Cailee, Lyndsay, and Lauren have been involved in the Grand Valley Power Mobility Project since late Fall 2014, and have provided power mobility training to a variety of children who have multiple, severe impairments. Their work has largely focused on younger children, ages 11 months to 4 years. The students' final project specifically focused on a case series detailing the use of an alternative power mobility device to allow young children with severe, multiple disabilities to participate in power mobility training.

Three children with cerebral palsy (ages 1 year, 5 months to 3 years, 5 months) participated in the case series. Intervention consisted of 12 weeks of power mobility training conducted in an engaging environment that was individualized to focus on the specific power mobility goals of each participant. All participants demonstrated improvements on various outcome measures at the completion of the intervention period. Cailee, Lyndsay, and Lauren were all strong participants in implementing, interpreting, and writing up this final project.

College of Liberal Arts & Sciences

- **Ryan M. Sheick, Master of Science in Cell and Molecular Biology**
  - **Project Title:** Characterizing Microbial Communities Associated with 2,4-D Herbicide Resistance in Invasive Watermilfoil
  - **Project Advisor:** Dr. Ryan Thum - Montana State University

Ryan is described as "a talented student who learned new techniques quickly, was able to analyze data and think critically and who helped a lot with other laboratory activities that benefited all other lab members."

Eurasian watermilfoil is an aquatic plant species invasive to North American lakes and estuaries which has detrimental effects to local ecosystems, recreational activities, and lakeside property values. Although it has historically been controlled by the herbicide 2,4-D, some populations of 2,4-D resistant strains have appeared recently.

As part of the requirement for his Professional Science Master's degree in Biotechnology, Ryan carried out an internship at the Annis Water Resources Institute in the laboratory of Dr. Thum. Part of Ryan's work was to establish a rapid method to identify 2,4-D resistant strains of Eurasian milfoil. The

results of this study have the potential to guide future work in the area of herbicide resistance mechanisms and could influence Eurasian watermilfoil management strategies.

GRADUATE DEAN'S CITATION FOR OUTSTANDING PUBLICATION
Winter 2015

College of Liberal Arts & Sciences

- **James R. LaFleur, Master of Science in Cell and Molecular Biology**
  - **Publication Title:** Structural Basis of Activity against Aztreonam and Extended Spectrum Cephalosporins for Two Carbapenem-Hydrolyzing Class D β-Lactamases from Acinetobacter baumannii
  - **Research Advisor:** Dr. Agnieszka Szarecka - Department of Cell and Molecular Biology

  As part of his thesis research, James submitted a manuscript for publication, which was accepted and will appear this year in the prestigious journal *Biochemistry.*

  He also attended the 33rd Midwest Enzyme Chemistry Conference and participated in the poster presentation session. James also had an abstract published and co-presented a poster at the 27th Annual Symposium of The Protein Society.

  Publication Authors:
  Joshua M. Mitchell ‡, Jozlyn R. Clasman ‡, Cynthia M. June ‡, Kip-Chumba J. Kaitany ‡, James R. LaFleur §, Magdalena A. Taracila ‖, Neil V. Klinger ‡, Robert A. Bonomo ‖, Troy Wymore ⊥,Agnieszka Szarecka §, Rachel A. Powers ‡, and David A. Leonard *‡

  ‡Department of Chemistry and §Department of Cell and Molecular Biology, Grand Valley State University, Allendale, Michigan 49401, United States

  ‖ Departments of Medicine, Pharmacology, Biochemistry, and Molecular Biology and Microbiology, Case Western Reserve University and Research Service, and Louis Stokes Cleveland Department of Veterans Affairs Medical Center, Cleveland, Ohio 44106, United States

  ⊥ UT/ORNL Center for Molecular Biophysics, Biosciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831, United States

