Lisa M. Stabryla

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EDUCATION

**Ph.D. Civil and Environmental Engineering** *expected* 2020

Working Thesis Title: Leveraging Nanomaterial Design for Next Generation Antimicrobials

Advisor: Dr. Leanne M. Gilbertson

University of Pittsburgh, Pittsburgh, PA

**M.S. Civil and Environmental Engineering** Dec 2017

University of Pittsburgh, Pittsburgh, PA

**B.S. Engineering Science**, *Magna Cum Laude* Dec 2015

Minors: Bioengineering, Materials Science Engineering, Chemistry

University of Pittsburgh, Pittsburgh, PA

HONORS AND AWARDS

**GRADUATE HONORS AND AWARDS**

ASEE Design in Engineering Education Division Best Paper Finalist 2018

Pittsburgh Paint and Glass (PPG) Foundation Graduate Student Conference Travel Award 2018

Water Works Operators’ Association of Pennsylvania David A. Long, Ph.D. Memorial 2017

Scholarship

National Defense Science and Engineering Graduate (NDSEG) Fellowship 2017

Engineering Graduate Student Organization CEE TA Award 2017

Ford Foundation Predoctoral Fellowship Honorable Mention 2017

Engineering Graduate Student Organization Travel Grant 2017

Wellington C. Carl Fund Scholarship 2016

ACS Green Chemistry Institute Ciba Travel Award 2016

Carson Scholars Fund “Top 20 Under Thirty” Alumni Hall of Fame 2016

Mascaro Center for Sustainable Innovation Graduate Student Conference Award 2016-2017

ASSIST Travel Grant for the Academic Leadership for Women in Engineering 2016

(ALWE) Conference

Society of Hispanic Professional Engineers (SHPE) Graduate Scholarship 2016-2017

University of Pittsburgh Pre-Doctoral Fellowship Summer 2016

University of Pittsburgh Graduate Teaching Assistantship 2016

**UNDERGRADUATE HONORS AND AWARDS**

University of Pittsburgh’s Dean’s List 2011-2015

Carson Scholars Fund “Top 20 Under Thirty” Alumni Hall of Fame Honorable Mention 2015

Twelfth Annual Freshman Engineering Conference Best Bioengineering Paper Award 2012

Joseph F. Mulach, Jr. and Louisa A. Mulach (The Pittsburgh Foundation) Scholarship 2012-2014

Pittsburgh History and Landmarks Foundation (PHLF) Scholarship 2011-2015

Bombardier Transportation Women in Leadership (WiL) Scholarship 2011

Pittsburgh Hilltop Lions Scholarship 2011

Pittsburgh Carson Scholars Fund (CSF) Scholarship 2010

**GRANT WRITING EXPERIENCE­**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Stabryla, L.** and L. Gilbertson. “Teaching Sustainable Engineering Through Design

Thinking.” The Mindlin Foundation. Grant No. MF17-US05. $10,000. December 2016.

* Details: Undergraduate Engineering Course Development at the University of Pittsburgh (CEE 1618: Design for the Environment)
* Contributions: Coordinated with professor to write proposal
* Role: Teaching assistant involved in course development with professor, focused on active learning and design thinking. Will also incorporate a teaching-as-research project

2. **Stabryla, L.** and L. Gilbertson. “Teaching Sustainable Engineering Through Design

Thinking.” Innovation in Education Awards 2017 program. University of Pittsburgh. $15,000.

March 2017.

* Same as above

PUBLICATIONS

PEER-REVIEWED JOURNAL PUBLICATIONS

5. **Stabryla, L.M.**; Johnston, K.A.; Millstone, J.E.; Gilbertson, L.M. “Emerging investigator

series: it’s not all about the ion: support for particle-specific contributions to silver nanoparticle

antimicrobial activity. 2018, *Environmental Science: Nano*, 5(9): 2047-2068. DOI:

10.1039/c8en00429c.

