2013-2014 GSRA Positions
University of Michigan-Flint

This document contains the 2013-2014 GSRA positions that are available to eligible graduate students at the University of Michigan-Flint. To view eligibility requirements and to apply, visit http://www.umflint.edu/graduateprograms/tuition-financial-aid/research-assistantships.page.
Job ID: 80566
Project Title: Investigating the performance of pheromone-baited trapping techniques using a management strategy evaluation model

Faculty Name: Heather Dawson
Department: Biology
Campus Address: 264 MSB
Email: hdawson@umflint.edu
Phone: 810-762-3360

Graduate Students in These Programs May Apply: Biology (MS); Computer Science and Information Systems (MS)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: A Management Strategy Evaluation (MSE) model will be modified to develop a tool to assess the utility of integrating pheromone-based trapping-for-control tactics within the current Integrated Management of Sea Lamprey strategy to support the GLFC's goal of rapid pheromone deployment. Previous analyses using an earlier version of this model showed that comparisons of management strategies using different combinations of lampricide and alternative control were very sensitive to estimates of the costs and efficacy of the alternative control measures. Management-scale tests of the pheromone 3kPZS conducted from 2008-2012 have yielded valuable data on the cost and efficacy of using a pheromone-based control method to enhance trap capture. These data can now be used in the MSE model to effectively compare integrated strategies. We will assemble and analyze these recent data, meet with sea lamprey control agents to identify the 3kPZS-pheromone + trapping-based management strategies to be tested, update the MSE model, and use the modified model to evaluate the performance of realistic integrated strategies.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The student will run simulations of the model to assess the performance of integrated strategies that incorporate pheromone-based tactics, relative to conventional (lampricide only) control strategies. If the integrated strategies do not result in better performance, the student will also assess how much more efficacious or lower in cost the selected tactics would have to be for the integrated strategy to outperform a lampricide only approach.

Specific Day/Time Requirements: None identified

Special Requirements: Must be able to:
1. Pay attention to detail and follow established protocols.
2. Learn the model and specialized software used to run the model.
3. Meet with the faculty advisor every two weeks to discuss research progress.
4. Use various computer programs, including Visual Basic, Excel, PowerPoint, and Access.
5. Work effectively and appropriately with others.
Job ID: 80568
Project Title: Effectiveness of Trail Cameras for Wildlife Species Detection Under Various Conditions

Faculty Name: Karmen Hollis-Etter
Department: Biology
Campus Address: 264 MSB
Email: kahollis@umflint.edu
Phone: 810-762-3360

Graduate Students in These Programs May Apply: Biology (MS)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: Trail cameras are being used to detect wildlife species, collect demographic information, and observe animal behavior in wildlife research. However, the basic assumption in all studies is cameras collect all the species of interest as they are encountered every time. Many brands of trail cameras contain different features (i.e., motion sensors, time lag between photographs, etc.) which may alter the detection of wildlife species between encounters. Additionally, we are aware of no rigorous testing of trail cameras under varying field conditions (i.e., humidity, temperature, angle, etc.) which also have the potential to influence individual camera performance. This information will be used by wildlife managers and allow for corrections in camera data accuracy and precision when examining wildlife demographics, animal behavior, and population estimates.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: 1. Establish research protocols using the scientific method and literature
2. Communicate effectively with camera manufacturers, landowners, faculty advisor, student help, and research investigators
3. Meet with faculty advisor as scheduled to discuss research progress
4. Conduct extensive field camera research (collect data), process, and analyze data
5. Handle various field conditions for extended periods of time
6. Identify wildlife species in the field and on camera images
7. Use computer and camera/video based programs
8. Complete MS thesis for degree
9. Prepare for conference presentations

Specific Day/Time Requirements: To be determined by research protocols.

Special Requirements: See above. This project will be designed for a student to complete a M.S. degree in Wildlife Biology in the Biology Department at the University of Michigan - Flint.
Job ID: 80571
Project Title: Art History Exhibition

Faculty Name: Sarah Lippert
Department: Communication and Visual Arts
Campus Address: 4123 WSW
Email: sarlipp@umflint.edu
Phone: 810-766-6680

Graduate Students in These Programs May Apply:
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The project is that Dr. Lippert has received a Research and Creative Activities Grant from the university to curate an exhibition at the FIA in May 2014. The project involves researching archives and other materials to write a book that will be the exhibition catalogue for the show, to present a public lecture at the FIA on the topic, and to mount an exhibition of works selected in the FIA's collection for the show.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The GRSA, who would most likely be a student in the M.A. Arts Administration program, would get tremendous on-the-job training by seeing the inner workings of all of the phases of scholarly and practical work that it takes to mount a show at a professional museum. The GSRA would help with researching materials for the book, collecting identification information for the works in the show, and installing the show at the FIA, as well as helping to proof and format the final book publication in the form of an exhibition catalogue.

Specific Day/Time Requirements: For most of the time in this position the GSRA would be able to work on his/her own schedule, meeting with Dr. Lippert periodically to go over research findings. In the later stages of the project, more in-person work would be needed to help at the FIA, but this would be only at the tail end of the project.

Special Requirements: The GSRA should have strong language skills, be organised, and be adept at using JSTOR and other search databases. This individual should also have a professional demeanour for the periods when we will be working with staff at the FIA.
**Job ID:** 80572  
**Project Title:** Training of Intelligent Denial of Service System using Neuro-Fuzzy Approach

**Faculty Name:** Biswajit Panja  
**Department:** CSEP  
**Campus Address:** 207MSB  
**Email:** bpanja@umflint.edu  
**Phone:** 810-762-3469

**Graduate Students in These Programs May Apply:** Computer Science and Information Systems (MS)  
**Work could be done by someone not coming to campus (e.g., online or non-local student):** Yes

**Project Description:** Distributed Denial of Service is an attack from multiple computers (zombies), targeted at one or more hosts by sending flood of packets to overwhelm network resources. These attacks are intended to consume resources including bandwidth, disk space or disrupt network resources. As Distributed Denial of Service continues to propagate the internet making services to customers unavailable at critical times, adequate measures should be made to protect critical resources from would be intruders.

There are a host of detection measures or mechanisms in use today (Misuse detection, IP spoofing techniques, firewall prevention schemes) each with its own flaw(s). Neural networks and Fuzzy Systems have also been used to detect DDOS intrusion. All these techniques have different flaws that make it difficult to achieve a high success rate or effectively distinguish between normal traffic and malicious traffic.

We need to introduce the use of machine learning techniques using adaptive and incremental learning classifiers to detect and control DDOS attacks.

**Semesters Desired:** Fall 2013 AND Winter 2014

**GSRA Position Description:** Developing suitable concepts.  
Working on the experiments.  
Documenting the project.

**Specific Day/Time Requirements:** None

**Special Requirements:** None
Job ID: 80573
Project Title: Group Security in V2V using Processing Power of Cloud Computing

Faculty Name: Biswajit Panja
Department: CSEP
Campus Address: 207MSB
Email: bpanja@umflint.edu
Phone: 810-762-3469

Graduate Students in These Programs May Apply: Computer Science and Information Systems (MS)
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: Vehicle to Vehicle (V2V) and Vehicle to Infrastructure (V2I) are a promising technology to improve safety and optimize traffic flow. Research has been done on identification of threats, specification of security mechanisms and how to adapt cryptographic primitives to a V2V/V2I model. There are a number of threats to the V2V/V2I system. A jammer can be used to stop any transmissions from traffic signals, because it remains in a local place, and can be placed relatively easily. Fake signals can then be broadcast, causing accidents if the vehicle doesn't know about hazards. Any node in the relay can also disrupt other nodes, causing the whole system to have problems. This also affects the driver's privacy, as their personal information could be accessed from the car. It is important to investigate vulnerabilities in the system. Some of the requirements of security in the system include authentication of transmissions, keeping data consistent, non-repudiation, and keeping clients private information secure.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Developing suitable concepts.
Working on the experiments.
Documenting the project.

