Progress Report: Feasibility Study for the Development of a Sustainability Consulting Firm on Campus

1.0 Executive Summary

Responsible recycle and disposal of waste and/or products at their end-of-life is important to protect valuable and finite resources as well as for the maintenance of the environment that we call home. We each generate waste of a variety of types and it is our responsibility to take care of them in an appropriate manner when they reach their end of life. Many non-profit organizations that make money by reselling products deemed to be at the end of their useful life for one person also receive a lot of items that are truly at their end of life and of no use to anyone else in their current state. An example of such an organization is Kiwanis Club of Ann Arbor Foundation, Inc. As an organization that accepts most household donations worthy of a tax-deduction they receive truck-loads of donations each week. This inevitably amounts to truck-loads of broken, obsolete, or otherwise useless items as well. Given the volume of donations that Kiwanis receives, development and expansion of sustainable systems within their structure in a way that is economically feasible for a non-profit could yield a significant impact on waste reduction, not only for them but for the community that they serve.

Further, non-profit organizations are typically posited in the community in a way that seeks to improve and enhance the community and therefore they often inherently strive to be responsible stewards of the planet. Regardless of the intentions, non-profits are also typically more constrained by man-power, expertise, and financial abilities than private businesses. Therefore, we proposed to establish a cross-disciplinary sustainability consulting firm on the campus of the University of Michigan that is aimed at helping non-profits in the community improve their sustainable culture and practices.

Our founding team is currently comprised of four students from various backgrounds. We have an undergraduate student in the School of Literature, Sciences, and the Arts, a second-year Medical student, and two Masters of Public Health students from the department of Environmental Health Sciences but pursuing different sub-plans. Ultimately, we want to grow our organization to consist of at least 10 members who can effectively facilitate a sustainability consultation at a local non-profit in a year or less. We have proposed a general rubric that each non-profit would be approached with, while specifics would be tailored on a case by case basis to the organizations structure and function. This process begins with a thorough assessment of existing facilities, systems, and resources. Followed by a formal report to be presented to the organizational leadership suggesting areas, and interventions for improvement. Simultaneously an educational document is prepared for approval and then presented to staff and volunteers of the organization by our team members. Following this educational intervention, we will actively put into place the structure and materials necessary for the intervention program. Finally, evaluation of the long-term sustainability of the intervention will be completed over the course of a year.
To test and tweak our proposal for consultation we had to choose a location for a pilot project. An organization that receives large quantities of various donated goods is a prime target for improved, responsible disposal of obsolete or damaged goods. Kiwanis is a 501(c)(3) organization with a local branch in Ann Arbor and seemed to be a perfect fit for our pilot study. The local chapter was established 96 years ago and started raising money via thrift sales 6 years after it was established, but it wasn’t until 1968 that the local branch of Kiwanis had a home-base where it could have more frequent sales. At the downtown Ann Arbor location, Kiwanis has been hosting thrift sales every Saturday from 9 to 1 pm and receiving donations from the community on Fridays and Saturdays for the last 50 years. However, just 3 years ago, with a goal of expanding their enterprise, they purchased an old warehouse facility situated on 17 acres in Scio Township. Following extensive renovations and upgrades the West location was opened mid-2015. This acquisition marked a new and very different outlook for Kiwanis and opened the doors to innovative programs and money-making ventures. But along with these new opportunities came new challenges. Therefore, now more than ever, Kiwanis can benefit from a partnership with the sustainable consulting firm.

2.0 Key Outcomes

2.1 Summary

Since the main goal of this pilot project was to determine the feasibility of starting a sustainability consulting firm on campus that would be dedicated to helping non-profit agencies in the community improve their sustainability via means that were cultural, environmental, and financially sound. Kiwanis Thrift Sale West was chosen because of previous observations that obsolete electronics were not being recycled in a responsible manner. Most of the focus over the summer, for the three months since we received funding was to build our knowledge of, and relationship with, Kiwanis so that we could tackle Approach #1 from our initial proposal in the most efficient directed way possible. It was evident early on that the story and project at Kiwanis was much larger in scope and more complicated than first thought. Therefore, most of the key outcomes to be discussed below are related to relationship building, information gathering, and directional pivoting in response to additional changes that have occurred throughout the summer.

2.2 Partnerships and relationship building

In the short three-month period since our proposal received pilot funding, new and critical partnerships and relationships were formed. By means of tackling Approach #1 from our proposal, we have become integrated with Kiwanis and several important members of their team following several face-to-face meetings, phone calls, and email exchanges. The first addition to our team was Robert Gray. Mr. Gray is a Professor Emeritus from the University of Michigan School of Public Health and currently a consistent lead volunteer coordinator at Kiwanis. He was an excellent addition to the team because not only does he share similar background and interests with the two
environmental health students on the team, but he is very in tune with what flows in and out of the Kiwanis warehouse location as well as the pulse of the volunteers. He is currently in charge of scheduling the shifts for all volunteers in the organization. Therefore, he also acts as a sounding board for concerns and difficulties that the volunteers are facing when sorting and deciding resell ability of all the goods received through donation. The second addition to the team was full-time employee, Mario Gasbarro who is the sales manager at both the Downtown and West locations. He was a critical addition to the team because he has been with Kiwanis as a staff member for many years and therefore has historical knowledge of what processes have and have not worked. He was also instrumental to understanding the status of recycling and resource allocations. Further his ability to articulate the acute challenges present at the new facility that did not exist at the Downtown facility and visa-versa will be very important in the next few months when we design educational materials.

2.3 Information/Data gathering

2.3.1 Sustainable culture

Upon early conversations with both Alan Burg (current President of Kiwanis-Ann Arbor) and other members (Robert Gray and Mario Gasbarro) it became apparent that sustainability and the environment were very important concepts to them and to Kiwanis as a whole, but the focus had taken a backseat due to complications and other priorities stemming from the significant relocation and facility change that was ongoing. Specifically, we were informed that their budget always includes funds for responsible disposal. Even in the presence of ever changing dynamics, Kiwanis has already taken several steps to improve their sustainability at the new West site. Upon occupation of the site they paid DTE to scale back the energy requirements from three transformers that were on site to only one. They have systemically switched all CFL lighting to LEDs throughout the warehouse to reduce energy bills. Through all of this they have also successfully maintained several of their long-standing recycling partnerships. For example, they collect CRT monitors and TVs for pick-up by every 6 months and continue to recycle textiles through Midwest Recycling.

Additionally, shortly after purchasing the West location, they received a $15,000 donation to convert the rear nature area of the property into a nature preserve. They are currently pursuing that venture and plan to call it KEEP. This area backs up to the Township open land so effectively increases the park size for the community. In conjunction with this community effort they have started renting their extra space out to different community groups to host events for little cost.