4. Johnston, K.A.; **Stabryla, L.M.**; Smith, A.M.; Gan, X.Y.; Gilbertson, L.M.; Millstone, J.E.

“Impacts of broth chemistry on silver ion release, surface chemistry composition, and

bacterial cytotoxicity of silver nanoparticles.” 2018, *Environmental Science: Nano*, 5: 304-

312. DOI: 10.1039/C7EN00974G.

3. Geng, H.; Feng, J.; **Stabryla, L.M.**; Cho, S.K. “Dielectrowetting manipulation for digital

microfluidics: creating, transporting, splitting, and merging of droplets.” 2017, *Lab on a*

*Chip*, 17(6): 1060-1068. DOI: 10.1039/C7LC00006E.

2. Cowan, D.M.; Maskrey, J.R.; Fung, E.M.; Woods, T.A.; **Stabryla, L.M.**; Scott, P.K.; Finley,

B.L. “Best-practices approach to determination of blood alcohol concentration (BAC) at

specific time points: combination of ante-mortem alcohol pharmacokinetic modeling and post-

mortem alcohol generation and transport considerations.” 2016, *Regulatory Toxicology and*

*Pharmacology*, 78: 24-36. DOI:10.1016/j.yrtph.2016.03.020.

1. Chen, Y.; **Stabryla, L.M.**; Wei, N. “Improved acetic acid resistance in *Saccharomyces*

*Cerevisiae* by overexpression of the WHI2 gene identified through inverse metabolic

engineering.” 2016, *Applied and Environmental Microbiology*, 82: 2156-2166. DOI:

10.1128/AEM.03718-15.

CONFERENCE PAPERS

2. Clark, R.; **Stabryla, L.M.**; Gilbertson, L.M. “Use of active learning and the design thinking

process to drive creative sustainable engineering design solutions.” 2018*,* *American Society*

*for Engineering Education (ASEE) 125th Annual Conference & Exposition.*

1. Geng, H.; Feng, J.; **Stabryla, L.M.**; Cho, S.K. “Droplet manipulations by dielectrowetting:

creating, transporting, splitting, and merging.” 2017, *IEEE 30th International Conference on*

*Micro Electro Mechanical Systems (MEMS)*, 113-116.

OTHER PAPERS

1. **Stabryla, L.M.**; Wei, N. “Biofuel production through anaerobic digestion effluent using *Yarrowia Lipolytica*.” 2016, *Ingenium: Undergraduate Research at the Swanson School of Engineering,* 2: 86-91.

PUBLISHED PHOTOGRAPHS

1. **Stabryla, L.M**. “Emerging investigator series: it’s not all about the ion: support for particle-

specific contributions to silver nanoparticle antimicrobial activity. 2018. Photograph.

Front cover, *Environmental Science: Nano*, 5(9): 2047-2068. DOI:10.1039/c8en00429c.

PRESENTATIONS

**CONFERENCE PRESENTATIONS**

6. **Stabryla, L.M**. “Designing new antimicrobial agents.” Department of Defense (DoD) Science,

Technology, and Innovation Exchange (STIX), US Institute of Peace, Washington DC,

December 10-11, 2018.

5. Gilbertson, L.M.; **Stabryla, L.M.** “Teaching sustainable engineering using a design thinking

approach.” The Association for the Advancement of Sustainability in Higher Education

(AASHE) Conference & Expo, Pittsburgh, PA, Oct 2-5, 2018.

4. Clark, R.; **Stabryla, L.M.**; Gilbertson, L.M. “Use of active learning and the design thinking

process to drive creative sustainable engineering design solutions.” American Society for

Engineering Education (ASEE) 125th Annual Conference & Exposition,Salt Lake City, UT,

June 24-27, 2018.

3. **Stabryla, L.M.**; Gilbertson, L.M. "Leveraging nanomaterial design for next generation

antimicrobials." Graduate Student Research Day (GSRD), University of Pittsburgh,

Pittsburgh, PA, April 6, 2018.