Specific Day/Time Requirements: None

Special Requirements: None
Job ID: 80574

Project Title: Application of Kalman Filtering to Modeling Evidence Accumulation in the Iowa Gambling Task

Faculty Name: Michael Farmer
Department: CSEP
Campus Address: 207 MSB
Email: farmerme@umflint.edu
Phone: 810-762-3423

Graduate Students in These Programs May Apply: Computer Science and Information Systems (MS)
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: In the field of signal processing, the Kalman Filter is used to integrate long time-series of data and provide clean estimates of the underlying signals. The mathematics of Kalman Filter parallels some of the mathematics used to explain long-term evidence accumulation in human subjects. The difference lies in the variable use of filter gain in Kalman, where this is a fixed and actually poorly explained term in human psychology. The faculty has developed a model for adapting gain based on conflict of new evidence with past evidence and this model will be explored.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Students will develop MATLAB data analysis tools and process existing collected Iowa Gambling Task data.

Specific Day/Time Requirements: None

Special Requirements: Must be very strong in MATLAB and general mathematics.
Job ID: 80578
Project Title: Event Stream Processing

Faculty Name: Murali Mani
Department: CSEP
Campus Address: 207 MSB
Email: mmani@umflint.edu
Phone: 810-762-606

Graduate Students in These Programs May Apply: Computer Science and Information Systems (MS)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: This project involves reading research papers, and coming up with solutions that enable investigate efficient event stream processing.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Read research papers, discuss research papers with advisor, come up with novel solutions, evaluate solutions.

Specific Day/Time Requirements: None identified

Special Requirements: Must be very interested in Databases and Algorithms.
Job ID: 80579
Project Title: Secure Database Processing in the Cloud

Faculty Name: Murali Mani
Department: CSEP
Campus Address: 207 MSB
Email: mmani@umflint.edu
Phone: 810-762-606

Graduate Students in These Programs May Apply: Computer Science and Information Systems (MS)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: This project involves reading research papers, and coming up with solutions that enable secure query processing in the cloud.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Read research papers, discuss research papers with advisor, come up with novel solutions, evaluate solutions.

Specific Day/Time Requirements: None identified

Special Requirements: Must be very interested in Databases and Algorithms.
Job ID: 80580
Project Title: Quality in Higher Education

Faculty Name: Quamrul Mazumder
Department: CSEP
Campus Address: 207 MSB
Email: qmazumde@umflint.edu
Phone: 810-762-3397

Graduate Students in These Programs May Apply: ANY Graduate Student
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: Development of models for quality in higher education using QFD, six sigma, and other principles. Development of research plan, data collection plans, collect and analyze data. Perform research activities towards scholarly publications in conferences and/or journals.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: 1) Literature search of previous similar scholarly work
2) Familiarity or willingness to learn SPPS software, Six sigma, QFD methods.
3) Be responsive to needs and able to complete assigned tasks within specified deadlines
4) Flexibilities to work as needed to achieve desired goals of the project.
5) Excellent writing skill, previous publication in conference or journal
6) Willing to dedicate efforts towards the goal of the project

Specific Day/Time Requirements: Two days per week (3 hours each day) meeting with research group

Special Requirements: None identified
Job ID: 80581
Project Title: Quality Improvement using Outcome Based Assessment

Faculty Name: Quamrul Mazumder
Department: CSEP
Campus Address: 207 MSB
Email: qmazumde@umflint.edu
Phone: 810-763-3397

Graduate Students in These Programs May Apply: ANY Graduate Student; Business Administration (MBA/Certificate); Computer Science and Information Systems (MS); Education (Ed.D./Ed.S.); Education (MAC Program); Educational Technology (MA); English Language and Literature (MA); Liberal Studies (MLS); Lit

Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The proposed project will investigate whether outcome based assessment methods improve learning effectiveness of engineering students. The research questions will include, Does assessment of student outcome significantly improves student learning? The research methods consists of using direct and indirect measurements collected from different engineering courses.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description:
1) Familiarity or willingness to learn SPPS statistical analysis software
2) Literature survey to investigate previous similar work.
3) Be responsive to needs and able to complete assigned tasks within specified deadlines
4) Flexibilities to work as needed to achieve desired goals of the project.
5) Excellent writing skill, previous publication in conference or journal
6) Willing to dedicate efforts towards the goal of the project

Specific Day/Time Requirements: Two Days Per week (3 hours each day)
Monday or Wednesday
Tuesday or Thursday

Special Requirements: 1)Have previous knowledge and experience with statistical analysis software
2) Have background or knowledge in educational research methods
3) Experience in writing conference and/or journal papers
Job ID: 80582

Project Title: Promoting community gardens: What do garden groups need and what can local governments do?

Faculty Name: Victoria Morckel
Department: Earth and Resource Science
Campus Address: 518 Murchie Science Building
Email: morckel@umflint.edu
Phone: 810-237-6597

Graduate Students in These Programs May Apply: ANY Graduate Student
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: Food access is a growing concern in many communities given the rising costs of fresh produce and the health outcomes that result from improper nutrition. Cities looking to mitigate food access problems are increasingly turning to community gardens as a solution; the problem is that there is little empirical research on how to start and sustain community gardens from the local government’s perspective. Therefore, the purpose of this study is to explore what new and existing community garden groups need, and what local governments can do with that information. This study will consist of a content-analysis of fifty-eight grant applications that were submitted to a community garden grant program funded by the City of Columbus, Ohio. The study will highlight who community gardens serve, the benefits of the gardens, the challenges the gardens face, and what the gardens require to get started and remain sustainable in the future.

Semesters Desired: Fall 2013 ONLY

GSRA Position Description: The GSRA will read garden grant applications, perform content analysis on the applications, and enter the resulting data into SPSS statistical software program. Prior knowledge of content analysis and SPSS is not required. The GSRA will be trained, if necessary.

Specific Day/Time Requirements: 5-6 hours per week.

Special Requirements: A social sciences major is preferred but not required. Prior experience with SPSS is preferred but not required.
Job ID: 80583
Project Title: Save that House! An Examination of Demolition Ordinances

Faculty Name: Victoria Morckel
Department: Earth and Resource Science
Campus Address: 518 Murchie Science Building
Email: morckel@umflint.edu
Phone: 810-237-6597

Graduate Students in These Programs May Apply: ANY Graduate Student
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: This study examines the effectiveness of ordinances intended to deter the demolition of structures, typically historic homes. These ordinances are usually referred to as demolition delay or moratorium ordinances. As the name suggests, a demolition delay ordinance delays a demolition but ultimately gives the property owner the right to demolish the structure. A moratorium stops or suspends all demolitions in the given area for a set period of time, typically while the community considers an issue such as a change in code or an update to a comprehensive plan. With a moratorium, the property owner must demonstrate to the community why he or she should be permitted to demolish the building, despite there being a moratorium in place.
The results of this study should help guide communities considering creating or amending ordinances that regulate demolitions. The study will highlight elements that are typically found in demolition ordinances and assess the ability of the ordinances to deter demolitions. Suggestions for ordinance language that may be effective in preventing demolitions will be made using quantitative and qualitative analyses.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The student involved in this project will have the following responsibilities:
1. Assisting with the literature review for the study
2. Identifying communities with demolition delay and moratorium ordinances
3. Reading city ordinances and performing content analysis on the ordinances
4. Conducting phone interviews of city officials working in communities with demolition delay and moratorium ordinances
5. Entering the ordinance and interview data into SPSS (a statistical software program)

Specific Day/Time Requirements: The student should be available for at least 3 hours per day, 2 days per week (6 hours total).