Finally, although the change from Downtown to the West location means that volunteers and staff will have to learn a new way of recycling and sustainability, the consensus is that everyone is willing and eager to do the best that they can. Passionate volunteers have already started several programs at the West location that ultimately reduce the trash volume. For example, several “shops” have been set up where items
like bicycles and lamps are repaired. Another is in the works that will be dedicated to electronic repair. They have also established a flip-it program in which volunteers use donated furniture items along with donated paints, brushes, and stains, etc. to repurpose items. These items are then sold on the floor for a bit more. Therefore, it seems that our approach to the educational aspect of this proposal will need to focus more on the specific changes between locations rather than improving the culture overall.

**2.3.2 Facilities**

During early conversations with the members of Kiwanis we learned that they plan to liquidate the Downtown location by the end of this year. This means that all unsold items must be transferred to the West location for sale. Kiwanis is not planning to do this all in one moment but instead are planning to end the sale of certain items each week over the next couple months as the designated rooms for that item are brought online following extensive renovations at the West location.

The new location West is a very large warehouse. In fact, it is more than 4 times that of the Downtown location. The increase in building size was a good thing for several reasons, including:

1) Increase in the amount of accepted donations
2) Space for innovative resale programs to increase revenue
3) Space for tenants who can cover the cost of the building
4) Ability to host community events in the space

Along with the warehouse came a 42-yard waste compactor. They are currently piloting its use for cardboard which they have self-identified as their largest waste stream. Although we also discussed that it be used for general trash to reduce the frequency of pickup, and thus the cost. The details for its most effective use are still being worked out. Unfortunately, this compactor is located at the far end of the warehouse which is a rather inconvenient place for Kiwanis, see Image 1. Retrofitting and moving the compactor will cost them $15,000 which they have budgeted but have yet to do. Once this move is completed we will work with Kiwanis to determine the most cost-effective use of the compactor to quickly offset the money spent.

**2.3.3 Resources in the area**

Originally, our conversations about available recycling resources in the area started with Anthony Saba, Kiwanis account manager at Waste Management, because they were the company that did both waste pick up and processing for Scio Township. Although Waste Management has the infrastructure to recycle many items, the methods available for most of the waste streams generated by Kiwanis are very expensive. This is because they must transport several of their collected waste streams to distant locations for processing. Therefore, the costs of these transports are charged to the customer. This, in most circumstances is not an economically feasible option for
Kiwanis. However, it was discussed, that it could be financially beneficial for Kiwanis to reduce their trash pick up to only once a month, rather than weekly. Following this information, a significant portion of the next several weeks was dedicated to trying to identify independent recyclers who could partner directly with Kiwanis for certain waste streams.

This research process was halted, approximately mid-summer when a significant change in waste processing occurred. Significant system level changes occurred at the township level. Recycle Ann Arbor won the contract for Scio Township and are working on implementing a Township wide recycling program as we speak. The main hurdle to this implementation is the finalization of new contracts between Recycle Ann Arbor and the now to be “hauler” (Waste Management). Once a new contract is completed it is expected that the cost to several waste streams collected by Waste Management should significantly decrease because Recycle Ann Arbor is now the processor and is significantly closer. Further, conversations that we have had directly with Recycle Ann Arbor have indicated the potential for a direct partnership between Recycle Ann Arbor and Kiwanis for certain, high volume waste streams. As a result, the next few months will also focus on putting real numbers to waste streams and facilitating this partnership.

3.0 Identified Challenges

3.1 Team short-comings and areas of weakness

MANOPOWER: Throughout the challenges encountered over the last three months we have identified several short-comings of our existing team. First and foremost, we need more members to make this project work. A team of four members, with very busy schedules is not sufficient to make significant headway on a project of this scope in this short of time.

DIVERSITY and EXPERIENCE: This project would also benefit from a wider variety of backgrounds. An engineer would be helpful to help design and evaluate effective and efficient interventions. A person with a business background (specifically one focused on non-profit administration) would be helpful to facilitate interfacing with Kiwanis on the budgetary level. Finally, an individual with either a policy or local government background would be very helpful to navigate the recent changes within the municipality as well as their interpretation in our context. Since no one on our existing team has had explicit experience in a project like this, or has any of the aforementioned expertise, we are each constantly learning as we go, therefore, more minds and ideas would be very helpful.

AVAILABILITY: We have also realized that due to the presence of only one full-time employee currently split between two locations as our only consistent contact, eyes, and ears, we need a stronger team presence from us to push this forward. Ideally, going forward we want to have at least one team member at Kiwanis each Saturday during the accessible hours of 9 to 1 pm, collecting hard data and observing.
3.2 Facility limitations

SPACE FOR COLLECTION: Currently there is no single designated location for collection of recyclable waste by stream. The limitation here is space to collect the recyclables/donations so that there is an incentive (a large amount) for the recipients to pick up. A certain amount of space can be justified if this is a profitable venture. It has been purposed to have small area specific collection sites. Since Kiwanis is dividing the warehouse into item specific rooms, this is at current the most feasible and manpower efficient option. In the upcoming month, this will be piloted in a few item specific areas and evaluated.

MANPOWER: In terms of moving forward toward more sustainable approaches, manpower seems to be one of the biggest hurdles. Kiwanis-Ann Arbor, only has 1 full-time, 5-7 part-time employees and therefore depends on volunteers who work on average 5 hours a week to do the rest. There are between 75-100 working volunteers.

RECORDS: One of the primary goals for the summer was to quantify the amount (in raw numbers and weight) of different categories of items that left the facility through each of the already established recycling streams. We were to use invoices and packing slips from these exchanges to do this. Several of these established streams are purchased by recycling companies from Kiwanis while other streams are simply donated. We also planned to analyze the amount of money being generated by each stream and whether those amounts were above the costs of isolating those individual streams so that we could determine if there was extra earned money that could be spent on investment into other waste streams. Further, we planned to help Kiwanis centralize this information into a spreadsheet that could be kept up-to-date for use at general board meetings when budgeting decisions were to be made. Unfortunately, this portion of the project is currently at a stand-still because isolation of the necessary documents has been significantly complicated by the move and transition. We are hopeful that they will be available soon and we can still do this evaluation in the next few months.

4.0 Ongoing project plan

Since much of the summer was spent on preliminary relationship building and information gathering of what systems and methods were already in place at Kiwanis, had been in place at Kiwanis in the past, and were already proposed for placement in the future. A key component of this was the assessment of why certain systems and methods failed and others succeeded.

Additionally, a significant portion of the research was dedicated to understanding how resources and the waste systems available differed between their old downtown Ann Arbor location and this new Scio Township warehouse location. Initially there was a significant lack of knowledge by both the U of M Sustainability Consulting team as well as members of Kiwanis as to how exactly this new geographical location would affect not only the availability and accessibility of certain recycling streams but also their cost.
Considering that the contract was awarded to Recycle Ann Arbor, the research into available recycle resources will need to be updated significantly and will be one of the primary focuses over the course of the next couple months. We must work to fully understand what will change with the full move the West location and the acquisition of recycling services in Scio Township by Recycle Ann Arbor. There were several limitations to the waste streams that could be recycled through Waste Management in a manner that was economically feasible for a non-profit. Several conversations with Recycle Ann Arbor have made it apparent that due to the volume of certain recyclables that Kiwanis produces (i.e., glass, plastics, wood, cardboard) it is likely that we can set up a special partnership. Over the next few months, we will continue to work with Recycle Ann Arbor to finalize the contract of a partnership in which Recycle Ann Arbor either allows Kiwanis West into the drop off facility on Ellsworth at a discounted rate or picks up certain waste streams directly from the Kiwanis site.