2. **Stabryla, L.M.** “Can we engineer a solution to the antimicrobial resistance challenge

using silver nanoparticles?” Graduate Student Research Day (GSRD), University of

Pittsburgh, Pittsburgh, PA, April 7, 2017.

1. Geng, H.; Feng, J.; **Stabryla, L.M.**; Cho, S.K. “Droplet manipulations by dielectrowetting:

creating, transporting, splitting, and merging.” 2017, IEEE 30th International Conference on

Micro Electro Mechanical Systems (MEMS), Las Vegas, NV, January 22-26, 2017.

**POSTER PRESENTATIONS**

10. **Stabryla, L.M.**; Johnston, K.A.; Millstone, J.E.; Bibby, K.J.; Gilbertson, L.M. "Leveraging

nanomaterial design for next generation antimicrobials." Pitt Future Faculty Development

Program, University of Pittsburgh, Pittsburgh, PA, October 25-27, 2018.

9. **Stabryla, L.M.**; Gilbertson, L.M.; Clark, R.M. “Use of active learning and the design thinking

process to drive creative sustainable design solutions and promote inclusive classroom

environments.” The Association for the Advancement of Sustainability in Higher Education

(AASHE) Conference & Expo, Pittsburgh, PA, Oct 2-5, 2018.

8. **Stabryla, L.M.**; Johnston, K.A.; Millstone, J.E.; Gilbertson, L.M. "Leveraging

nanomaterial design for next generation antimicrobials", Microbial Stress Response

Gordon Research Seminar (GRS) and Conference (GRC), South Hadley, MA, July 14-20, 2018.

**7. Stabryla, L.M.**; Johnston, K.A.; Millstone, J.E.; Bibby, K.J.; Gilbertson, L.M. "Leveraging

nanomaterial design for next generation antimicrobials." Graduate Student Research Day

(GSRD), University of Pittsburgh, Pittsburgh, PA, April 6, 2018.

6. **Stabryla, L.M.**; Gilbertson, L.M.; Clark, R.M. “Use of active learning and the design thinking

process to drive creative sustainable design solutions and promote inclusive classroom

environments.” 6th Annual Assessment and Teaching Conference, University of Pittsburgh,

Pittsburgh, PA, January 26, 2018.

5. **Stabryla, L.M.**; Johnston, K.A.; Millstone, J.E.; Bibby, K.J.; Gilbertson, L.M. “Coupling

material and biological systems to inform design of nano-enabled antimicrobials”,

27th Annual Society of Environmental Journalists (SEJ) Conference, Pittsburgh, PA, Oct 4-8,

2017.

4. **Stabryla, L.M.**; Johnston, K.A.; Millstone, J.E.; Bibby, K.J.; Gilbertson, L.M. "Leveraging

nanomaterial design for next generation antimicrobials", Environmental Nanotechnology

Gordon Research Seminar (GRS) and Conference (GRC), Stowe, VT, June 18-23, 2017.

3. **Stabryla, L.M.**; Johnston, K.A.; Millstone, J.E.; Bibby, K.J.; Gilbertson, L.M. "Leveraging nanomaterial design for next generation antimicrobials", 21st Annual ACS Green Chemistry & Engineering Conference (GC&E), Reston, VA, June 13-15, 2017.

2. **Stabryla, L.M.**; Johnston, K.A.; Millstone, J.E.; Bibby, K.J.; Gilbertson, L.M. “Coupling

material and biological systems to inform design of nano-enabled antimicrobials”,

Engineering Sustainability (ES) Conference, Pittsburgh, PA, April 10-11, 2017.

1. Cowan, D.M.; Maskrey, J.R.; Fung, E.S.; Woods, T.A.; **Stabryla, L.M.**; Scott, P.K.

“Evaluation of antemortem ethanol concentration PBPK modeling approaches and

postmortem ethanol generation and transport considerations”, Society of Toxicology (SOT),

San Diego, CA. March 22-26, 2015.

