

## **Mary M. Staehle, Ph.D.**

Rowan University  
Biomedical Engineering  
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### **EDUCATION**

#### **Ph.D. in Chemical Engineering (2010)**

The University of Delaware, Newark, Delaware

Thesis Topic: Characterization of Neuroadaptation Dynamics During Chronic Alcoholism and Acute Alcohol Withdrawal in Rats

Advisors: Babatunde A. Ogunnaike (University of Delaware) and James Schwaber (Thomas Jefferson University)

#### **B.S. in Biomedical Engineering (2004)**

Johns Hopkins University, Baltimore, Maryland

Concentration: Chemical Engineering; Minor: Mathematics

Graduated with Department and University Honors

Tau Beta Pi and Alpha Eta Mu Beta (Biomedical Engineering) Honor Societies

### **ACADEMIC EXPERIENCE**

#### **Rowan University, Biomedical Engineering**

Undergraduate Program Chair, 2015-present

Assistant Professor, 2015-present

#### **Rowan University, Chemical Engineering**

Assistant Professor, September 2010-2015

#### **Cooper Medical School of Rowan University, Biomedical Sciences**

Assistant Professor (Affiliate Appointment), 2013-present

#### **University of Delaware, Chemical Engineering**

- Fraser and Shirley Russell Teaching Fellow, Spring 2008
- Chemical Process Control and Dynamics Substitute Instructor, Fall 2009
- Chemical Process Control and Dynamics – TA. Fall 2006
- Principles of Chemical Engineering II (Applied Mathematics for Chemical Engineering Graduate Students) – TA. Spring 2006.

#### **Johns Hopkins University, Chemical Engineering**

Kinetic Processes – TA. Fall 2003.

## HONORS & AWARDS

- ASEE Biomedical Engineering Division Teaching Award (2015)
- Nominated for the Lindback Distinguished Teaching Award (2015)
- Rowan University Teaching Wall of Fame (2014)
- Frances Johnson Junior Faculty Innovative Teaching Award, Rowan University (2013)
- Rowan University Chemical Engineering Outstanding Teacher Award (2012)
- ASEE Best Student Paper Award: Environmental Engineering Division (2012)
- Fraser and Shirley Russell Teaching Fellowship (2007-2008)
- Supported Participant at the Emerging Trends in Process Systems Engineering Pan-American Collaboration PASI Workshop (2008)
- Robert E. Davies Student Travel Award – AWIS-PHL (2008)
- Robert L. Pigford Teaching Assistant Award (2007)
- Nomination for UD Excellence in Teaching Award (2007)
- Commendation for exceptional oral Ph.D. candidacy examination (2005)
- Margareta A. Augustine Scholarship (2002-2004)
- IEEE/EMBS Student Design Competition Winner – First place team (2004)
- Marine Corps Scholarship Foundation Cornerstone Scholar (1 of 3 nationwide) (2000-04)

## PROFESSIONAL AFFILIATIONS

- Member of the American Society of Engineering Education
- Member of the American Institute of Chemical Engineers
- Member of the Biomedical Engineering Society
- Member of the Society for Biological Engineering
- Member of the Research Society on Alcoholism
- Member of the Tau Beta Pi Alumni, Philadelphia Chapter

## PEER-REVIEWED JOURNAL PUBLICATIONS

1. Lowe, J.R., T.D. Mahool<sup>#</sup>, **M.M. Staehle**, *Ethanol exposure induces a delay in the reacquisition of function during head regeneration in Schmidtea mediterranea*. Neurotoxicology and Teratology. 48, March-April 2015; 28-32. <sup>#</sup>: Undergraduate Student
2. Gutierrez, C. A., & **M.M. Staehle** (2015). *A control system analysis of the dynamic response of N-methyl-D-aspartate glutamate receptors to alcoholism and alcohol withdrawal*. Theoretical Biology and Medical Modelling, 12(1), 8.
3. **Staehle, M.M.**, A.R. Reed, H.S. Benavidez, W.T. Riddell, *Communication-based learning objectives in a four-year engineering curriculum: a longitudinal analysis*. Global Journal of Engineering Education. 17(1), 2015.