Further, the situation with Kiwanis seems much more dynamic than was first thought because at this new facility they will be renting out small spaces within the warehouse to other businesses. This is meant to cover their payments on the facility as well as utilities but would ultimately free up funds for some other initiatives that they feel passionate about. However, significant costs have gone into upgrading the building, facilities, and electrical infrastructure in the building which has in turn created large one-time waste streams that Kiwanis is looking for a way to deal with. These upgrades and remodeling are to be finished by the time that sales end at Kiwanis in downtown Ann Arbor which is scheduled to be the end of October. Shortly before the remodeling is finished we will meet with Kiwanis again to identify all waste streams that need to be sent or picked up for recycling. We will help Kiwanis identify locations for disposal of these items. We expect there to be old office furniture, old light fixtures, and old electrical conduit. One of the initial initiatives that Kiwanis implemented upon acquiring the site was to replace all CFL lighting with new energy efficient LEDs, which we expect to be completed soon as well. Therefore, there is also a large CFL bulb collection on site that will need a disposal stream.

To move the quantification of waste streams forward, the UM sustainability consulting firm plans to return to the West facility in October and November to manually take inventory of incoming goods and out-going goods to various streams (trash, recycling, and donations). This data will help us determine the streams that are working well and those that are not in lieu of the invoices that are currently unavailable. At the same time part of the team will identify areas in the new item designated spaces that recycle canisters can be placed for easy collection.

Finally, to address the short-comings in manpower, expertise, and availability in our consulting team we will continue to recruit from all departments around campus. Over the summer we sent emails to several groups and departments around campus but many students were not on campus for the summer. We did receive interest from two students, one each from the Ford School of Public Policy and the School of Natural
Resources and the Environment but they were unavailable until September. We plan to meet with them in the next couple weeks to give them some more background and assign tasks. We will repeat our email outreach now that school is back in full session and more students are back on campus. We will also spend time developing a more sophisticated outreach campaign.

Due to the challenges related to the changing home-base of Kiwanis, the change to municipal recycle/waste pick up, the short-comings in our team, and limited time available in the last 3 months, that we have encountered with the implementation of this proposal, we are not seeking additional funding now, but hope to seek additional funding in the future following full implementation and analysis of this proposed consultation.

**Image 1.** 42-yard compactor currently used for cardboard.
Lauren M. Smith  
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989-590-0529 laumarie@umich.edu

Education

University of Michigan, Ann Arbor, MI  
May 2018  
Master of Public Health in Environmental Health Sciences  
Occupational and Environmental Epidemiology  
- Global Health and Risk Assessment Certifications

Wayne State University, Detroit, MI  
May 2012  
Master of Science in Biomedical Engineering  
May 2011  
Bachelor of Science in Biomedical Physics

Alpena Community College, Alpena, MI  
May 2008  
Associates of Science in Applied Science

Experience

University of Chile School of Public Health, Department of Biostatistics, Santiago, Chile  
June 2017 – August 2017  
Internship  
- Management and implementation of a field study that investigated the health of formal and informal electronic waste recyclers in 3 communities in Chile

University of Michigan School of Public Health, Department of Epidemiology, Ann Arbor, MI  
Dec 2016 – Present  
Research Specialist I in Center for Midlife Science  
- Digital archival of radiographs from various longitudinal studies

University of Michigan Health Systems, Department of Orthopaedic Surgery, Ann Arbor, MI  
Research Specialist II in Orthopaedic Research Labs  
- Managing the computed tomography imaging core facility

Aug 2012 – Aug 2016  
Research Lab Specialist Intermediate in Orthopaedic Research Labs  
- Managed and maintained mouse colony and large data sets  
- Published in peer-reviewed scientific journals and presented abstracts at international meetings  
- Mentored many graduate and undergraduate students  
- Developed nano-computed tomography imaging protocols and analysis  
- Analyzed tissue samples using cell and molecular biology techniques  
- Proficient in analysis software (i.e., GraphPad Prism and Minitab)

Wayne State University, Physics Department, Detroit, MI  
May – Aug 2011  
Research Lab Assistant  
- Designed new temperature sensitive collagen gel for iron oxide nanoparticles  
- Enforced chemical safety in the laboratory

Commercial Experience

Home Depot Measurement Service, Oak Park, MI  
July 2009 - Aug 2012  
Customer Service Support  
- Team leader of ten employees  
- Employee of the Month

Wendy’s, Westland, MI  
July 2008 – Aug 2009  
Crew Member  
- Employee of the month twice

Panel Processing Inc., Alpena, MI  
Dec 2004 - May 2008  
Accounting Assistant
Awards and Honors
2016 – 2017  Dean’s scholarship
2016 – 2017  Environmental Health Sciences Department scholarship
2009 – 2011  Cum laude
2010 – 2011  Physics department scholarship
2009 – 2011  Dean’s List
2007 – 2011  Dean’s List
2006 – 2008  Full tuition scholarship via NJCAA Women’s Basketball

Service/Extra-curricular Activities
2017 – Present  Department of Environmental Health Sciences DEI committee
2016 – Present  Environmental Health Student Assembly
  • Facilitated a zero-waste internship round table event
  • First year representative
2016 – Present  Public Health Sustainability Initiative
  • Responsible for the implementation of pen/pencil and battery recycling in the School of Public Health
  • Team initiative to design a green roof for one of the SPH building
2014 – Present  Planet Blue Ambassador
  • Instrumental in Sustainable Lab Recognition with planet blue - GOLD level
  • Implemented new and improved existing lab waste recycling programs
2013 – Present  Volunteer at the Humane Society of Huron Valley
  • Certified cat comforter
2009 – 2011  Member of the Society of Physics Students
2006 – 2008  NJCAA Women’s Basketball
  • Captain

Mentoring at the University of Michigan

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<td>Undergraduate</td>
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<td>Antonio Ciarelli</td>
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<td>R.J. Nakula</td>
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<td>Stephen Schlecht</td>
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<td>Noah Mathis</td>
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<td>Holly Moore</td>
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<td>Nicholas Kondaleon</td>
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Peer-reviewed


Smith LM, Xin F, Susiarjo M, Bartolomei MS, Jepsen KJ. 2016 Multi-generational effects of bisphenol A (BPA) on bone structure and function are sex dependent. 2017. *Re-submitting*

Nakkula RW, Smith LM, Bigelow EMR, Nolan BT, Ramcharan MA, Vedolich K, Thompson C, Jepsen KJ. Secular changes in sexual dimorphism of deer mice over 85 years. *In preparation*

Abstracts


Smith LM, Susiarjo M, Bartolomei MS, Jepsen KJ. Multi-generational effects of Bisphenol-A (BPA) on bone structure and function are sex dependent. 37th Annual Meeting of the American Society for Bone and Mineral Research, Seattle, WA, 2015.