Special Requirements: To effectively conduct phone interviews, the student must have excellent oral communication skills. A native English speaker is preferred. Familiarity with SPSS (a statistical software package) is a plus, but not required.
Job ID: 80584
Project Title: Institute for Innovation in Education

Faculty Name: Jeff Kupperman
Department: Education
Campus Address: 430 French Hall
Email: jkupp@umflint.edu
Phone: 734-604-6117

Graduate Students in These Programs May Apply: Educational Technology (MA)
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: The Institute for Innovation in Education (IIE) is an incubator of ideas, projects, and partnerships at the intersection of technology and learning, which is closely connected to the UMF Educational Technology master’s program along with various research and development initiatives in Educational Technology on the Flint and Ann Arbor campuses. See http://www.umflint.edu/edtech/iie.htm.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Depending on the assistant's expertise and the emerging needs of the IIE, duties may include:
- Supporting research on learning within the IIE and IIE-related projects, including tasks such as writing literature reviews, collecting and analyzing data, co-authoring research papers, etc.
- Supporting the development and implementation of new and revised courses in the Educational Technology master's program, through tasks such as collecting and editing course readings and media, creating example projects, and piloting course assignments.
- Developing online materials and/or social media presence that support IIE projects and the professional development of IIE members.
- Assisting with logistics of IIE Gatherings.

Specific Day/Time Requirements: None identified

Special Requirements: Excellent written communication skills and familiarity with educational technology are required. Experience with web or mobile app development, video editing, online collaboration tools, social media marketing, and educational research methods is desired. GSRA must be able to work independently and handle multiple tasks proactively.
Job ID: 80585  
**Project Title:** Passion, Power, Participation: Doing English Studies in the 21st Century

**Faculty Name:** M. Jan Furman  
**Department:** English  
**Campus Address:** 326 French Hall  
**Email:** jfurman@umflint.edu  
**Phone:** 810-762-3285

**Graduate Students in These Programs May Apply:** ANY Graduate Student  
**Work could be done by someone not coming to campus (e.g., online or non-local student):** No

**Project Description:** Research, design and assess co-curricula, interdisciplinary initiatives related to the study and appreciation of English language and literature

**Semesters Desired:** Fall 2013 AND Winter 2014

**GSRA Position Description:** Research and report on the role, if any, co-curricular initiatives play in promoting students' engagement with their English departments, universities and communities; research and report best practices in the design of co-curricular initiatives; inventory existing co-curricular initiatives at UM-Flint; design, implement and assess a co-curricular activity for English.

**Specific Day/Time Requirements:** None identified

**Special Requirements:** Proven skill in academic writing and research; ability to plan, organize and schedule independent research; ability to conceive original ideas; strong intellectual background in humanities' disciplines; demonstrated strong work ethic.
Job ID: 80586
Project Title: Vehicle City Voices Database

Faculty Name: Erica Britt
Department: English
Campus Address: 330N French Hall
Email: erbritt@umflint.edu
Phone: 810-762-3483

Graduate Students in These Programs May Apply: Early Childhood Education (MA); Education (Ed.D./Ed.S.); Education (MAC Program); Educational Technology (MA); English Language and Literature (MA); Liberal Studies (MLS); Literacy Education (MA); Social Sciences (MA); Special Education (MA)

Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The Vehicle City Voices (VCV) database is an online database of interviews that serves as a digital resource for researchers on the UM-Flint campus and beyond. The database contains hour-long interviews with residents of Genesee county telling stories about growing up in and living in the community. Interviews from this database will be made available to students and researchers of a variety of disciplines on the UM-Flint campus who have an interest in social, historical and linguistic change in Genesee County. In addition, the project will serve as an important oral history resource for members of the local community.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The GSRA will be responsible for conducting additional interviews with residents of Genesee County (recording equipment will be provided). The research assistant will also update demographic information in the database, sort and file documents, including consent forms and surveys, and send out mailings to community members. The assistant will also transcribe interviews.

Specific Day/Time Requirements: None identified

Special Requirements: GSRA must have the ability to use word processing software (i.e. MS Word) and spreadsheets (i.e. Excel). The assistant should have some familiarity with and/or comfort with using digital recorders and conducting interviews (in-depth training will be provided).
Job ID: 80588

Project Title: Bibliography of works in teaching linguistics

Faculty Name: Kazuko Hiramatsu
Department: English
Campus Address: 326 French Hall
Email: kazukoh@umflint.edu
Phone: 810-762-3478

Graduate Students in These Programs May Apply: ANY Graduate Student
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The goal of this project is to create a comprehensive annotated bibliography of peer-reviewed articles and books on the teaching of linguistics, as well as introductory textbooks in linguistics.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Create annotated bibliographic entries of academic references and textbooks.

Specific Day/Time Requirements: Most of the work can be done off campus but we will need to meet in person occasionally.

Special Requirements: *Strong research and writing skills.
*Willingness to learn Zotero, a research tool to organize references.
*A background or interest in linguistics would be helpful.
Job ID: 80589
Project Title: Reading Films/Reading Poetry

Faculty Name: Tom Foster
Department: English
Campus Address: 326 FH
Email: tfos@umflint.edu
Phone: 810-762-3285

Graduate Students in These Programs May Apply: English Language and Literature (MA); Liberal Studies (MLS)
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: Two projects: Reading the Silver Screen (Fall, finish book), and How to Read Poetry (Winter, begin ebook).
If I can only have an RA for one semester, Fall is the more important.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Fall: identify still shots from films, check use of same in other sources, request permissions, read chapters-in-progress and suggest editorial ideas.
Winter: survey competing texts, identify copyright holders and issues for selected poems, survey ebooks for format possibilities, read chapters-in-progress for initial consistency.

Specific Day/Time Requirements: Flexible.

Special Requirements: Must be or become familiar with copyright practices as well as literary/film studies.
Job ID: 80590
Project Title: Medieval Literature's Seventeenth-Century Readers

Faculty Name: Vickie Larsen
Department: English
Campus Address: 330G French Hall
Email: vlarsen@umflint.edu
Phone: 810-424-5656

Graduate Students in These Programs May Apply: ANY Graduate Student
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The large majority of books in England at the close of the Middle Ages occupied the shelves of wealthy and powerful monastic libraries. When Henry VIII dissolved the English monasteries between 1535 and 1541, his agents confiscated the monastic lands and treasuries, and smashed the altars, statues, and windows. The fate of the libraries remains unclear--some books were burned or left to ruin, but many came into the possession of expelled monks, Henry’s commissioners, local families, or Henry VIII himself. My work follows some of those books into seventeenth-century private collections. During 2013-14 I will be producing two components of this larger project. The first analyzes archival evidence regarding Catherine of Braganza’s reading life, her royal library, and her relationships with the London book-trades between 1662 and 1705 with particular attention to her collection of medieval manuscripts and early printed editions in English. The second examines the response to Julian of Norwich’s medieval writings by proponents of late seventeenth-century enlightenment rationalism.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Read and annotate relevant existing scholarship
Assist with the analysis of archival findings
Prepare manuscripts for publication
Translate Portuguese materials into English

Specific Day/Time Requirements: Flexible works days and hours. Some meeting time M-F between 9:00 and 5:00.