ABSTRACT

The carbapenem-hydrolyzing class D β-lactamases OXA-23 and OXA-24/40 have emerged worldwide as causative agents for β-lactam antibiotic resistance in Acinetobacter species. Many variants of these enzymes have appeared clinically, including OXA-160 and OXA-225, which both contain a P → S substitution at homologous positions in the OXA-24/40 and OXA-23 backgrounds, respectively. We purified OXA-160 and OXA-225 and used steady-state kinetic analysis to compare the substrate profiles of these variants to their parental enzymes, OXA-24/40 and OXA-23. OXA-160 and OXA-225 possess greatly enhanced hydrolytic activities against aztreonam, ceftazidime, cefotaxime, and ceftriaxone when compared to OXA-24/40 and OXA-23. These enhanced activities are the result of much lower Km values, suggesting that the P → S substitution enhances the binding affinity of these drugs. We have determined the structures of the acylated forms of OXA-160 (with ceftazidime and aztreonam) and OXA-225 (ceftazidime). These structures show that the R1 oxyimino side-chain of these drugs occupies a space near the β5-β6 loop and the omega loop of the enzymes. The P → S substitution found in OXA-160 and OXA-225 results in a deviation of the β5-β6 loop, relieving the steric clash with the R1 side-chain carboxypropyl group of aztreonam and ceftazidime. These results reveal worrying trends in the enhancement of substrate spectrum of class D β-lactamases but may also provide a map for β-lactam improvement.

GRADUATE DEAN'S CITATION FOR EXCELLENCE IN SERVICE TO THE COMMUNITY OR PROFESSION
Winter 2015

College of Community & Public Service

- **Ted J. Alberts, Master of Health Administration**

  Ted started his professional career with a graduate degree in School Counseling and teaching in the public school setting. Changing careers partway through life, Ted dedicated himself to learning as much about health administration as he could through volunteer work, internships and employment. His dedication and success in his graduate education, as well as both his internship and volunteer work, have been an inspiration to his graduate student colleagues– both those in-career and those pre-career. The School of Public, Nonprofit, and Health Administration enthusiastically nominates Ted for this award based on his passion for the profession and the communities he serves.

College of Health Professions

- **Patrick J. Lawrence, Doctor of Physical Therapy**

  Patrick has demonstrated extraordinary service to the community and profession while completing his studies at GVSU. Patrick has a passion for service and has dedicated his skills and time to numerous activities, including: SRC Student Conclave Co-programming Chair; MPTA Student Relations Committee member; Family Health Center SPT Volunteer; Pro-Bono Personal Aide in Client Maintenance Program; SHAPE Camp volunteer; 2014 Wheel Run Together 5K Logistics Co-Director; Almont Life-athon Run Founder & Director; and Peer Minister for Catholic Campus Ministries at GVSU. He has made significant contributions through his service, and his contributions have had a positive impact on the community and his chosen profession.

Kirkhof College of Nursing

- **Julie C. Cooper, Doctor of Nursing Practice**

  Julie's dissertation work, titled "The Development of an Evidence-Based Ebola Virus Disease Preparedness Plan for a College Health Center," has provided significant direction to her clinical practice site relative to the preparedness and directed response to Ebola Virus detection. Julie's work throughout her DNP program has been disciplined and self-directed. Her work at her clinical site has served as an exemplar of innovation and the impact and potential for DNP practice on community health. Both GVSU and the Kirkhof College of Nursing can be proud of Julie and her accomplishments.

GRADUATE DEAN'S CITATION FOR EXCELLENCE IN LEADERSHIP & SERVICE TO GVSU
Winter 2015

College of Community & Public Service

- **Heather N. DeCoster, Master of Heather Administration**

  Despite the coursework demands in the program, Heather has also served as the President of the Healthcare Professionals Graduate Student Alliance (HPGSA). During her year in this leadership position she has: further developed its membership; secured national and regional speakers for HPGSA events; coordinated graduate student members' attendance at the annual American College of Healthcare Executives; and developed succession planning structure, ensuring the sustainability of HPGSA. She is also a student board member of the Great Lakes American College of Healthcare Executives and a member of the American College of Healthcare Executives.

  Heather is also the recipient of the Graduate Dean's Citation Award for Excellence in the Degree Program from the School of Public, Nonprofit, and Health Administration.