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MEDICAL EDUCATION

2016-2020 University of Michigan Medical School, Ann Arbor, MI
MD Candidate, Class of 2020

UNDERGRADUATE EDUCATION

2010-2013 University of Michigan, Ann Arbor, MI
Bachelor of Sciences in Cellular and Molecular Biology with Highest Distinction, Dec 2013
Cumulative GPA: 3.96/4.00; Major GPA: 3.97/4.00
MCAT: 37 (Physical Sciences: 12, Verbal Reasoning: 11, Biological Sciences: 14)

2011 Muskegon Community College, Muskegon, MI
Coursework: Calculus II
GPA: 4.00/4.00

2014 Lansing Community College, Lansing, MI
Coursework: Child Psychology
GPA: 4.00/4.00

FELLOWSHIPS, HONORS & AWARDS

1/2017 – 12/2017 Dow Masters/Professional Sustainability Fellowship
6/2014 – 6/2016 Postbaccaulaureate Intramural Research Training Award (IRTA) Fellowship
12/2013 Highest Distinction in the Cellular and Molecular Biology Major
4/2013 Phi Kappa Phi Honor Society Member
12/2011 Golden Key International Honor Society
6/2012 – 6/2016 National Institutes of Health Undergraduate Scholarship Program
3/2011 William J. Branstrom Freshman Prize
2/2010 National Merit Finalist
4/2010 University of Michigan LSA Kessler Presidential Scholarship Award

RELEVANT EXPERIENCE

Postbaccaulaureate Intramural Research Training Award (IRTA) Fellowship
Research Experience: Conducted clinical research examining pathophysiological and clinical correlates of severe mood dysregulation and bipolar disorder in pediatric population. Preprocessed, quality checked, and conducted individual- and group-level analyses of functional magnetic resonance imaging (fMRI) data using Analysis of NeuroImages (AFNI) and Unix. Compiled and organized Structured Clinical Interview for DSM Disorders (SCID) data in order to analyze the relationship between parental and child diagnoses. Distributed and updated the weekly fMRI scanning schedule for the ED Branch scans. Presented data in poster presentations.
Clinical Experience: Managed a longitudinal, outpatient case load (n=50). Scheduled, coordinated, and ran visits for pediatric patients with severe mood dysregulation (DMDD), bipolar disorder and ADHD as well as children at familial risk for bipolar disorder and adults with bipolar disorder. Tracked and verified patient clinical scan results and report abnormalities to staff psychiatrist. Administer behavioral tasks, questionnaires, neuropsychological tests [Wechsler Abbreviated Scale of Intelligence (WASI)], and fMRI scanning simulation training to patients. Conducted telephone screens for potential study participants. Coordinated stays for inpatients participating in double-blind placebo controlled drug trial for severely irritable children. Attended case
presentations, interdisciplinary meetings, therapeutic family meetings and rounds on the inpatient clinic as well as weekly lab meetings.

**1/2014 – 6/2014**

**Novel Responses, Inc.**  
*Behavior Technician*

**Clinical Experience:** Mastered the Applied Behavior Analysis method of behavior modification and language skills instruction. Implemented an in-home, one-on-one behavioral intervention for a child with Autism Spectrum Disorder (ASD). Facilitated the development of both non-verbal (American Sign Language) and verbal language skills in a child with ASD and used natural environment play therapy to encourage appropriate social behaviors. Documented client progress daily and participated in monthly care team treatment development meetings.

**9/2010 – 3/2013**

**University of Michigan School of Dentistry, Department of Biologic and Materials Sciences, Mentor:** Brian Pierchala  
*Research Assistant*

**Research Experience:** Investigated the mechanism of GDNF receptor kinase Ret retrograde transport in sympathetic neuron axons. Designed a cloning strategy for the creation of a lentivirus containing a gene for a fluorescent Ret isotope (Ret-Kikume and Ret-Dendra) that was used to infect rat sympathetic neurons. Extracted and cultured sympathetic cervical ganglion neurons from fetal rats for use in transfection experiments. Developed live cell imaging in sympathetic neurons in order to observe the mechanism of retrograde axonal transport of activated Ret complexes. Acquired and analyzed confocal microscopy images to determine rate and mechanism of Ret complex degradation. Designed western blot analysis protocol to confirm degradation findings. Presented data in poster presentation. Assisted in manuscript preparation.

**6/2012 – 8/2012**

**National Institute on Aging, Laboratory of Neurogenetics, Mentor:** Huaibin Cai  
*Undergraduate Scholarship Program (UGSP) Scholar*

**Research Experience:** Researched the role of LRRK2 protein in neural development and sporadic Parkinson disease. Optimized transgenic mouse models for in vivo and in vitro study of the effect of dopamine deficiency on intracellular signaling in striatal neurons. Utilized western blot analysis to assess changes in phosphorylation of GluR1, CREB and cofilin proteins in LRRK2 -/- and LRRK2 +/+ mouse models to determine the effect of LRRK2 on PKA pathway functioning. Acquired and analyzed images of mouse striata to determine the morphology and density of dendritic spines on striatal medium spiny neurons in LRRK2 -/- and LRRK2 +/+ mice. Led lab meeting about the use of optogenetic technology in alleviating Parkinson’s symptoms in affected mouse models. Presented data in poster presentation. Assisted in manuscript preparation.

**8/2009 – 8/2010**

**Great Lakes Bioenergy Research Center, Michigan State University Department of Plant Biology, Mentor:** Carolyn Malmstrom  
*Research Assistant*

**Research Experience:** Analyzed over 500 viral RNA samples isolated from plant tissue collected in the field, providing insight to barley yellow dwarf virus prevalence and movement patterns across southern Michigan. Mastered and optimized reactions such as reverse transcription, polymerase chain reaction and RNA extraction in order to enhance product quality and yield. Contributed to the discovery of a plant virus novel to southern Michigan and analyzed the sequence of the new virus in order to determine its origin and evolutionary relationships.

**EXTRACURRICULAR ACTIVITIES**

**10/2015 – 6/2016**

**Grid Alternatives, Washington, DC**  
*Volunteer,* Assisted in no-cost home solar panel installations for income-qualified residents of DC. Contacted qualified residents to inform them of affordable and no-cost solar systems available to them.

**9/2014 – 6/2016**

**So Others Might Eat, Washington, DC**  
*Mentor at Jordan and Mary Claire Houses,* Visited residents of Jordan House and Mary Claire House, community-housing alternatives to psychiatric hospitalization, twice weekly. Prepared and shared family-style meals with residents. Organized and accompanied residents on outings to stores and attractions in the metro DC area. Brought about positive behavioral change by building trust and relationships with residents.

**9/2012 – 6/2013**

**Ann Arbor Animal Hospital, Ann Arbor, MI**
Volunteer, Shadowed a veterinary surgeon during procedures such as routine dental cleaning, neutering/spaying, declawing, tumor removal and ACL reconstruction surgery. Aided in preparing animals for surgery. Observed and participated in pre-and post-op visits with owners.