**OTHER PRESENTATIONS**

2. **Stabryla, L.M.** “Creation of a GC Screen Validation for Bath Salts,” Allegheny County Office

of the Medical Examiner (ACOME), Pittsburgh, PA, July, 2015.

1. **Stabryla, L.M**; Wei, N. “Harnessing Microbial Power for Waste-to-Energy Biotransformation,” Mascaro Center for Sustainable Innovation Undergraduate Research Program (MCSI URP) Summer Symposium, University of Pittsburgh, Pittsburgh, PA, July, 2015.

NETWORKING EVENTS ATTENDED

2. 3M 12th Science and Engineering Faculty Day (SEFD), St. Paul, MN, June 5-6, 2017.

1. Academic Leadership for Women in Engineering (ALWE), Held in conjunction with WE16, Society of Women Engineers (SWE) Annual Conference, Philadelphia, PA, October 27-29, 2016.

RESEARCH EXPERIENCE

**Ph.D. Student, Civil and Environmental Engineering** 2016 – Present

University of Pittsburgh, Pittsburgh PA

* Commenced an interdisciplinary research project (environmental engineering, chemistry, and molecular biology) in Dr. Gilbertson’s lab focused on 1) decoupling the toxicity mechanisms of metal nanoparticles and their released ions in microorganisms and 2) elucidating the underlying mechanisms of bacterial inactivation and the evolution of these mechanisms with changes in material properties in order to inform design of effective antimicrobial agents that prolong emergence of bacterial resistance
* Research activities include synthesizing nanoparticles, characterizing materials using transmission electron microscopy (TEM), UV-visible spectroscopy, and inductively coupled plasma mass spectrometry (ICP-MS), and evaluating antimicrobial activity and emergence of resistance using minimum inhibitory concentration (MIC) assays, kinetic growth assays, and gene expression with reverse transcription quantitative polymerase chain reaction (RT-qPCR)

**Undergraduate Student Researcher, Civil and Environmental Engineering** 2015

University of Pittsburgh, Pittsburgh PA

* Conducted research in Dr. Bibby’s lab to gain insight in microbial mat technologies for water treatment
* Became proficient in ion chromatography (IC), designing experiments, and troubleshooting problems

**Undergraduate Student Researcher, Civil and Environmental Engineering** 2015

Mascaro Center for Sustainable Innovation, Pittsburgh PA

* Gained research experience in biofuels under Dr. Wei which led to a peer-reviewed publication
* Became trained in cell culture methods, UV-visible spectroscopy, and high performance liquid chromatography (HPLC)
* Presented at the 2015 Undergraduate Summer Research Symposium
* Completed monthly community sustainability projects in local neighborhoods

**Undergraduate Student Researcher, Chemistry** 2014

University of Pittsburgh, Pittsburgh PA

* Designed and 3D-printed a microreactor to optimize organic chemical reactions in Dr. Wipf’s lab
* Gained proficiency in nuclear magnetic resonance (NMR) spectroscopy and high performance liquid chromatography (HPLC) pumps

**Intern and Camp Counselor** 2011

McGowan Institute of Regenerative Medicine, Pittsburgh PA

* Completed week-long projects in tissue engineering labs (Dr. Stephen Badylak, Dr. Kacey Marra, Dr. William Federspiel, Dr. Steven Little)
* Facilitated the Pittsburgh Tissue Engineering Initiative (PTEI) middle school science camp

INDUSTRY EXPERIENCE

**Toxicology Intern** 2015

Allegheny County Office of the Medical Examiner, Pittsburgh PA

* Validated a gas chromatography flame ionization detector (GC-FID) screening procedure for synthetic cathinones according to Scientific Working Group for Forensic Toxicology (SWGTOX) guidelines
* Assisted in liquid-liquid extractions of driving under the influence and postmortem blood samples