4. Egbert, T., J. Everett, F. Crockett, S. Farrell, **M. Staehle** (2018) "Growing and engineering living and learning community" *Global Journal of Engineering Education* 20.1.
5. Freeman, K.\*, **M.M. Staehle\***, R. Vadigepalli, G.E. Gonye, B.A. Ogunnaike, J.B. Hoek, J.S. Schwaber, *Coordinated Dynamic Gene Expression Changes in the Central Nucleus of the Amygdala During Alcohol Withdrawal*, *Alcohol Clin Exp Res* 37, 2013 January; E88-E100. \*: Equal Contributions
6. Freeman, K.\*, **M.M. Staehle\***, Z.H. Gümüş, R. Vadigepalli, G.E. Gonye, C.N. Nichols, B.A. Ogunnaike, J.B. Hoek, J.S. Schwaber, *Rapid Temporal Changes in the Expression of a Set of Neuromodulatory Genes During Alcohol Withdrawal in the Dorsal Vagal Complex: Molecular Evidence of Homeostatic Disturbance*, *Alcohol Clin Exp Res*, 36(10), 2012 October; 1688-1700. \*: Equal Contributions
7. Freeman, K., A. Brureau, R. Vadigepalli, **M.M. Staehle**, M.M. Brureau, G.E. Gonye, J.B. Hoek, D.C. Hooper, J.S. Schwaber, *Temporal changes in innate immune signals in a rat model of alcohol withdrawal in emotional and cardiorespiratory nuclei*. *Journal of Neuroinflammation* 24(9), 2012 May; 97.
8. Khan, R.L, R. Vadigepalli, **M.K. McDonald**, R.F. Rogers, G.R. Gao, J.S. Schwaber, *Dynamic Transcriptomic Response to Acute Hypertension in the Nucleus Tractus Solitarius*. *Am J Physiol Regul Integr Comp Physiol*. 2008 July, 295(1), R15-27.
9. Kim, E.J., P. Theprungsirikul, **M.K. McDonald**, E.D. Gurewitsch, R.H. Allen, *A biofidelic birthing simulator. Models for research and training in complicated human births*. *IEEE Eng Med BiolMag*. 2005 Nov-Dec; 24(6): 34-9.
10. Gurewitsch, E.D., E.J. Kim, J.H. Yang, K.E. Outland, **M.K. McDonald**, R.H. Allen, *Comparing McRoberts' and Rubin's maneuvers for initial management of shoulder dystocia: an objective evaluation*. *Am J Obstet Gynecol*. 2005 Jan; 192(1): 153-60.

## BOOK CHAPTERS

1. Struck Jannini, A.V., Wisniewski, C.W., **Staehle, M.M.**, Stanzione III, J.F., Savelski, M.J., *An Edible Education in Sustainable Development: Investigating Chocolate Manufacturing in a Laboratory-Based Undergraduate Engineering Course*. *Engineering Education for Sustainable Development*; World Sustainability Series, Editors: W.L. Filho, S. Nesbit.

## PEER REVIEWED CONFERENCE PROCEEDINGS

1. **Staehle, M.** (2017, June), Evaluating the Impact of Online Delivery of a Process Dynamics and Control Course Paper presented at 2017 ASEE Annual Conference & Exposition, Columbus, Ohio. <https://peer.asee.org/28304>
2. D. Silverstein, Vigeant, M. A., & **Staehle, M.** (2016, June). How We Teach Process Control: 2015 Survey Results. In 2016 ASEE Annual Conference & Exposition.

3. Dahm, K. D., & Savelski, M. J., & **Stahle, M.**, & Stanzione, J. F. (2016, June), Is Student Performance in CHE Core Courses Affected by Time Elapsed Since Completion of Material and Energy Balance Course Sequence? Paper presented at 2016 ASEE Annual Conference & Exposition, New Orleans, Louisiana. 10.18260/p.25500
4. Seaman, D., Corrado, C., Murphy, R., Sigona, P., Vadigepalli, R. & **Stahle, M.** (2015). A Quantitative Model of Transcription Factor Regulation in Stem Cells. Paper presented at FOSBE 2015 – Foundations of Systems Biology in Engineering, Boston, Massachusetts.
5. Hanna, L., McGee, J., Srinivasan, D., & **Stahle, M.** (2015). Ethanol affects the progression of planarian head regeneration in a time-dependent manner. *The FASEB Journal*, 29 (1 Suppl), 1018-5, Presented at 2015 Experimental Biology Meeting.
6. Wisniewski, C., Stanzione, J. F., Savelski, M. J., **Stahle, M. M.**, & Jannini, A. V. S. (2015). An edible education in sustainable development: investigating chocolate manufacturing in a laboratory-based undergraduate engineering course. In EESD15–The Seventh International Conference on Engineering Education for Sustainable Development.
7. Farrell, S., Vernengo, J., Merrill, T. L., **Stahle, M.**, Kadlowec, J., Strobel, J. (2015, June), Organ-izing the Curriculum: Enhancing Knowledge, Attitudes and Interests in Engineering with Biomedical Course Modules Paper presented at 2015 ASEE Annual Conference and Exposition, Seattle, Washington.
8. Struck Jannini, A. V., **Stahle, M.**, Stanzione, J. F., Wisniewski, C. M. (2015, June), Green Chocolate? - Investigating the Sustainable Development of Chocolate Manufacturing in a Laboratory-Based Undergraduate Engineering Course Paper presented at 2015 ASEE Annual Conference and Exposition, Seattle, Washington. 10.18260/p.24164
9. **Stahle, M.M.**, B.A. Ogunnaike, *Simulation-Based Guided Explorations in Process Dynamics and Control*, ASEE Conference Proceedings, 2014.
10. **Stahle, M.M.**, T.L. Merrill, S. Farrell, *Artificial Organs Leading to Real Engineering Learning [Work-in-Progress]*, ASEE Conference Proceedings, 2014.
11. Farrell, S., A.J. Vernengo, T.L. Merrill, J. Kadlowec, **M.M. Stahle**, R. Polikar, *Organ-izing the engineering curriculum with biomedically related learning modules*, ASEE Conference Proceedings, 2014.
12. Bauer, S.K.<sup>#</sup>, A.R. McFarland<sup>#</sup>, **M.M. Stahle**, K. Jahan, *Weaving Sustainability into Undergraduate Engineering Education Through Innovative Pedagogical Methods: A Student's Perspective*, ASEE Conference Proceedings, 2012. <sup>#</sup>: Undergraduate Students
13. Farrell, S., A.J. Vernengo, **M.M. Stahle**, J. Kadlowec, T.L. Merrill, R. Polikar, J. Strobel, *Organizing the curriculum: Introducing engineering principles through biomedically related experiments: Module development*, ASEE Conference Proceedings, 2012.