- **Simeon J. Switzer, Master of Public Administration**

  Simeon came to GVSU after serving in the Michigan Army National Guard. He successfully completed a graduate assistantanship with the Assistant Dean of Student Affairs. In this role, Switzer quickly demonstrated his passion for serving veterans and a core set of competencies that allowed him to excel in this role. He was highly-motivated, analytical, a strong researcher, highly effective communicator (written and verbal), and a great ambassador to student veterans and the broader university community. Simeon also served as an intern at Kent County Veteran Affairs and was the campaign manager for "Citizens Supporting Kent County Veterans," a veteran-dedicated millage proposal that was passed by an overwhelming margin. He recently accepted a position with the Social Security Administration in Kalamazoo.

- **Nick S. Bayer, Master of Social Work**

  Nick is the epitome of the active graduate student and contributor. His leadership has not only impacted the students, faculty, staff, alumni of the School of Social Work, but also that of GVSU and the West Michigan community. Nick was nominated and elected to the position of Phi Alpha Honor Society president, where he is very active organizing events and ceremonies as well as dealing with the daily operations of this organization. He also coordinated a panel discussion about being male in the field of social work titled, "Men at (Social) Work;" this well attended event was open to students, faculty, and community members. Nick is a model of determination, hard work, leadership and excellence that all students can emulate.

College of Education

- **V'Lecea R. Hunter, Master of Education in Higher Education**

  V'Lecea currently holds a graduate assistantship with the Oliver Wilson Freshman Academy program at GVSU, where she provides leadership to conditionally admitted students and assesses their academic and professional needs. She is passionate in her work with this important population of students and serves the university through these endeavors. The many students she mentors would suggest that she has played a significant role in their success and retention at the university. Her work at GVSU stretches across several units on campus, and many of her peers and advisees would acknowledge her as a leader and servant to the institution. In addition, V'Lecea serves as advisor to two campus student organizations and has given four local and state presentations during her time in the program.

College of Liberal Arts & Sciences

- **Katie E. Whittington, Master of Science in Biostatistics**

  Katie has completed graduate assistantship work for both the Statistical Consulting Center (2013-14) and the Statistics Department, and for the Professional Science Masters programs (2014-15). Simultaneously, she also completed successful internships as a programmer/analyst at Ottawa County

Public Health in Holland and at MPI Research in Mattawan. In these roles, Katie demonstrated leadership immediately in the work she was assigned. Her supervisors describe her as "instrumental," "not afraid to take a lead role," and "a pleasure to work with." Katie has also stayed active in the Math/Stats Club, the GVSU Running Club, and the Mu Sigma Rho Statistics Honors Society.

- **Lisa A. Burgess, Master of Arts in English**

Lisa was the 2014-15 graduate assistant for communications in the English M.A. program. She has served all year as a leader and an inspiration to other students in the program. Because the program was itself under new leadership this year, there was a very steep learning curve for Lisa in undertaking to establish and continue strong communication with its students and other audiences. As a leader in the classroom and a big contribution to building community among students, Lisa was impressive both in her coursework and in her independent thesis project. Lisa, collaborating with other graduate students, led the M.A. program into the future with funded travel and research, as well as with a newly revised and much improved website.

Lisa is also the recipient of the Graduate Dean's Citation Award for Excellence in the Degree Program from the Department of English.

GRADUATE DEAN'S CITATION FOR PROMOTING DIVERSITY AND INCLUSION AT GVSU
Winter 2015

College of Community & Public Service

- **Alaina G. Clarke, Master of Public Administration**

Alaina is one of two graduate assistants at the Center for Entrepreneurship and Innovation. Through CEI, she has worked with diverse audiences and researches the impact of artists as entrepreneurs, develops curriculum, assists students in the ideation stages of their product or business idea, and engages in program development throughout the university and local community. During her graduate program in Public Administration, she has focused on curricular development of entrepreneurship and the creative community, and is working to bridge the gap between business and art. She served as Graduate Student Association president in 2014-15. In that role, she advocated for the inclusion of graduate students on university committees, secured more funds for graduate students to present at conferences, and co-organized graduate student success workshops to ensure that graduate students have a positive graduate experience.