**Engineering Co-op Student** 2013 – 2014

Cardno ChemRisk, Pittsburgh PA

* Conducted independent research and executed a risk assessment for alcohol consumption which led to a peer-reviewed publication and an opinion letter used in court
* Gained proficiency in physiologically based-pharmacokinetic (PBPK) and biokinetic models for several chemicals to quantify human health risk assessment and created a user interface
* Performed literature reviews, prepared spreadsheets for exposure estimates, and reviewed manuscripts

TEACHING AND MENTORING EXPERIENCE

**Pitt-CIRTL Scholar Certification in STEM Teaching** Fall 2018

University of Pittsburgh

* Completed a teaching certification program to gain the knowledge and skills to be a scholarly teacher and use the Teaching-as-Research process to improve teaching practices through reflective practice
* Publication on the use of active learning and the design thinking process to increase the practice of sustainability and creativity in students’ design solutions to a real-world sustainability challenge in an undergraduate course, *Design for the Environment*
  + Reference: Clark, R.; **Stabryla, L.M.**; Gilbertson, L.M. “Use of active learning and the design thinking process to drive creative sustainable engineering design solutions.” 2018*,* *American Society for Engineering Education (ASEE) 125th Annual Conference & Exposition.*
* Mentored other Pitt-CIRTL participants on reflective practice and evidence-based instructional practice (TAR meetings – fall 2018)
* Assembled Teaching Portfolio

**Pitt-CIRTL Practitioner Certification in STEM Teaching** Fall 2018

University of Pittsburgh

* Completed a teaching certification program to gain the knowledge and skills to be a scholarly teacher and use the Teaching-as-Research process to improve teaching practices through reflective practice
* Completed a mentored Teaching-as-Research project
  + Title: Use of Active Learning and the Design Thinking Process to Drive Creative Sustainable Design Solutions
  + Description: Explored how the use of active learning and the design thinking process can increase the practice of sustainability and creativity in students’ design solutions to a real-world sustainability challenge in an undergraduate course, *Design for the Environment*
  + Dissemination: local TAR presentation to the Pitt-CIRTL learning community, 2018 Assessment and Teaching Conference, 2018 Association for the Advancement of Sustainability in Higher Education (AASHE) Conference, and the 2018 American Society for Engineering Education (ASEE) Conference
* Completed one advanced course/seminar series to enhance professional development in STEM academia
  + Integrating Creativity, Innovation, and Design Thinking in STEM courses, Summer 2016, CIRTL Network
* Mentored other Pitt-CIRTL participants on reflective practice and evidence-based instructional practice (Summer Mentoring Learning Community meetings – summer 2018)

**Graduate Student Lecturer** Summer 2018

CEE 1504: Chemistry in Environmental Engineering, University of Pittsburgh

Instructor: Dr. Leanne Gilbertson

* Developed and delivered a lecture on solving acid base problems
* Led a hands-on green chemistry activity

**Graduate Student Teaching Assistant** Fall 2017

CEE 1618: Design for the Environment, University of Pittsburgh

Instructor: Dr. Leanne Gilbertson

Under Grant No. MF17-US05 (Mindlin Foundation) and Innovation in Education Award

* Developed new sustainability-based modules to enhance active learning
* Organized the course readings and homework assignments
* Assisted the professor with and led a few of the active learning and group activities
* Held weekly office hours and gave weekly feedback on term project
* Judged and graded term projects with professor

**Pitt-CIRTL Associate Certification in STEM Teaching**  Spring 2017University of Pittsburgh

* Completed a teaching certification program to gain the knowledge and skills to be an effective teacher and implement research-based best practices in different learning environments
* Participated in a learning community-based course that introduced the Alignment model and evidence-based STEM teaching practices
  + The College Classroom, Spring 2017, CIRTL Network
* Attended CIRTL Network professional development seminars
  + Design Group-based Writing Assignments for Problem-based Learning Course
  + Creating Effective Posters
* Drafted a teaching philosophy statement