Special Requirements: Interest in and ability to read historical materials and humanities research
Attention to detail
Ability to become familiar with a style manual and format research in accordance with it
Added Bonus: Portuguese language skills
Job ID: 80592
Project Title: Spatial Learning and other Sickness Responses Following an Immune Challenge

Faculty Name: Barbara Kupferschmid
Department: Nursing
Campus Address: 2192 WSW Bldg
Email: bkupf@umflint.edu
Phone: 810-762-3420

Graduate Students in These Programs May Apply: ANY Graduate Student
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: The purpose of this project is to understand the impact of infections on cognition and other responses in aged rats in order to more fully understand the implications of acute infections in the elderly. The aim is to develop a model simulating the infectious process experienced by the elderly in order to fully characterize the effects on spatial learning and other responses. The goal is early recognition of behavioral changes which could lead to identification and testing of appropriate interventions. We will examine spatial learning and other sickness responses in aged rats after they are administered intraperitoneal Lipopolysaccharide (LPS) injections. Further, another goal is to develop a study designed to characterize cognitive and other responses in elderly people experiencing an infection.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Conduct review of literature
Assist with project design
Assist with IRB amendments or proposal
Data collection, including with animals
Data entry and analysis
Assist with grant application
Assist with manuscript preparation

Specific Day/Time Requirements: Unless there is an ongoing protocol, days/times are negotiable.
When protocol in place, times are also negotiable but would primarily be mornings and some afternoons.
All duties can be performed off campus with the exception of research with animals.

Special Requirements: None identified
Job ID: 80594  
Project Title: Topics in Graduate Nursing and Advanced Practice

Faculty Name: Constance Creech  
Department: Nursing  
Campus Address: 2180 WSW  
Email: ccreech@umflint.edu  
Phone: 810-762-3420

Graduate Students in These Programs May Apply: Nursing (MSN/DNP)  
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: Students who are SDS scholarship recipients will work closely with faculty on their research topics and receive mentoring in the research process.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Approximately 4 hours per week will be required to complete either data collection, analysis, manuscript preparation, literature reviews and other related activities for the assigned faculty

Specific Day/Time Requirements: Flexible

Special Requirements: Must be a DNP student with a SDS scholarship
Job ID: 80595
Project Title: Special Topics in Graduate Nursing and Advanced Practice

Faculty Name: Constance Creech  
Department: Nursing  
Campus Address: 2180 WSW  
Email: ccreech@umflint.edu  
Phone: 810-762-3420

Graduate Students in These Programs May Apply: Nursing (MSN/DNP)  
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: Students will be expected work closely with faculty doing primary and evidenced based practice research and will receive mentoring in the research process.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: students will work 4 hours per week completing either Data collection, analysis, manuscript preparation, literature reviews and other related activities.

Specific Day/Time Requirements: Flexible

Special Requirements: Must be a DNP student and an SDS scholarship recipient
Job ID: 80596

Project Title: Barriers and Facilitators to Accelerated MSN education

Faculty Name: Constance Creech
Department: Nursing
Campus Address: 2180 WSW
Email: ccreech@umflint.edu
Phone: 810-762-3420

Graduate Students in These Programs May Apply: Nursing (MSN/DNP)
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: Focus group data has been collected. Data must now be coded and placed in a poster/article format.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: code data, design poster, assist with manuscript preparation

Specific Day/Time Requirements: flexible

Special Requirements: MSN or DNP student
Job ID: 80598

Project Title: Special Topics in Graduate Nursing and Advanced Practice

Faculty Name: Constance Creech
Department: Nursing
Campus Address: 2180 WSW
Email: ccreech@umflint.edu
Phone: 810-762-3420

Graduate Students in These Programs May Apply: Nursing (MSN/DNP)
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: GSRA Position Description: Students who are SDS scholarship recipients will work closely with faculty on their research topics and receive mentoring in the research process. Approximately 4 hours per week will be required to complete either data collection, analysis, manuscript preparation, literature reviews and other related activities for the assigned faculty.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Students who are SDS scholarship recipients will work 4 hours per week completing either data collection, analysis, manuscript preparation, literature reviews and other related activities for the assigned faculty.

Specific Day/Time Requirements: Flexible

Special Requirements: Graduate nursing student with an awarded SDS scholarship
**Job ID:** 80599  
**Project Title:** Transcultural Concepts in Nursing Care

**Faculty Name:** Margaret Andrews  
**Department:** Nursing  
**Campus Address:** 2180 W S White Bldg  
**Email:** johcolli@umflint.edu  
**Phone:** 810-424-5650

**Graduate Students in These Programs May Apply:** Health Education (MS); Nursing (MSN/DNP); Public Health (MPH)  
**Work could be done by someone not coming to campus (e.g., online or non-local student):** No

**Project Description:** Assistance with new edition of Transcultural Concepts in Nursing Care text.

**Semesters Desired:** Fall 2013 AND Winter 2014

**GSRA Position Description:** Library searches related to Transcultural Nursing research and publications. Assistance with proof reading, reference checking, and research related to publications.

**Specific Day/Time Requirements:** Flexible days and time

**Special Requirements:** None identified
Job ID: 80601
Project Title: Initiatives for Nursing Workforce Diversity (UM-FIND)

Faculty Name: Linda Knecht
Department: Nursing
Campus Address: 2180 WSW
Email: lknecht@umflint.edu
Phone: 810-766-6855

Graduate Students in These Programs May Apply: Nursing (MSN/DNP); Public Health (MPH)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The UM-Flint Initiatives for Nursing Diversity (UM-FIND) is a federally funded project from the US Department of Health and Human Services, Health Resources & Services Administration with the goal to increase nursing education opportunities for students from disadvantaged backgrounds (including racial and ethnic minorities underrepresented in Nursing). The purpose of this project is to increase the level of diversity and cultural competence in Flint’s nursing workforce by providing disadvantaged/minority students at the high school, associate degree and baccalaureate levels with the skills and resources to successfully compete for admission, enrollment, progression and graduation from the Bachelor of Science in Nursing (BSN) program at UM-Flint. Activities from pre-college high school level through BSN graduation are designed to motivate and support disadvantaged/minority students to pursue and persist in a career in nursing. Students receive an array of personal, professional, leadership development, and academic enrichment services.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: A GRSA working with the UM-FIND project would be able to assist in a variety of grant related evaluation activities including but not limited to researching and summarizing review of literature related to retention, cultural competency, and other grant related areas of interest, assisting with data collection and analysis, assisting with the writing of results of grant activities and outcomes.

Specific Day/Time Requirements: None identified

Special Requirements: Seeking a GSRA with the ability to conduct ROL and solid academic writing abilities. Knowledge/experience with both qualitative as well as quantitative evaluation methods preferred.
Job ID: 80602
Project Title: Assets of Pregnant Teens

Faculty Name: Marilyn Filter
Department: Nursing
Campus Address: WSW 2180
Email: msfilter@umflint.edu
Phone: 810-766-6863

Graduate Students in These Programs May Apply: Nursing (MSN/DNP)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: This project is looking at the relationship between assets and birth outcomes of pregnant teens in an urban setting.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: This GRSA is expected to do online research for the project, data analysis and writing of manuscripts.

Specific Day/Time Requirements: Variable.

Special Requirements: Must be able to do online literature reviews, data analysis using SPSS, writing skills to produce manuscripts.
Job ID: 80604
Project Title: Lapeer County Community Mental Health InSHAPE program evaluation

Faculty Name: Marsha Lesley
Department: Nursing
Campus Address: 2180 WSW Bldg
Email: mlesley@umflint.edu
Phone: 810-766-6852

Graduate Students in These Programs May Apply: ANY Graduate Student
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: This is an ongoing project with completion of qualitative study anticipated during summer 2013, and initiation of quantitative study and data analysis during fall 2014.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Assist with project expansion
Assist with IRB proposal
Assist with grant application
Conduct review of the literature
Assist with manuscript preparation

Specific Day/Time Requirements: Days/times are negotiable

Special Requirements: None identified
Job ID: 80605

Project Title: Examining Men's Experience in Nursing School for Perceived Learning Disparities and Gender Bias

Faculty Name: Judy Haefner
Department: Nursing
Campus Address: 303 Kearsley Rm 2180
Email: jhaefner@umflint.edu
Phone: 586-943-8890

Graduate Students in These Programs May Apply: Nursing (MSN/DNP)
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: 1. Survey of UMF graduate male nursing students investigating gender bias in the classroom and at the clinical site.
2. Completion of research of benefit of simulation in undergrad nursing education.
3. Revision of article on use of psychotropic drugs with the elderly, risks and benefits. Directed at primary NP.
4. Revision of article applying Bowen's Family Theory to a family in therapy.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: 1. Assist with compiling data on survey of UMF male nursing students. Assist with literature search associated with writing journal article on the topic.
2. Assist with updated literature search review for three articles. Assist with writing literature reviews for article in preparation of publication.