2/2011 – 5/2014 Young Life College at University of Michigan, Ann Arbor, MI
Student Leader and Music Director. Participated as a member in three Spring Break service trips to the Dominican Republic. Planned weekly club meetings and developed vision for the group as member of the YLC Leadership Team. Spoke at several club and Leadership meetings about personal experiences. Mentored several underclassmen, including band members. Volunteered as a High Ropes Course instructor at Young Life’s Saranac Village Camp in New York during August 2013. Attended the 2014 Young Life Student Staff Conference in Chicago as a member of the YLC Student Staff to develop a deeper understanding of and vision for college ministry. Organized and led band practices and performances at weekly club meetings, semiannual Worship Nights, and annual Fall and Spring Retreats. Recruited and trained band members to take over leadership roles.

PUBLICATIONS AND PRESENTATIONS


RELEVANT COURSEWORK

- Genetics with Lab
- Neurobiology
- Genes, Circuits and Behavior
- Epigenetics
- Evolution
- Biochemistry
- Cell Biology
- Molecular Biology
- Immunology
- Child Psychology
- Introduction to Statistics

RELEVANT SKILLS & TRAINING

Computer & Data Analysis
Microsoft Office (Word, Excel, Outlook, Access & PowerPoint), SPSS, Analysis of Functional NeuroImages (AFNI), Unix, BioEdit and MEGA 5 (oligonucleotide analysis)

Laboratory Equipment and Techniques
TCS SP5 II Confocal Microscopy, Cryostat, Tissue Extraction, Primary Neuron Culture and Transfection, Immunoprecipitation, Subcloning, Western Blot Analysis, Animal Care and Use Certified

Neuropsychological & Clinical Assessments
Wechsler Abbreviated Intelligence Scale (WASI), Applied Behavior Analysis

Language Proficiency
Conversational Spanish
Christopher Gerard Schaitkin
441 South 1st Street • Ann Arbor, MI 48103 • cgschait@umich.edu • (724) 216-3959

**Education:**

University of Michigan School of Public Health
Ann Arbor, Michigan
Master of Public Health, Environmental Quality and Health

September 2016 - Present

University of Michigan Rackham Graduate School
Ann Arbor, Michigan
Master of Science, Physiology

September 2015 – June 2016

University of Michigan College of Literature, Science, & the Arts
Ann Arbor, Michigan
Bachelor of Science, Economics

September 2011 – May 2015

**Extracurricular Activities:**

Treasurer, University of Michigan Environmental Health Students Association
Ann Arbor, Michigan
May 2017 - Present

Plan events put on by the Environmental Health Students Association

Manage the organization’s funds and budget

Executive Director, Marketing, Relay For Life at the University of Michigan
Ann Arbor, Michigan
May 2013 – May 2015

Led a large team in staging the second-most widely attended event on campus

Worked with Relay For Life executives in other areas to best direct the organization

Invited to attend several regional leadership conferences

Fundraised more than $700,000 over two years

Member, Michigan Economics Society
Ann Arbor, Michigan
May 2014 – May 2015

Volunteer Coach, Ann Arbor Rec & Ed Youth Basketball
Ann Arbor, Michigan
January 2014 – May 2014

Director, Relay For Life at the University of Michigan
Ann Arbor, Michigan
September 2011 – May 2013

**Work Experience:**

Server, Real Seafood Company
Ann Arbor, Michigan
July 2014 – March 2015

Interacted extensively with guests to ensure a quality dining experience

**Achievements:**

- University of Michigan Honors
- Leaders For Life Conference invitee
- University of Michigan School of Public Health Dean’s Scholarship recipient

**Skills and Strengths:**
• Trained in Microsoft Office Suite and SPSS
• Spanish language proficiency
• Passionate and hard-working
PABLO NUÑEZ

734-846-7371
pnunez@umich.edu

2121 Crestland St.
Ann Arbor, MI
48104

Education
University of Michigan, Ann Arbor, MI
• Expected Graduation: May 2019
• Major: Program in the Environment (PitE)
• Minor: Political Science
• Supplemental Study: Graham Undergraduate Sustainability Scholars Program
• GPA: 3.452/4.000

Experience
Student Research Assistant at University of Michigan School of Natural Resources and Environment — September 2016-Present
• Ecological Impacts of Large-scale Land Transactions in Africa
• Analyzing changes in land cover and patterns in land changes over time in Ethiopia using ArcGIS and other mapping software

Student Research Assistant in Merchant Laboratory at University of Michigan Biomedical Science Research Building — June 2014-August 2014
• Identified genes associated with intestinal stem cell differentiation by immunostaining intestinal stem cells using fluorescence microscopy
• Advanced collaboration and scientific research skills through constant communication with other researchers

Server, Blank Slate Creamery, Ann Arbor, MI — May 2016-August 2016
• Developed communication, teamwork, quick-thinking skills through constant dialogue with co-workers and store patrons
• Responded to needs and concerns of store patrons in professional matter

BLUElab: Sa’ Nima’ Collaborative, Project Board and Executive Board — Spring 2016-Present
• Acted as group translator during Sa’ Nima’ Collaborative 2016 and 2017 summer trips to Guatemala; facilitated and moderated discussions between our group and community officials
• Enhanced interpersonal skills by directing English lessons for students while in community
• Collaborated with rest of BLUElab Project Board to improve organization, represented Sa’ Nima’ and helped conduct presentations for funding and recruitment of new members

Circle K International at the University of Michigan, Environment Committee — October 2016-Present
• Completed at least 8 hours of service per month through variety of community organizations and service events (environmental, youth programs, homeless outreach, fundraising, etc.)
• Maintained regular contact with community organizations in order to arrange service projects

Additional
• Bilingual Spanish level (reading, writing, speaking)
• Working knowledge of Esri ArcMap 10.5 (mapping software)
• Basic knowledge of R (statistical computing and graphics software)
Alan Joseph Burg

Retired 2013


Thirty-six years - Lenawee Intermediate School District (LISD), Adrian, MI.

2011 Retired from LISD
2002 - 2011 LISD Assistant Superintendent for Instruction
1998 - 2002 LISD Assistant Superintendent and Special Education Director
1992 - 1998 LISD Special Education Assistant Director & Central Region Supervisor
1990 - 1992 LISD Special Education Regional Supervisor for Adrian and Madison Schools, as well as Adrian area parochial schools
1985 - 1990 Principal, Milton C. Porter Education Center
1984 - 1985 LISD Special Education Supervisor of Psychologists, Social Workers, Teacher Consultants, and the Lenawee County Western Region School Districts
1984 - 1985 LISD Teacher, SXI Porter Center Summer Programs
1975 - 1985 LISD Teacher, TMI Porter Center Adolescent and Young Adult Programs

Two years - US Army

1971 - 1973 Specialist 5, Financial Services, Army Intelligence, Baltimore, MD / Washington DC.