College of Education

- **Kayla A. Jones, Master of Education in Higher Education**

Kayla currently holds a graduate assistantship in the Office of Multicultural Affairs, where she assists with the implementation of pre-college seminars for over 300 students, advising a minimum of 20 individual students each week. Kayla's two practicum experiences were conducted with the Black Males Scholars Initiative and the Sophomore Academy which fosters leadership and academic success for sophomore level students. Kayla also chaired the BBQGVSU (Being Black/Being Queer at GVSU) program committee, was a member of the "Making Sense of Michael Brown" program, and serves as a mentor in the NIARA program. Kayla has also been active in with the GVSU chapter of the NAACP and recently gave a keynote address for the Saginaw chapter of the NAACP. Clearly, Kayla's academic and personal involvement has focused on issues of diversity, inclusion and equity. Kayla has impressed

her faculty members and her peers with her academic and interpersonal skills, but more importantly her advocacy on campus for students, diversity and social justice issues.

College of Health Professions

- **Alicia J. Marquis, Doctor of Physical Therapy**

  Alicia has been a Pro-Bono Clinic Coordinator for the Physical Therapy Program. In this position she has treated, and organized students and physical therapists to treat underprivileged individuals in the Grand Rapids area. For over two years, Alicia has also provided an in-home, pro-bono maintenance exercise program for a young adult with severe brain injury. This client is cared for by his family who immigrated from Eritria (East Africa). Alicia has consistently demonstrated cultural competence in working with this client and his family. She also worked very well with the elderly in the PT Parkinson's disease research study. With the older age group, she demonstrated above-entry level skills in her clinical hands-on and communications skills with this age group. She has also participated in Partners for Rural Health in the Dominican Republic, providing health care to underserved individuals in rural areas of the Dominican Republic. Alicia clearly values and promotes diversity and is able to effectively integrate this value into her interpersonal relationship skills and building rapport with patients and families.

GRADUATE STUDENT ASSOCIATION
OUTSTANDING FACULTY MENTOR AWARD
Winter 2015

- **Russ Barneveld, Graduate Teaching Certificate Field Coordinator**
  Nominated by: Jacob Deubner, Education-Instruction and Curriculum and Lauren Nick, Education-Instruction and Curriculum

  Jacob writes: "Professor Barneveld has been incredibly encouraging to all of us in his cohort with thoughtful and helpful critiques of lessons he's observed, while also providing us with quality conversation topics for each week in our online sessions. He also is writing each one of us a recommendation letter to use as we move forward in our careers. Everything he has done for us this year as a mentor has been done solely to help us become better teachers. He knows that the best way for us to do this is to be in the classroom. I really appreciated having Professor Barneveld as my cohort leader. The Graduate Teaching Certificate (GTC) program is very strenuous, but because I had him as my mentor, I know I was able to be successful and develop in my field better than if I had not had him."

  Lauren writes: "Professor Barneveld has been a fantastic field coordinator and teacher over the course of my GTC internship. Over the course of this intensive program, Professor Barneveld has been supportive, understanding, and passionate about helping me become a better teacher. Professor Barneveld is in constant contact with the students he is responsible for, and he helps us manage a chaotic and overwhelming year.

  He is clearly very passionate about his work, and he never misses an opportunity to encourage and inspire me to become a better teacher. There have been times where the GTC program has seemed confusing and overwhelming, but I can always count on Professor Barneveld to help me succeed and become the best teacher I can be."

- **Susan Cleghorn, Assistant Professor of Occupational Therapy**
  Nominated by: Melissa Klenk, Occupational Therapy

  Melissa writes: "Professor Cleghorn is a true advocate for the occupational therapy profession, as well as her students. She has led multiple service-learning experiences. One experience included planning and leading a tour of Art Prize for over 70 older adults in Grand Haven. She also challenged her students' clinical skills by having them create a variety of outdoor group activities for kids who belong to the group 'No More Sidelines.' The students were required to consider the physical, cognitive, and environmental components of each activity in order for it to be appropriate for a variety of ages and abilities.

  Not only has Susan contributed to her students' learning in the community, she also enables her students to learn in the classroom, through a variety of instructional methods. And she is more than willing to share her own personal experiences to ease students' nerves when they are approaching clinicals. Academically, Susan has held a role as research advisor, and attended last year's AOTA conference with several students. Overall, Susan contributes a great deal to the occupational therapy department as a whole, and truly exemplifies a mentor for her students, assisting them in gaining knowledge and skills to be exceptional therapists."