Specific Day/Time Requirements: Flexible. GSRA will be able to work from home most days. Planned person to person meeting will be flexible to accommodate everyone's schedule.

Special Requirements: Experience with computers
Able to complete online library searches for specific topics.
Able to summarize research article.
Able to participate in collecting, interpreting and evaluation data from survey results.
Job ID: 80607
Project Title: Ekso Exoskeleton Ambulation Device

Faculty Name: Cathy A. Larson
Department: Physical Therapy
Campus Address: 2157 WSW
Email: clarson@umflint.edu
Phone: 810-762-3373

Graduate Students in These Programs May Apply: Candidate in mind
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The Ekso exoskeleton is a lower extremity (LE) orthotic device intended for rehabilitation and ambulation for individuals with limited LE muscle function. The Rehabilitation Institute of Michigan (RIM), Detroit, is one of 10 national sites that has purchased the Ekso exoskeleton and is using it for patients post-spinal cord injury to lean to walk using the Ekso device. (http://www.eksobionics.com) This study will examine the safety, efficacy and possible brain activity using transcranial magnetic stimulation while gait training using the Ekso device.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Assist in designing the study after careful reading and synthesis of the current body of literature
Submission of IRB application to both WSU & UMF
Liaison with contacts at RIM to organize and carry out this study
Subject recruitment, data acquisition, entry and data analysis
Preparation and presentation at a state/national conference
Assist in preparation of a written manuscript for submission to an appropriate journal

Specific Day/Time Requirements: To be arranged to accommodate both student and faculty class/work schedules

Special Requirements: In good standing in Professional DPT program; some experience with Word, Ref Works, Excel and SPSS, good organization & communication skills; transportation to/from Detroit on occasion
Job ID: 80608  
Project Title: EMG Biodfeedback utilization in designing Maximum Benefit Exercises

Faculty Name: Cathy A. Larson  
Department: Physical Therapy  
Campus Address: 2157 WSW  
Email: clarson@umflint.edu  
Phone: 810-762-3373

Graduate Students in These Programs May Apply: Candidate in mind
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: This study will investigate the use of electromyographic biofeedback (EMG-BF) to design targeted therapeutic exercises which optimize muscle activity in order to improve functional outcomes in patients with neuropathologies including spinal cord injury (SCI) and cerebral vascular accident (CVA). Traditionally, therapists rely on their academic and continuing education and previous experience to design therapeutic exercises and intervention strategies. It is our contention that surface EMG-BF can be utilized to design more appropriate and more effective exercises which optimize muscle activity. For example, one of our past patients with SCI had been performing 12 exercises designed by a physical therapist experienced in SCI intervention to address his strength and graded force control. Using surface EMG-BF, it was discovered that 5 of the 12 exercises actually activated the weak muscles and 7 exercises were relatively ineffective. New exercises were added and others were modified based upon discovering the optimal patient and joint position, muscle length, manual facilitation and resistance, and the direction of joint movement which enhanced muscle activity as recorded by surface EMG-BF. It is our hope that, if EMG-BF is proven to assist therapists in designing streamlined, targeted and more effective intervention programs, then the limited financial resources available to individuals with SCI and CVA and their time in therapy can be more effectively utilized.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description:  
After new equipment is purchased (have funds), set-up and learn the EMG-BF equipment, integrate it with current motion analysis VICON system and force plate, undergo training via face to face and online mechanisms, establish instructions for use, and be prepared to teach others.  
Assist in designing the study after careful reading and synthesis of the current body of literature  
Subject recruitment, data acquisition, entry and data analysis  
Preparation and presentation at a state/national conference  
Assist in preparation of a written manuscript for submission to an appropriate journal

Specific Day/Time Requirements: Will be arranged around student and faculty class/work schedules

Special Requirements: in good standing within Professional DPT program, experience with Word, Excel and SPSS software; prefer current 1st year Prof DPT student (class of 2015)
Job ID: 80609

Project Title: The Use of Biomechanical Orthotic Devices in the Control of Anterior Instability of the Lumbar Spine

Faculty Name: James R. Creps
Department: Physical Therapy
Campus Address: 2157 William S White
Email: jcreps@umflint.edu
Phone: 810-762-3371

Graduate Students in These Programs May Apply: Physical Therapy (DPT/Certificate)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: Low back pain is an endemic health problem. Lumbar instability, and concomitant facet synovitis, arthropathy, and nerve root impingement, is a common cause of low back pain. Eighty-five percent of lumbar instabilities are anterior, and instability in the subtalor and midtarsal joints of the foot can predispose the lumbar spine to anterior shear forces. This project will attempt to quantify the effect of biomechanical orthotic devices on the resultant anterior shear force on the lumbar spine in patients with low back pain, anterior instability of the lumbar spine, and subtalor and midtarsal joint instability. The purpose is to attempt to validate that biomechanical orthotic devices can be an effective passive management strategy for patients suffering from low back pain secondary to anterior instability of the lumbar spine.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The GRSA will perform literature review functions and assist with lab preparation and data collection/compilation.

Specific Day/Time Requirements: The GSRA’s time can be arranged to accommodate both the faculty and student’s schedules.

Special Requirements: The GSRA will require good time management skills and the ability to perform evidence-based, web-centered, scientific inquiry using validated medical search engines.
Job ID: 80610  
Project Title: Relationship of Cognition and Balance Outcomes in Physical Therapy Practice

Faculty Name: Jennifer Blackwood  
Department: Physical Therapy  
Campus Address: 2157 WSW  
Email: jblackwo@umflint.edu  
Phone: 810-762-3373

Graduate Students in These Programs May Apply:  
Nursing (MSN/DNP); Physical Therapy (DPT/Certificate); Public Health (MPH)

Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The focus of my research is on the relationship between cognition and fall risk and balance in older adults. Although the American Geriatric Society has recommended that areas of cognition should be assessed as a part of a comprehensive fall risk assessment, it is unknown how often cognition assessments are completed by physical therapists when examining fall risk. Numerous tests and intervention programs have been studied to identify fall risk and to reduce falls and fall related injuries in the older adult, but no published study to date has investigated the frequency of assessment, attitudes towards assessment, or the types of cognitive assessment tools used by physical therapists in the State of Michigan.

A survey of current practice patterns of Michigan physical therapists was performed to determine the frequency at which cognition and fall risk are assessed including the tools that are commonly used. The purpose of this study is threefold: first, to determine the frequency of assessing cognition and fall risk in older adults by physical therapists in Michigan. The second purpose is to assess physical therapists' attitudes towards assessing cognition and fall risk in the older adult. The final purpose of this study is to determine which screening tools are being used to assess cognition and fall risk in older adults by physical therapists in Michigan.

This project will examine the survey results to examine significant trends in the data. Products of this study include a professional presentation at a peer reviewed conference as well as the completion of a manuscript. In addition, this survey may be revised and submitted to compare current practice patterns of board certified physical therapists to determine how their practice patterns differ from a population of therapists.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Data management: cleaning of data, running statistical analysis (with supervision), creation of tables/figures to display the data.

Professional writing: Assist in the literature review, collating documents, writing of the data results and analysis/discussion sections, completion of an abstract, submission of information for professional presentation.

Specific Day/Time Requirements: TBD dependent on the student & faculty member's schedule.