One year - Pinckney Community Schools

1970 - 1971 Teacher, Industrial Education, Metals Fabrication, Pinckney High School, Pinckney, MI

Educational Supervisor and Administrative Experiences

Supervised LISD Instructional Administrators and Staff in the following programs and service areas:

• LISD TECH Center, Young Children Services, Sp. Ed. Adult & Behavioral Services, Laura Haviland Program, Maurice Spear Campus, Adult Learning Services, LISD PREP Academy, and Career Preparation Services 2002 – 2010
• LISD Special Education Regional Supervisors 1999 – 2002
• LISD Campuses: Milton C. Porter Education Center, LISD TECH Center (Vo-Tech), Trenton Hills Learning Center, Stubnitz Environmental Education Center, Center for Sustainable Future (Agri Campus), the LISD Classroom Programs at Madison, Adrian, and Tecumseh Public Schools and LISD Programs at HOPE Community Center in Adrian.
• Established and supported LISD Reproductive Health Sex Ed Advisory Committees 1995 - 2011
• Established and expanded LISD Career Camps
• Expanded Career Preparation Services across Lenawee County
• Established and designed the Program Annual Review (PAR) process for LISD TECH Center
• Design Team for New LISD Evaluation Models for Administrators (2005), Teachers (2007), and Assistants (2010).
• Strategic Planning Lead Team for LISD
• Established Porter Center “off-campus” LISD special education classroom programs starting with the first Community Classroom on Broad St. in Adrian, followed by programs at Springbrook Middle School (Adrian 7/8), Adrian High School, Tipton, Goodwill Industries, Madison School District, HOPE Community Center, and Trenton Hills Learning Center.
• Established SMI and SXI classroom-based Language and Communication programs
Related Experiences

- President of Kiwanis Club of Ann Arbor 2016-17
- A2Y Leadership Class of 2015
- President of Kiwanis Club of Tecumseh 2009-10
- Vice President Foster Grandparent Program Lenawee/Monroe/Hillsdale Advisory Board 2010
- Vice President HOPE Community Center Advisory Board 2010
- Vice President Lenawee County Phi Delta Kappa Vice President 1998
- Presented at National and State Professional Conferences 1985 - 2010
- Leadership Lenawee Class of 1998
- Member of State Review Committee for Outcome Indicators for Autism, 1987 – 1989
- Executive Director, Respite Care Center Programs, ARC/Lenawee, 1985 – 1988
- Member, Lenawee Supportive Employment and Transition Projects
- Member, Inter-Agency Committee for Lenawee County agencies and LISD
- Member, Individual Wraparound Teams for students from Adrian
- Member, Lenawee County Transportation Advisory Board

Honors

- LISD Community Service Awards 2009 and 2010
- Foster Grandparent Program Appreciation Award
- FFA Honorary Chapter Degree
- Lenawee County Phi Delta Kappa Educator of the Year 1999
- LISD Special Education Teacher of the Year 1984
- ARC/Lenawee Teacher of the Year 1980

Educational Degrees

Specialist of Arts Degree, December 1993, Special Education Administration and Supervision, Eastern Michigan University

Master of Arts Degree, June 1975, Special Education Mentally Impaired, Eastern Michigan University

Bachelor of Science, June 1970, Industrial Arts Education, Graphic Arts, Eastern Michigan University

Michigan Certifications

- Central Office Administration, 1994, 2009
- Director of Special Education, Full Approval, 1995
- Elementary and Secondary School Administrator, 1990, 2009
- Supervisor of Special Education, 1986
- Teacher K-12, Special Education, Mentally Impaired, 1975
- Teacher K-12, Industrial Arts, Graphic Arts 1970
CURRICULUM VITAE

RICHARD LEE NEITZEL

August 2017

University of Michigan
Department of Environmental Health Sciences
School of Public Health
1415 Washington Heights, 6611 SPH I
Ann Arbor MI 48109
Telephone: 734.763.2870; Fax: 734.763.8095
Email: rneitzel@umich.edu

EDUCATION AND QUALIFICATIONS

PhD Environmental and Occupational Hygiene, University of Washington, Seattle, WA, 2009
MS Environmental Health, University of Washington, Seattle, WA, 1998
BS Safety (Psychology minor), University of Southern California, Los Angeles, CA, 1996
Certified Industrial Hygienist (CIH), Comprehensive Practice, American Board of Industrial Hygiene, 2003

EXPERIENCE

<table>
<thead>
<tr>
<th>Position</th>
<th>Organization</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Professor</td>
<td>University of Michigan (UM) Department of Environmental Health Sciences, Ann Arbor, MI</td>
<td>2016-present</td>
</tr>
<tr>
<td>Associate Chair</td>
<td>University of Michigan (UM) Department of Environmental Health Sciences, Ann Arbor, MI</td>
<td>2016-present</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>University of Michigan (UM) Risk Science Center and Department of Environmental Health Sciences, Ann Arbor, MI</td>
<td>2011 – 2016</td>
</tr>
<tr>
<td>Visiting Researcher</td>
<td>Environmental and Occupational Medicine, Sahlgrenska University Hospital, University of Göteborg, Göteborg, Sweden</td>
<td>2012 – present</td>
</tr>
<tr>
<td>Visiting Researcher</td>
<td>Karolinska Institute, Stockholm, Sweden</td>
<td>2012</td>
</tr>
<tr>
<td>Research Consultant</td>
<td>New York City Department of Health and Mental Hygiene, New York, NY</td>
<td>2011</td>
</tr>
<tr>
<td>Research Scientist</td>
<td>University of Washington (UW) Department of Environmental and Occupational Health Sciences, Seattle, WA</td>
<td>2000 – 2011</td>
</tr>
<tr>
<td>Research Consultant</td>
<td>Columbia University Department of Sociomedical Sciences, New York, NY</td>
<td>2008 – 2011</td>
</tr>
<tr>
<td>Research Industrial Hygienist</td>
<td>UW Department of Environmental and Occupational Health Sciences, Seattle, WA</td>
<td>1998 – 2000</td>
</tr>
<tr>
<td>Research Assistant</td>
<td>UW Department of Environmental Health, Seattle, WA</td>
<td>1997 – 1998</td>
</tr>
<tr>
<td>Industrial Hygiene Intern</td>
<td>Safety and Claims Management, Metro-King County, WA</td>
<td>1997 – 1998</td>
</tr>
<tr>
<td>Safety Intern</td>
<td>Seagate Substrates, Inc., Anaheim, CA</td>
<td>1996</td>
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<tr>
<td>Position</td>
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<td>Dates</td>
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<tr>
<td>Safety and Health Intern</td>
<td>Risk Management Section, Los Angeles County Department of Public Works, CA</td>
<td>1995-1996</td>
</tr>
<tr>
<td>Laboratory Technician</td>
<td>University of Southern California Head Protection Research Laboratory, Los Angeles, CA</td>
<td>1994-1996</td>
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**AWARDS**