GRADUATE STUDENT
PRESIDENTIAL RESEARCH GRANT RECIPIENTS
Spring/Summer 2014

Brittain, Rebecca. College of Liberal Arts and Sciences, Biology.
Title: *Self-Medicative Behavior in Rhesus Macaques: The Relationship Between Geophagy and Intestinal Parasites*

Buzzard, Melissa. College of Liberal Arts and Sciences, Biology
Title: *An Examination of Ruffed Grouse Drumming Use In Response to Management Practices in the Northeastern Lower Peninsula of Michigan*

Cannan, Melissa. College of Liberal Arts and Sciences, Biology.
Title: *American Marten Denning Behavior in Michigan*

Howard, Christopher. College of Liberal Arts and Sciences, Cell and Molecular Biology.
Title: *Investigation into the Functions and Interactions of Candida albicans Apr1p Under Conditions of Varying Oxygen Availability*

Jones, Devin. College of Liberal Arts and Sciences, Biology.
Title: *Species delimitation of Western North American Myotis assessed through Next Generation Sequencing*

Kuzniar, Zachary. College of Liberal Arts and Sciences, Biology.
Title: *Adult Rainbow Trout Habitat Selection in the Henry's Fork of the Snake River, Idaho*

Rossi, Michael. College of Liberal Arts and Sciences, Biology
Title: *Noninvasive approach to assessing the American marten population in the Northwest Lower Peninsula of Michigan*

Schulte, Lindsey-Ann. College of Liberal Arts and Sciences, Biology.
Title: Genetic *Variation for 2, 4-D sensibility in watermilfoil*

SKUTNIK, John. College of Liberal Arts and Sciences, Biology.
Title: *Quantifying the effect of climate change on the upper mesophotic Scleractian coral Montastraea cavernosa*

Snyder, Heather. College of Liberal Arts and Sciences, Biology.
Title: *Quantification of Microcystin-LR among Fish Species in an Oligotrophic Lake: A Proposed Study in Little Traverse Lake, MI*

Stamann, Sarah. College of Liberal Arts and Sciences, Biology.
Title: *Toxin Production and Population Dynamics of Gloeotrickia echinulata with Considerations of Global Climate Change*

GRADUATE STUDENT PRESIDENTIAL RESEARCH GRANT RECIPIENTS Fall 2014 and Winter 2015

DeCoster, Heather. College of Community and Public Service, Health Administration.
Title: *Telemedicine and the Patient Centered Medical Home: Best Practices for Creating and Sustaining a Telemedicine Program*

Kroodsma, Derrick. College of Liberal Arts and Sciences, Cell and Molecular Biology.
Title: *Quantitative Real Time PCR Validation of Host Response in Children with Typhoid Fever*

Jones, Devin. College of Liberal Arts and Sciences, Biology.
Title: *Are little brown bats ingesting microcystin through Hexagenia*

Mukhopdhyay, Sayantoni. College of Liberal Arts and Sciences, Cell and Molecular Biology.
Title: *Assessment of Parkinson's disease-specific microRNAs in Alzheimer's disease*

Win, Kyaw Zin. College of Community and Public Service, Health Administration.
Title: *Access to Healthcare for Myanmar Refugees in Grand Rapids*

OTHER GRADUATE STUDENTS DEMONSTRATING ACADEMIC EXCELLENCE IN WINTER 2015

GLENN A. NIEMEYER AWARD FOR OUTSTANDING GRADUATE STUDENTS

This is a university-wide award honoring the most outstanding graduate students; selection is made by the Provost's Cabinet.

- Julie Bulson, Nursing-Doctorate
- Gabriel Kalmbacher, Business Administration

DEPARTMENTAL HONORS
2014-15

Recognized at the Annual Awards Celebration on April 6, 2015.