Special Requirements: Able to work independently & under supervision with timelines of the faculty member.

Good professional writing skills including the ability to incorporate literature into writing.
Good understanding of statistics and the results of statistical analyses to include in writing and discussion.
Able to use SPSS for statistical analysis with minimal assistance.
Willingness to work under the mentorship of the faculty member.
Good organization skills
Job ID: 80612
Project Title: Normative values of the Functional Measures Screen (FMS), Star Excursion Balance Test, strength, power, flexibility, and agility in high school athletes.

Faculty Name: Thomas Ruediger
Department: Physical Therapy
Campus Address: 2157 William S White
Email: ruediger@umflint.edu
Phone: 810-762-3373

Graduate Students in These Programs May Apply: Physical Therapy (DPT/Certificate)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: Injuries are prevalent in high school athletes, much more so in female athletes. Neither the FMS nor the SEBT, though widely used screening tools for athletic adults, have any reported normative values in this population. This study will seek to describe to report balance, strength, power, flexibility, and agility measures in a cohort of male and a cohort of female athletes and build a developing relationship with a Genesee County High School Athletic Program.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Assist with literature review, IRB application, recruitment and coordination of data collection and intervention, administrative support activities associated with research.

Specific Day/Time Requirements: Some Saturdays and evenings at high schools may be required; these will be coordinated with student's schedule.

Special Requirements: Strong desire to publish
Good organizational and time management skills
Job ID: 80613

**Project Title:** Effect of Cadence Manipulation on Foot Strike Characteristics in Barefoot Running

**Faculty Name:** Thomas Ruediger  
**Department:** Physical Therapy  
**Campus Address:** 2157 William S White  
**Email:** ruediger@umflint.edu  
**Phone:** 810-762-3373

**Graduate Students in These Programs May Apply:** Biology (MS); Health Education (MS); Nursing (MSN/DNP); Physical Therapy (DPT/Certificate); Public Health (MPH)

**Work could be done by someone not coming to campus (e.g., online or non-local student):** No

**Project Description:** This study builds on research performed with GSRA from 2012-2013. Barefoot running is a relatively new area of scientific inquiry with initial evidence that there may be both a performance enhancement effect and an injury prevention benefit. There is also developing evidence that foot strike patterns change with barefoot running. However, little is now known about the effects of cadence manipulation on the foot strike in barefoot running. This case series study will follow selected runners and report the impact that manipulating the number of steps they take per minute has on running characteristics.

**Semesters Desired:** Fall 2013 AND Winter 2014

**GSRA Position Description:** Assist with literature review, IRB application, recruitment and coordination of data collection and intervention, administrative support activities associated with research.

**Specific Day/Time Requirements:** Negotiable

**Special Requirements:** Strong desire to publish.  
Good organizational and time management skills.
Project Title: Effect of High Velocity Upper Extremity Facilitated Squats on Selected Balance Measures in Adults at Risk for Falls

Faculty Name: Thomas Ruediger
Department: Physical Therapy
Campus Address: 2157 William S White
Email: ruediger@umflint.edu
Phone: 810-762-3373

Graduate Students in These Programs May Apply: Physical Therapy (DPT/Certificate)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: Body weight resisted training is generally regarded as being more functional than fixed axis resistance training. However, adults with balance deficits may be hesitant to perform these activities. This project will begin to investigate whether the addition of suspension trainer (TRX) can provide these adults the confidence to perform exercise at a higher intensity and both improve their strength and reduce their risk for falls. This study builds on research performed with GSRAs from 2012-2013.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Assist with literature review, IRB application, recruitment and coordination of data collection and intervention, administrative support activities associated with research.

Specific Day/Time Requirements: Some Saturdays and evenings at senior centers/assisted living centers; these will be coordinated with student’s schedule.

Special Requirements: Strong desire to publish. Good organizational and time management skills.
Job ID: 80616
Project Title: Does Masculinity Affect Help-Seeking Behaviors in African American Men?

Faculty Name: Terry Thompson
Department: Public Health and Health Sciences
Campus Address: 3124 WSW Rm 3118
Email: terrytho@umflint.edu
Phone: 773-203-5722

Graduate Students in These Programs May Apply: Anesthesia (MS/DrAP); Business Administration (MBA/Certificate); Education (Ed.D./Ed.S.); Education (MAC Program); Educational Technology (MA); Health Education (MS); Public Administration (MPA); Public Health (MPH); Social Sciences (MA)

Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: I will be conducting surveys in local barbershops within the Flint area. Respondents will be asked to fill out a survey that will address why men don't seek help for health related issues.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The GSRA would assist by administering surveys, collecting the surveys, and possibly doing some data entry.

Specific Day/Time Requirements: Fridays (3-7pm)
Saturdays (12-4pm)
This will continue until a sufficient number of survey respondents have been captured; N> 400.

Special Requirements: Students will be requested to go into barbershops within diverse communities in Flint and administer surveys.
Job ID: 80617
Project Title: Neighborhood, economic, geographic, and demographic health determinants

Faculty Name: Gergana Kodjebacheva
Department: Public Health and Health Sciences
Campus Address: 3124 William S White Building
Email: gergana@umflint.edu
Phone: 810-732-3172

Graduate Students in These Programs May Apply: Accounting (MSA); Anesthesia (MS/DrAP); Business Administration (MBA/Certificate); Early Childhood Education (MA); Education (Ed.D./Ed.S.); Education (MAC Program); Educational Technology (MA); English Language and Literature (MA); Health Education (MS);
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The research investigates public health issues, specifically the effect of neighborhood, economic, geographic, and demographic factors on people's health.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The student will perform literature searches. The student will map people's health status by zip code or census tract. The student will participate in community meetings that seek to promote the health of people in Michigan. If interested, the student will co-author a paper for publication.

Specific Day/Time Requirements: The days and times are flexible.

Special Requirements: The GSRA will be trained. Strong writing skills are preferred.
Job ID: 80618
Project Title: Assessment of Lifestyle Choices and Sexual Health Intervention of At-Risk Young Adult Women over the age of 18 who live in Genesee County.

Faculty Name: Shan Parker
Department: Public Health and Health Sciences
Campus Address: 3124 William S White Building
Email: shanpark@umflint.edu
Phone: 810-762-3172

Graduate Students in These Programs May Apply: Health Education (MS); Public Health (MPH); Social Sciences (MA)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: This project is two fold: There is an ongoing healthy lifestyle choices survey where data are being collected from adults over the age of 18 to assess their sexual risk taking behaviors. The GSRA will be responsible for helping to continue the implementation and data analysis of survey results. The second part of the position involves the development and implementation of a sexual health intervention focused on women of color over the age of 18 who live in Genesee County. The study addresses sexual health promoting the use of barrier protection in the prevention of disease and unplanned pregnancy. The intervention will concentrate around the concept of healthy relationships focusing on basic HIV/STD knowledge, behavior modification skills such as condom use and partner communication along with decision making skills and being an overall healthier individual in all dimensions of health (physical, mental, emotional, social, and spiritual).

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The GSRA would be responsible for assisting in the development of manuscripts for publication including data analysis, writing literature reviews, researching journals and journal articles to be included in the literature review. GSRA is responsible for developing both poster and oral presentations for submission to conferences. GSRA will assist in data collection of ongoing survey instrument assessing sexual health and risk taking factors of adults over the age of 18. GSRA will be responsible for assisting in the development and implementation of sexual health workshops both on and off campus for adult women over the age of 18. Would assist in developing blogs for a sexual health website specific to healthy sexuality.

Specific Day/Time Requirements: Willing to work with student’s schedule and specify specific date and time that works for us both. Will need to work some evening during intervention implementation which are to be determined.