University of Michigan School of Public Health Excellence in Teaching Award. Recipient, 2017
University of Michigan Golden Apple Teaching Award nominee, 2017
Fellow of the American Industrial Hygiene Association, 2015
American Industrial Hygiene Association Project Team Award for 85-3 Project, 2012
National Institute for Occupational Safety and Health “National Occupational Research Agenda Innovative Research Award, 2011”
University of Washington School of Public Health “Gilbert S. Omenn Award for Academic Excellence, 2009”
American Industrial Hygiene Association Scholarship, 2007
American Industrial Hygiene Association Biological Monitoring Committee “Best Student Oral Presentation, 2007”
American Industrial Hygiene Association “Future Leaders Institute” invitee, 2006
3M Corporation Industrial Hygiene Scholarship, 2006
University of Washington Department of Environmental and Occupational Health Sciences “Community Outreach Award, 2004”
Puget Sound Safety Summit “Trainer of the Year for the Overall Good of the Industry, 2002”
Pacific Northwest Section-American Industrial Hygiene Association Scholarship, 1997

**RESEARCH**

**Current Support**

1. AFA-Försäkring (Sweden). Effects of noise exposure and hearing loss on risk of cardiovascular disease. 4/1/17-4/1/20. 10% effort. **Co-PI, R Neitzel.** TDC $292,345.
2. University of Michigan Lifestage Environmental Exposures and Disease (M-LEEaD) Center. Health risks to vulnerable populations from exposure to airborne asbestos from the demolition of abandoned homes in Detroit. 4/1/17-3/31/18. 0% effort. **PI, R Neitzel.** TDC $49,578.
6. University of Michigan MCubed Program. Public health and public policy approaches to electronic waste recycling. 12/1/16-12/31/17. 0% effort. PI, R Neitzel. TDC $60,000.


10. AFA-Försäkring (Sweden). Assessment of cardiovascular disease associated with noise, dust, and shiftwork. 10% effort. E Anderson, PI. 1/1/13-12/31/16, PI on UM subcontract, R Neitzel, TDC $47,980.

11. University of Michigan Dow Distinguished Award Program. Feasibility Study for the Development of a Sustainability Consulting Firm. 0% effort. 5/30/17-5/29/18. Faculty advisor, R Neitzel. TDC $5,000.

Pending Support


Past Support

1. The Gerber Foundation. Evaluation of the Effects of Prenatal Exposure to Non-Essential Heavy Metals on Hearing. 10% Effort. PI, R Neitzel. 5/1/13-4/30/16, TDC $125,740.

2. National Institute for Deafness and Communication Disorders, 1R03DC013378. Pilot assessment of the effects of noise, lead, and cadmium on hearing in mice. 10% effort. PI, R Neitzel. 7/1/13-9/30/15. TDC $155,500.


3
5. University of Michigan Thai Studies Grant Program, Center for Southeast Asian Studies. 0% effort. **PI, R Neitzel.** 4/1/15-3/31/16, TDC $3300.


7. University Research Corridor. Evaluation of the Effects of Prenatal Exposure to Non-Essential Heavy Metals on Hearing. 0% effort. **PI, R Neitzel.** 12/1/12-4/1/15, TDC $24,488.


9. University Research Corridor. Evaluation of the Effects of Prenatal Exposure to Non-Essential Heavy Metals on Hearing. 0% effort. **PI, R Neitzel.** 12/1/12-4/1/15, TDC $24,488.


11. University of Michigan MCubed Program. Risk Governance for Disruptive Technologies. 12/1/12-6/1/14. 0% effort. **PI, R Neitzel.** TDC $60,000.


15. Karolinska Institute, Stockholm, Sweden. A study to characterize exposures to work and non-work noise. 10% effort. **PI, R Neitzel.** 6/1/12-8/15/12, TDC $8,995.


UM 
Pre-UM 

17. National Institute of Environmental Health Sciences, R01 ES017809. Characterization of exposure and response biomarkers among welder apprentices. 10% effort. PI, N Seixas. **Co-I, R Neitzel.** 9/15/10-9/14/13, TDC $1,188,173.

18. Washington State Department of Labor and Industries, 2009-ZH-00115. Development of an effective labor/management health and safety committee in a dual-lingual, high-hazard industry. 10% effort. PI, N Seixas. **Co-I, R Neitzel.** 6/15/10-2/1/12. TDC $223,479. **PI on UM subcontract, R Neitzel, $6,139.**

19. National Institute of Environmental Health Sciences, R21 ES015347A. Noise exposure and health outcomes in subway riders. PI, R Gershon. **Co-I, R Neitzel.** 10% effort. 3/01/08-2/28/10, TDC $275,000.


21. National Institute for Occupational Safety and Health, R01 OH 008078. Effectiveness of training and reinforcement on HPD use among construction workers. PI, N Seixas. **Co-I, R Neitzel.** 20%. 4/01/05-3/31/09; TC $1,044,211.

22. Custom Protect Ear, Inc. Assessing Hearing Protection Device Attenuation. PI, N Seixas. **Co-I, R Neitzel.** 25% effort. 4/25/05-7/15/05, TC $12,646.


28. Center to Protect Workers’ Rights. Noise Exposure Among Construction Trades. 9/1/97-8/30/98. PI, R Neitzel. 100% effort. $16,709 TDC.

BIBLIOGRAPHY

Peer-Reviewed Published (T denotes trainee, * denotes corresponding author)


Considerations for the National Children's Study.  Nonoccupational noise exposures.

Risk?

Injury risk and noise exposure in firefighter training operations.  Annals Occup Hyg 2016 May;60(4):405-20.  PMC4829339


Personal measures of power-frequency magnetic field exposure among men from an infertility clinic: distribution, temporal variability, and correlation with their female partners’ exposure.  Rad Prot Dosim 2016 Dec;172(4):401-408.  PMC5204365

Health Seeking Behaviours among Electronic Waste Workers in Ghana.  BMC Pub Health 2015; 15, 1065-1074.  PMC4609051


Association


Peer-Reviewed, In Press (T denotes trainee, * denotes corresponding author)


Peer-Reviewed, Submitted (T denotes trainee, * denotes corresponding author)


Book chapters

1. Fligor B*, Chasin M, Neitzel RL. Noise Exposure and Issues in Hearing Conservation. In *The...

In Preparation (T denotes trainee, * denotes corresponding author)


Invited manuscripts


Technical Reports


TEACHING

New Courses Developed or Contributed to


6. UM EHS 796, Current Issues in Exposure Science, 1 credit, W2012. Sole instructor, developed course.
9. UW ENVH 511 “Introduction to Environmental Health,” Fa1998, 3 credits, teaching assistant.