**Graduate Student Laboratory Teaching Assistant** Sept 2016 – Apr 2017

CEE 1105: Materials of Construction, University of Pittsburgh

Instructor: Dr. John Oyler

* Gave pre-laboratory lecture and conducted laboratory sessions
* Held weekly office hours
* Graded laboratory reports

**Research Mentor** 2016 – Present

Civil & Environmental Engineering, University of Pittsburgh

* Ph.D. student, Civil and Environmental Engineering
* Undergraduate sophomore, Department of Mechanical Engineering and Materials Science
* M.S. student, Civil and Environmental Engineering
* Female undergraduate senior, Department of Chemical and Petroleum Engineering
* Female undergraduate senior, Department of Mechanical Engineering and Materials Science

**Graduate Student Teaching Assistant** Jan – Apr 2016

CEE 1503: Introduction to Environmental Engineering, University of Pittsburgh

Instructor: Dr. David Sanchez

* Coordinated with professor to create engaging assignments
* Graded homework assignments and quizzes
* Held weekly office hours to review homework solutions and methodology

**Undergraduate Teaching Assistant** Sept – Dec 2013

CHEM 0110: General Chemistry 1,University of Pittsburgh

Instructor: Dr. Michael Golde

* Facilitated students during experiments in the chemistry laboratory
* Graded laboratory reports

**Teaching Assistant** Jun – Aug 2012

INVESTING NOW Summer Enrichment Program, University of Pittsburgh

* Assisted with enforcing discipline in the classroom, taking attendance, and tutoring
* Facilitated students in the Pitt Mobile bioengineering laboratory

PROFESSIONAL LEADERSHIP AND SERVICE

**Professional Development Organizer** 2018 – 2019

Environmental Nanotechnology Gordon Research Seminar (GRS)

* Invited professionals from industry, government, and academia to speak with and mentor graduate students and post-docs
* Organized formal “focus group” career sessions and an informal networking lunch

**Co-Editor-in-Chief** 2016 – Present

*Ingenium: Undergraduate Research at the Swanson School of Engineering*

* Oversaw the graduate student review board
* Served as the third party contact between students and the review board
* Made final decisions on abstracts and full manuscripts to be invited for submission
* Worked with the Marketing team on the final layout design
* Streamlined the data entry process for next year
* Updated the author and reviewer guidelines
* Implemented changes into the format of the final Ingenium publication

**Reviewer for Scholarly Journals** 2018 – Present

* ACS Applied Materials and Interfaces, Sustainble Chemistry and Langmuir

**Penpal** Fall 2017 – Present

Letters to a Pre-Scientist

* Correspond with a middle school student about careers in STEM

**Discussion Group Leader** April 2017

Michael Horman Sustainability Symposium (MHSS),

Held in conjunction with the Engineering Sustainability 17 conference

* Led peer discussion and managed time throughout the session

**Alumni Scholar Reflection Speaker** April 2017

Pittsburgh Carson Scholars Fund Awards Banquet

**Category Judge Chemistry – Senior (9th-12th grade)** March 2017

78th Covestro Pittsburgh Regional Science and Engineering Fair (PRSEF)

**Session Chair** 2016 – 2017

Leading Methodologies for Evaluating Environmental Impacts and Benefits of Nanotechnology, Environmental Nanotechnology Gordon Research Seminar (GRS)

* Selected speakers to be invited for session talk
* Introduced speakers, managed time, and monitored discussion throughout the session

**Planning Committee Member** 2016 – Present

Graduate Student Research Day, University of Pittsburgh

* Selected graduate students to give a 5-minute elevator pitch presentation
* Provided graduate students with a platform to showcase the variety of research conducted within the CEE department, allow students to practice their public speaking skills and effectively communicate to those outside of their specific field, and foster future cross-disciplinary collaboration within the department among students and faculty
* Organized a poster session to showcase student research and provide additional networking opportunities