Special Requirements: Knowledge of SPSS and descriptive data analysis, strong oral and written communication skills. Health education and promotion or public health background preferred. Expertise in sexual health preferred. Student must have had a course in Public Speaking.
Job ID: 80619
Project Title: Analyzing Race/ethnicity, socioeconomic trajectories, depression, and chronic conditions over the life course in the Panel Study of Income Dynamics

Faculty Name: Vicki Johnson-Lawrence
Department: Public Health and Health Sciences
Campus Address: 3124 William S White Bldg
Email: vickij@umich.edu
Phone: 734-762-3172

Graduate Students in These Programs May Apply: Computer Science and Information Systems (MS); Health Education (MS); Nursing (MSN/DNP); Public Health (MPH); Social Sciences (MA)

Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: This project utilizes multiple statistical approaches using a longitudinal data source to identify racial/ethnic differences in (1) social determinants of health and (2) mental and physical health outcomes from a life course perspective. These data allow us to evaluate mental and physical health simultaneously, as individuals who are disadvantaged or highly vulnerable to the negative experiences associated with lower socioeconomic status are also more likely to experience both mental and physical health outcomes, and may in fact suffer from both mental and physical health outcomes concurrently. These findings may provide evidence of particular stages in the life course at which the UM-Flint Public Health faculty can design or evaluate interventions (particularly those that rely on medical treatment) to serve as a method of secondary prevention from advanced chronic disease burden, and particularly among disadvantaged and/or minority adults. Findings from these analyses will provide clearer evidence regarding the interaction of mental and physical health, and racial differences in these relationships at different life course stages. The Flint patient care data accessible by the Public Health faculty would allow us to test, on a local level, whether individuals with mental health needs are at increased risk for multiple physical health problems. Further, we could develop and assess whether there are interventions that can be implemented once but potentially have sustaining effects for supporting better physical health.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The GSRA would be responsible for utilizing the SAS programming language to manage and perform initial analyses of the longitudinal data. This person would also be responsible for retrieving the specific data required for analyses from the PSID web page, which would include development and maintenance of detailed codebooks and records of the variables available, their formats, and any updates of the information. The GSRA will be included as a co-author on the manuscripts produced as a result of the GSRA’s efforts.

Specific Day/Time Requirements: None identified

Special Requirements: Experience with SAS, Excel, SPSS (preferable, but not required). The student is not required to be on campus for all work performed, but must be available to come to campus for regular bi-weekly meetings and at least 5 hours of time in office every two weeks.
Job ID: 80620

Project Title: Online Learning in Accounting Courses

Faculty Name: Clement Chen
Department: School of Management
Campus Address: 2107 Riverfront
Email: clementc@umflint.edu
Phone: 810-762-3267

Graduate Students in These Programs May Apply: Accounting (MSA); Business Administration (MBA/Certificate)
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: This research project examines factors that affect the learning outcomes of students in online accounting courses.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The GSRA will conduct literature review for the research project.

Specific Day/Time Requirements: None identified

Special Requirements: None.
Job ID: 80621
Project Title: Business Processes Analysis and Accounting Systems Design Using Web 2.0 Virtual Market Simulation

Faculty Name: Jacob Peng  
Department: School of Management  
Campus Address: 2114 Riverfront Center  
Email: jcpeng@umflint.edu  
Phone: 810-762-3160

Graduate Students in These Programs May Apply: ANY Graduate Student; Accounting (MSA); Business Administration (MBA/Certificate)  
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The purpose of this research project is to create a meaningful simulation for students to learn the mapping between business processes and accounting cycle. To this end, this project plans to experiment a creation of a virtual market using Second Life platform. Participants in this virtual market will be able to trade with each other and retain trading records for accounting purposes. Second Life has been widely recognized as a learning tool that provides an engaging environment for students. Furthermore, Second Life can be used to promote collaborative learning that engaging and constructivist activities can be provided. Such environment may not be replicable in a traditional classroom. In addition to creating a virtual market for participants to trade, an emphasis will be placed on the mapping of accounting cycle and business processes with a complete record keeping mechanism. Two accounting cycles will be implemented in the virtual simulation: sales cycle and purchase cycle. In the sales cycle participants need to first develop a product list and incur administrative expenditures such as marketing expense. When products are sold sellers need to determine the credit policy and collect cash. The cycle will end with cash collection. In the purchase cycle participants need to act as a buyer and purchase products from the virtual market. This cycle starts with a decision to buy a particular product and followed by a purchase order prepared and sent to the seller. When products are delivered the buyer needs to examine the product and then issue payment. The cycle ends with cash disbursements. The virtual market will be able to accommodate the need of both buyers and sellers at the same time, without sacrificing the feel of reality. Furthermore, each participant can experience two different roles and process transactions from two different perspectives. This simulated, immersive environment will be difficult to replicate in a traditional classroom.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: 1. Help with literature collection and review.  
2. Help with computer system design and implementation. (Training will be provided.)  
3. Help with project logistics.  
4. Help with data collection.  
5. Other related tasks. The professor may have other research projects this GSRA needs to get involved with.

Specific Day/Time Requirements: None identified

Special Requirements: Good working ethics REQUIRED. Business students are preferred.
**Job ID:** 80622  
**Project Title:** An Investigation into Effects of Perceived Fairness of Course Policies

**Faculty Name:** Jie Li  
**Department:** School of Management  
**Campus Address:** 2150 Riverfront Center  
**Email:** drjieli@umflint.edu  
**Phone:** 810-424-5588

**Graduate Students in These Programs May Apply:** ANY Graduate Student  
**Work could be done by someone not coming to campus (e.g., online or non-local student):** No

**Project Description:** Our aim in this research project is to investigate the degree to which justice and fairness practices will spur students to make proactive improvements to their business writing. Operant conditioning would suggest that if a professor makes spelling errors painful enough, students will stop making them. However, attitudes and efficacy toward writing are not likely to change in the face of draconian grading policies. Rather, we believe and aim to demonstrate through a naturally occurring field experiment that when grading policies are combined with higher levels of information about the reasons for these policies and the benefits to students of adhering to strict writing standards, that greater improvements in writing ability and in attitudes towards writing will derive. We aim to present a model for the pedagogy of writing in business curricula through this project.

**Semesters Desired:** Fall 2013 AND Winter 2014

**GSRA Position Description:** GSRAs will evaluate e-mails received by faculty from undergraduate students as to their correctness in terms of style, grammar, and spelling. They will be provided a rubric that will indicate penalties for spelling, grammar, and style mistakes

**Specific Day/Time Requirements:** N/A. This work can be done at any time during each week of the semester.

**Special Requirements:** GSRAs should demonstrate high levels of proficiency with the English language. As part of the selection process, GSRAs will be asked to demonstrate their proficiency through cognitive ability tests and/or proofreading exercises.
Job ID: 80623

Project Title: Dissemination of Price Innovations between the Nordic-Baltic and Advanced Stock Markets

Faculty Name: Seyed Mehdian
Department: School of Management
Campus Address: 2109 Riverfront Center
Email: seyed@umflint.edu
Phone: 810-814-0437

Graduate Students in These Programs May Apply: Accounting (MSA); Business Administration (MBA/Certificate)

Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The Nordic-Baltic countries are not only historically, socially, and culturally connected; but they also share very similar economic characteristics and as a result are deeply economically interrelated. Consequently, Nordic-Baltic countries can be considered as a bloc where the information is expected to be transmitted efficiently across the stock markets countries that are the member of this bloc. This efficiency may lead to instantaneous exhaustion of any possible arbitrage opportunities in these stock markets. The objective of this study is first, to determine the correlations among stock markets of these countries and discover which country is potentially the origin of price innovations and volatilities of return. We, further, attempt to examine empirically the process of the diffusion of information across these courtiers. The results and implications of this study are most valuable, specifically, to asset as they managers to establish / structure optimal portfolios. This knowledge becomes more vital as the internationalization and integration of emerging financial market continues at a rapid speed. In order to carry out this investigation, we use three econometric models. These models are estimated in framework lead and lag regression, GARCH, and vector autoregression (VAR). We expect that the results provide evidence to indicate that the Nordic-Baltic stock markets are primarily impacted by the within bloc price innovations and shocks. However, we believe some influence from advanced equity markets outside the bloc such as Western European countries and the United States should not be ruled out.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: To collect data, to do literature search, and possibly assist in model estimations.