**Continuing Education and Outreach**

4. Course Director: Current Solutions to Workplace Noise Hazards, University of Washington DEOHS Continuing Education Program. May 2007
9. Course Director: Current Issues in Construction Safety, University of Washington DEOHS Continuing Education Program. April 2002

**Supervisor for Doctoral Dissertations**


**Committee Member for Doctoral Dissertations - Domestic**


Committee Member for Doctoral Dissertations - International


Opponent for Doctoral Dissertations – International


Supervisor for Masters Theses


Committee Member for Masters Theses


Committee Member of Bachelor’s Thesis

Masters of Public Health Advisees by Expected Graduation Date
2016: 4 advisees
2015: 3 advisees
2014: 5 advisees
2013: 4 advisees

Undergraduate Research Opportunity Program students
2014: 2 students supervised

SERVICE

University/local
1. Director, Pilot Project Research Training program, UM Center for Occupational Health and Safety Engineering 2013-present
2. Director, UM School of Public Health Certificate in Risk Science and Human Health 2011-present
3. UM Environmental Toxicology and Epidemiology Training Grant Executive Committee, 2014-present
4. UM Department of Environmental Health Sciences Executive Committee, 2013-2015
5. UM Department of Environmental Health Sciences Professional Degree Program Committee Co-Chair, 2013-2015
6. UM Department of Environmental Health Sciences Admissions Committee Chair, 2015-2017
7. Grant reviewer, University of Michigan Office of Global Public Health internship program, 2017-present
8. Grant reviewer, University of Michigan Graham Sustainability Institute Emerging Opportunities program, 2017-present.
9. Grant reviewer, Environmental Health Sciences Center for Urban Responses to Environmental Stressors (CURES) at Wayne State University, 2015
10. Grant reviewer, Pacific Northwest Agricultural Safety and Health Center at the University of Washington, 2013
11. UM Risk Science Center Executive Committee, 2013-2015
12. UM Department of Environmental Health Sciences Admissions Committee, 2011-2013

National/international
2. American Conference of Governmental Industrial Hygienists Threshold Limit Values – Physical Agents Committee, member, 2014-present
   Vice Chair, 2015-present
4. Grant review panel member, Kentucky SBIR-STTR funding program, 2016
5. Grant review panel member, NY and NJ Education and Research Center Pilot Project Research
Training Grant program, 2016

6. Health Advisory Panel Member, Quiet Communities Foundation, 2016-

7. Grant review panel member, Alpha Foundation for the Improvement of Mine Safety and Health, 2014

8. American Industrial Hygiene Association Noise Committee, 2002 – present


10. 85-3 Campaign to increase awareness of best practices in hearing conservation, 2011-present

11. National Hearing Conservation Association, member, 2000-present

   Immediate Past President, 2010-2011
   President, 2009-2010
   President-Elect, 2008 – 2009
   Director of Communications, 2003 – 2006
   Treasurer, 2002-2003


14. Testimony delivered to the US Occupational Safety and Health Administration on 7/15/2002 concerning proposed amendments to the construction hearing conservation regulation, 29 CFR 1926.52.

15. Grant review panel member, Federal Emergency Management Administration Assistance to Firefighters Grants, Research and Development program, January 2008


PROFESSIONAL ACTIVITIES

Manuscript reviewer

*Acoustics Australia*

*American Industrial Hygiene Association Journal*

*American Journal of Industrial Medicine*

*Annals of Occupational Hygiene*

*Applied Acoustics*

*Applied Occupational and Environmental Hygiene*

*Automation in Construction*

*Chemosphere*

*Construction Technologies and Engineering*

*Ear and Hearing*

*Environment International*

*Environmental Health Insights*

*Environmental Science and Technology*

*European Archives of Oto-Rhino-Laryngology and Head & Neck*
Memberships

Acoustical Society of America, 2005 – 2011
American Conference of Governmental Industrial Hygienists, 2005 – present
American Industrial Hygiene Association, 1999 – present
International Society of Environmental Epidemiology, 2014 – present
International Society of Exposure Science, 2011 – present
Michigan Industrial Hygiene Society, 2011 – present
Midwest Injury Prevention Alliance, 2013 – present
National Hearing Conservation Association, 2001 – present
Pacific Northwest Section of the American Industrial Hygiene Association, 2000 – 2011
UM Environmental Health Sciences Core Center, 2013-present
UM Injury Center, 2012-present
UM Department of Environmental and Occupational Health Sciences Student Advisory Council, 1997-1998 and 2006-2008
UW Industrial Hygiene Student Association President, 1997-1998

SELECT PRESENTATIONS

Invited


3. Neitzel, R. Michigan Industrial Hygiene Society Mini-Conference (Sept 2016), Troy, MI. “Global occupational health research at the University of Michigan.”


6. Neitzel, R. 11th International Congress on the Biological Effects of Noise (Jun 2014), Nara, Japan. “Environmental and Occupational Noise Pollution in the US: How Bad is the Problem and What Can We Do About It?”


Other

1. Neitzel, R (June 2017) Zürich, Switzerland. 12th International Congress on the Biological Effects of Noise. “Development of a Job Exposure Matrix for Occupational Noise in the US.”


8. Neitzel, R. National Center for Rehabilitative Audiological Research, Portland Veterans’ Administration Medical Center (July 2013), Portland, OR. “Evaluating the scope and impact of noise exposure in America.”


16

13. **Neitzel, R.** National Institute for Occupational Safety and Health Buy Quiet Workshop (Nov 2011), Cincinnati, OH. “Construction noise: why should we care?”


16. **Neitzel, R.** University of Washington Continuing Education Seminar (Nov 2010), Seattle, WA. “Welding and thermal cutting noise exposures: How high are they and can they be controlled?”


18. **Neitzel R, Gershon R.** International Conference on Urban Health (Oct 2010), New York, NY “Mass transit noise levels and rider characteristics in New York City.”

19. **Neitzel, R.** Karolinska Institute Seminar (Sept 2010), Stockholm, Sweden. “Understanding the risk of hearing loss from noise exposure at work and play.”


21. **Neitzel R, Gershon R.** National Hearing Conservation Association conference (Feb 2010), Orlando, FL. “Mass transit noise levels and rider characteristics in New York City”


24. **Neitzel, R.** National Hearing Conservation Association conference (Feb 2009), Atlanta GA. “Can subjective exposure information be used to improve occupational exposure estimates?”


30. **Neitzel, R.** NHCA/Manitoba AIHA Hearing Loss Prevention Conference (Oct 2007), Winnipeg, Manitoba, Canada. “Construction noise: how bad is it and what can we do about it?”


32. **Neitzel R, Berna B, Seixas N.** National Hearing Conservation Association conference (Feb 2007), Savannah GA. “Noise levels and hearing protection use aboard two large commercial fishing vessels.”
33. Ploger J, Neitzel R, Johnson P. University of Washington/University of British Columbia Join Conference on occupational Health (Jan 2007), Blaine, WA. “Measurement of whole body vibration in King County bus drivers.”

34. Neitzel R University of Washington/University of British Columbia Join Conference on occupational Health (Jan 2007), Blaine, WA. “Retrospective noise exposure assessment incorporating subjective measures.”


41. Neitzel R. American Industrial Hygiene Conference and Exposition (June 2002), San Diego, CA. “Construction Noise Control Efforts and Opportunities.”


Posters


6. De Castro AB, Krenz J, **Neitzel RL**. Western Forum for Migrant and Community Health (Feb 2014) Seattle WA. “Agricultural Safety & Health Hazards among Hmong Farmers.”