Seidman College of Business

- Rebecca Glover, Accounting
- Marty Gurry, Business Administration
- John Vande Guchte, Taxation

College of Community & Public Service

- Jenna Eavey, Criminal Justice
- Daniel Cook, Health Administration
- Kaitlin Kirouac, Public Administration
- Alexa Thompson, Social Work

College of Education

- Kathleen Mundo, Educational Specialist in Leadership
- Justin Melick, Education Technology
- Theresa Lyon, Higher Education
- Stacy Goodman, Literacy Studies
- Jessica Marzi, School Counseling
- Abdullah Alatawi, Special Education

Padnos College of Engineering & Computing

- Emily Johnson, Computer Information Systems
- Priya Balasubramanian, Engineering
- Christopher Theisen, Medical and Bioinformatics

College of Health Professions

- Amber Mistopoulos, Occupational Therapy
- Megan Kaiser, Physical Therapy
- Andra Talaska, Physician Assistant Studies
- Kirsten Curtis, Public Health
- Ashley Bernard, Speech-Language Pathology

College of Liberal Arts & Sciences

- Devin Jones, Biology
- Megan Glazier, Biomedical Sciences
- Alexandria VanderMolen, Biostatistics
- Ryan Sheick, Cell and Molecular Biology
- Kelley Monterusso, Communications
- Elizabeth Burgess, English

Kirkhof College of Nursing

- Lucy Ledesma, Nursing-Doctorate
- Lauren See-Jacques, Nursing-Masters

*Omicron Delta Kappa (*ΟΔΚ*) National Leadership Honor Society*
Winter 2015

Omicron Delta Kappa was founded December 3, 1914 at Washington and Lee University in Lexington, Virginia by 15 student and faculty leaders. Now present on more than 300 campuses nationwide, membership in ΟΔΚ is one of the highest honors a college student can receive. Membership is granted to juniors, seniors and graduate students who excel academically and exhibit leadership in at least one of the five phases of campus life:

- Scholarship
- Athletics
- Campus or Community Service, Social and Religious Activities, or Campus Government
- Journalism, Speech, or the Mass Media
- Creative and Performing Arts

Graduate Students inducted into the
GVSU Circle of Omicron Delta Kappa in 2014-15:

Kallie Bauer
Ashleigh Begres
Ravi Bhatta
Kirsten Curtis
Jennifer Deamud
Jeremy Dewar
Dawn Drazba
Alex Dudek
Derek Duzan
Ashley Eggleston
Megan Ellinger
Taryn Eva
Jakia Fuller
Brendan Gallagher
Alexandria Gauthier
Jeff Gibson
Autumn Hubbard
V'Lecea Hunter
Kayla Jones
Alicia Killinger
Andrea McKinney
Megan Miller
Daniel Welburn
Nicole Wilson

GRADUATE STUDENT ASSOCIATION OFFICERS
Winter 2015

President: Alaina Clarke, Public Administration

Vice President: Samantha Lynn, Criminal Justice

Administrative Officer: Colette Cascarilla, Business Administration

Communications Officer: Adil Shah, Accounting

Finance Officer: Selase Asamoa-Tutu, Engineering

Membership Officer: Kristin Ruther, Public Administration

Graduate Council Student Elected Representatives:
Majesta Van Wyk, Cell and Molecular Biology
Marc Plooster, Business Administration

Advisors:
Mr. Steven Lipnicki, Assistant Dean of Students
Dr. John Stevenson, Associate Dean of Graduate Studies

GRADUATE COUNCIL OFFICERS
Winter 2015

Chair:
Dr. Mark Luttenton, Biology

Vice-Chair:
Dr. Andrea Bostrom, Nursing

Policy Subcommittee Chair:
Dr. Mark Luttenton, Biology

Curriculum Subcommittee Chair:
Dr. Mark Staves, Cell and Molecular Biology

GRAND VALLEY STATE UNIVERSITY
OFFICE OF GRADUATE STUDIES

Dr. Jeffrey A. Potteiger, Dean of Graduate Studies

Dr. John R. Stevenson, Associate Dean of Graduate Studies

Irene Fountain, Administrative Assistant

Jennifer Palm, Office Coordinator

Graduate Assistants:
Autumn Hubbard, Public Administration
Anoush Kabalyan, Business Administration
Brent Showerman, Social Work

Student Assistant:
Shannon Heynen, International Business (undergraduate)

Office of Graduate Studies
401 W. Fulton St
318C DeVos Center
Grand Rapids, MI 49504

Phone: 616-331-7105
Email: gradstudies@gvsu.edu
Website: http://www.gvsu.edu/gs