Specific Day/Time Requirements: Mondays, Wednesdays, or Fridays

Special Requirements: Be able to collect data and literature.
Job ID: 80625

Project Title: An Investigation into Effects of Perceived Fairness of Course Policies

Faculty Name: Gregory A Laurence
Department: School of Management
Campus Address: 2151 Riverfront
Email: glaurenc@umflint.edu
Phone: 810-424-5527

Graduate Students in These Programs May Apply: ANY Graduate Student
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: Our aim in this research project is to investigate the degree to which justice and fairness practices will spur students to make proactive improvements to their business writing. Operant conditioning would suggest that if a professor makes spelling errors painful enough, students will stop making them. However, attitudes and efficacy toward writing are not likely to change in the face of draconian grading policies. Rather, we believe and aim to demonstrate through a naturally occurring field experiment that when grading policies are combined with higher levels of information about the reasons for these policies and the benefits to students of adhering to strict writing standards, that greater improvements in writing ability and in attitudes towards writing will derive. We aim to present a model for the pedagogy of writing in business curricula through this project.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: GSRAs will evaluate e-mails received by faculty from undergraduate students as to their correctness in terms of style, grammar, and spelling. They will be provided a rubric that will indicate penalties for spelling, grammar, and style mistakes.

Specific Day/Time Requirements: N/A. This work can be done at any time during each week of the semester.

Special Requirements: GSRAs should demonstrate high levels of proficiency with the English language. As part of the selection process, GSRAs will be asked to demonstrate their proficiency through cognitive ability tests and/or proofreading exercises.
Job ID: 80626
Project Title: Analyzing Tweets from USA's Largest Malls

Faculty Name: Sy Banerjee
Department: School of Management
Campus Address: 2128 Riverfront Building
Email: syban@umflint.edu
Phone: 401-243-3206

Graduate Students in These Programs May Apply: Business Administration (MBA/Certificate); Computer Science and Information Systems (MS)
Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: A program has been deployed to collect/mine tweets from 1 mile radius around the top 25 malls in USA. The purpose of the project is to extract information about specific brands and products from the tweets to build weekly brand-sentiment indices from them.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The GSRA should know how to code/use softwares or learn how to analyze/structure textual data. The assistant will need to go through a few million tweets to extract information from them.

Specific Day/Time Requirements: None identified

Special Requirements: An interest in text-mining is required, and even if the student does not know text mining, some technical background is preferred so that they are willing to learn.
Job ID: 80627

Project Title: Public Security, Fear of Crime and Access to Justice in a Caribbean Community

Faculty Name: Joan Mars
Department: Sociology and WGS
Campus Address: 522 French Hall
Email: jrmars@umflint.edu
Phone: 810-762-3340

Graduate Students in These Programs May Apply: Computer Science and Information Systems (MS); Mathematics (MA); Public Administration (MPA); Social Sciences (MA)

Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: Statistical analyses and publication of the results of a public survey conducted in Linden, Guyana in the summer of 2011 on citizen fear of crime, satisfaction with the police and satisfaction with legal aid services.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: Assist in conducting descriptive statistical analyses and factor analyses of data that have already been entered into the SPSS database. Assist in preparing tables, charts and models. Conduct library research and and related tasks as needed.

Specific Day/Time Requirements: Flexible days and times in keeping with the GSRA's schedule.

Special Requirements: GSRA should have working knowledge of the SPSS statistical program and Microsoft Excel.
Job ID: 80628
Project Title: Women in Higher Education: Students and Professors

Faculty Name: Heather Laube
Department: Sociology and WGS
Campus Address: 522 French Hall
Email: hlaube@umflint.edu
Phone: 810-762-3088

Graduate Students in These Programs May Apply: Education (Ed.D./Ed.S.); Education (MAC Program); English Language and Literature (MA); Liberal Studies (MLS); Literacy Education (MA); Public Administration (MPA); Social Sciences (MA)

Work could be done by someone not coming to campus (e.g., online or non-local student): Yes

Project Description: The first, “Feminist Academics: Identity, Profession, Protest,” is a follow-up interview study focused on feminist academics (sociologists). This study explores how these feminist women reconcile their ideals, realities, and identities, practice their politics, conduct their professional work, and structure their personal lives. It analyzes their experiences at different ranks and different types of institutions and how their commitments and experiences differ by race/ethnicity. The second is an ongoing project, “Alumnae of UM-Flint.” I have completed interviews with 57 women graduates of UM-Flint. Questions focused on why they decided to attend, their experiences on campus, juggling work and family, professional work, and social change. This portion of the project will finalize the analysis of the data, complete the review of the literature, and move forward with the book manuscript. In the process we will assess the need to conduct additional interviews.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The GSRA will conduct library research using the library databases (identify relevant literature and summarize), transcribe interviews, gather data about women in higher education, conduct archival research, and other related work as required. She or he may also schedule interviews and conduct individual or group interviews.

Specific Day/Time Requirements: None identified

Special Requirements: Ability to work independently. Exceptional writing skills. Exceptional communication skills. Transcription Skills. Ability to conduct library literature searches with limited guidance. Ability to navigate government and university websites to access information from databases and reports. Understanding of social science research methods. Preference given to candidates with experience and comfort conducting face-to-face interviews.
Job ID: 80630  
Project Title: Costume Stock Graduate Assistant

Faculty Name: Amanda Janke  
Department: Theatre and Dance  
Campus Address: 318 Theatre  
Email: arjanke@umflint.edu  
Phone: 810-762-3449

Graduate Students in These Programs May Apply: ANY Graduate Student  
Work could be done by someone not coming to campus (e.g., online or non-local student): No

Project Description: The Department of Theatre & Dance produces four main stage productions and one dance concert each season, the costumes for each productions go into a storage area to be reused or repurposed for later productions. The Costume Stock Research Assistant would help maintain the costume stock using specific period research and current organizational trends.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description: The Costume Stock Graduate Research Assistant would help maintain good historical accuracy in the organization of the costume stock areas before, after and during all productions during our season. The Research Assistant may also assist the costume shop supervisor in new organization techniques that could then be presented at the annual conference on theatre technology. The Research Assistant may also help with the introduction of a new cataloging system of all historic stock pieces to align our stock methods with that on the Ann Arbor campus. The Costume Stock Graduate Assistant may also help out with requests to borrow costumes from other universities.

Specific Day/Time Requirements: Flexible based on student availability, costume shop is open Monday-Friday 9:00 AM-5:00 PM. Would like Research Assistant to work at least two days a week (3 hrs each day) if possible.

Special Requirements: We are looking for an organized and energetic self-starter who can work independently on historic research projects. A knowledge and interest in fashion history is necessary. If candidate has experience in costume construction repairs of costume stock pieces could be a part of the position.
Job ID: 80633
Project Title: Personal Research Project

Faculty Name: TBA
Department:
Campus Address:
Email:
Phone:

Graduate Students in These Programs May Apply:
Work could be done by someone not coming to campus (e.g., online or non-local student):

Project Description: Students performing research for their academic program of study may be considered for a GSRA position. Examples of personal research include thesis preparation and final project preparation. Students applying for a personal research position must secure a faculty advisor for the project that will be expected to mentor the student and provide feedback to the Office of Graduate Programs.

Semesters Desired: Fall 2013 AND Winter 2014

GSRA Position Description:

Specific Day/Time Requirements: None identified

Special Requirements: None identified