**Graduate Student Editorial Board Member** 2016 – 2018

*Ingenium: Undergraduate Research at the Swanson School of Engineering*

* Select abstracts to be invited for submission
* Offer feedback to students on their writing
* Review and select manuscripts to be included in the journal

**Volunteer for Teach-a-Teacher Workshop** June 2016

Mascaro Center for Sustainable Innovation, University of Pittsburgh

* Engaged middle school teachers during hands-on project based learning activities with an aim of inspiring them to integrate sustainability and engineering practices into the classroom

**Facilitator for Female Empowerment Mission (FEM)** 2016 – 2017

INVESTING NOW, University of Pittsburgh

* Introduce ethical engineering practices to a group of female high school students
* Present inspirational case studies of women in science

**Volunteer for INVESTING NOW Summer Enrichment Program** Jun – Aug 2015

University of Pittsburgh

* Introduced underrepresented high school students to sustainability concepts through the development of engineering design challenges

**MATHCOUNTS Coach** Sept 2014 – Apr 2015

Fund for Advancement of Minorities through Education (FAME) Academy

* Taught creative problem-solving strategies to Pittsburgh inner city African American students
* Teams won 1st and 2nd place at the 2014 NSBE Region II Fall Regional Conference

**Freshman Mentor and Student Workshop Coordinator** 2014 – 2015

Society of Hispanic Professional Engineers (SHPE), University of Pittsburgh

* Assisted young local Latino students at Noche de Ciencas (Science Night) with science experiments that illustrated Newton’s laws of motion
* Scheduled bimonthly meetings with a freshman female engineering student to ease her transition into college

PROFESSIONAL AFFILIATIONS

American Chemical Society (ACS) 2017

Environmental and Water Resources Institute (EWRI), American Society of Civil Engineers 2017

* Secretary of the University of Pittsburgh Graduate Student Chapter

Society of Women Engineers (SWE) 2015 – Present

Society of Hispanic Professional Engineers (SHPE) 2014 – Present

**OTHER ORGANIZATIONS**

Engineering Graduate Student Organization (EGSO) 2018 – 2019

* Event coordinator
  + Planned social, academic, and professional development events that aligned with the needs of the engineering graduate and professional student body
  + Assembled an event planning committee and delegated event-planning tasks
  + Managed logistics and ensured that all events were executed properly

Society of Engineering Science (SES), University of Pittsburgh Chapter 2015 – 2017

* Co-founder and secretary (2015)
  + Recorded and distributed meeting minutes
  + Sent out event emails and organized event calendar
* Treasurer (2016)
  + Created semesterly budgets and ordered materials
  + Coordinated fundraising and managed money

Pitt EXCEL Minority Engineering Program 2012 – 2015

GRADUATE COURSEWORK

CEE COURSEWORK

CEE 2500 – Environmental Engineering Microbiology

CEE 2501 – Environmental Engineering Chemistry

CEE 2502 – Physical Chemical Principles in Environmental Engineering

CEE 2612 – Design and Analysis of Experiments

CEE 3501 – Environmental Engineering Processes I

CEE 3502 – Environmental Engineering Processes II

CEE 3609 – Advanced Life Cycle Assessment

CEE 3460 – Advanced Scientific Visual Communication

OTHER COURSEWORK

EOH 2309 – Environmental Health Chemistry

EOH 2013 – Environmental Health and Disease

IDM 2014 – Functional Genomics of Microbial Pathogens

EOH 2175 – Principles of Toxicology

ChE 3460 – Advanced Scientific Visual Communication

ENGR 2900 – Graduate Fellowships and Proposal-Writing Workshop

Center for the Integration of Research, Teaching, and Learning (CIRTL) Network courses:

1. Integrating Creativity, Innovation, and Design Thinking in STEM courses
2. The College Classroom
3. Creating Assessments for the STEM Classroom
4. CIRTLCAST Designing Group-based Writing Assignments for Problem-based Learning Courses