14. **Stahle, M.M.**, J.S. Schwaber, B.A. Ogunnaike, *Quantitative Investigations of Control System Hypotheses in Alcoholism and Alcohol Withdrawal*, Proceedings of the International Symposium of Recent and Emergent Advances in Chemical Engineering, 2010 December.
15. **McDonald, M.K.**, J.S. Schwaber, B.A. Ogunnaike, *A Control System Hypothesis of the N-Methyl D-Aspartate Glutamate Receptor's Role in Alcoholism and Alcohol Withdrawal*, Proceedings of the International Federation for Automatic Control World Congress, 2008 July, 15885-15890.

### **SUPERVISED UNDERGRADUATE STUDENT AWARDS**

1. Mark Sharp won 2<sup>nd</sup> place in the National AIChE Student Paper Competition at the 2015 AIChE Annual Student Conference, Salt Lake City, UT, 2015.
2. Mark Sharp won 1<sup>st</sup> place in the AIChE Student Paper Competition – Midatlantic Region, at the AIChE Midatlantic Regional Conference, College Park, MD, 2015.
3. Tyler Mahool won 2<sup>nd</sup> place in the AIChE Annual Student Meeting Poster Competition at the AIChE Annual Meeting, Minneapolis, MN, 2011.
4. Jonathan Soong won 3<sup>rd</sup> place in the AIChE Midatlantic Region Paper Competition, Hoboken, NJ, 2012.
5. A team working on quantitative modeling of stem cell regulation and differentiation won the 2014 Zeisberg award from the Delaware Valley section of AIChE for the best student laboratory report.
6. Anna Gonye, a Wilmington Charter High School student conducting a science fair project with me, won first place at the County Science Expo and was named the 2013 State of Delaware's BioGENEius Award recipient for her work "The effects of environmental toxins on planarian regeneration as a method of determining the teratogenic properties of environmental toxins."
7. The Rowan AIChE Student Chapter, which I advised, won a 2015 Outstanding Student Chapter Award from AIChE, and an Outstanding Student Chapter Award from the AIChE Delaware Valley Section in 2015.

### **CONFERENCE PRESENTATIONS**

1. **M. Stahle**, *Evaluating the Impact of Online Delivery of a Process Dynamics and Control Course*, ASEE Annual Conference, June 2017.
2. Sharp, M.\*, Green, E., Winterburn, S., Marino, Costantini, N., S., Wyatt, M., Case, T., Dahm, K., Stanzone, J., & **Stahle, M.**, *Bisphenol A Exposure Affects Cognitive Development in *Schmidtea mediterranea* During Head Regeneration*, AIChE Annual Student Conference, November 2015. \*: Presenting Author
3. **Stahle, M.M.**, Savelski, M.J., *Enhancing Learning and Increasing Rigor in an Introductory Energy Balances Course*, AIChE Annual Meeting, November 2015.
4. **Stahle, M.M.**, *Schmidtea mediterranea: A new animal model for neurodevelopmental toxicology studies?*, 4<sup>th</sup> Global Summit on Toxicology, August 2015.

5. Wisniewski, C., Stanzione, J. F., Savelski, M. J., **Stahle, M. M.**, & Jannini, A. V. S.\* *An edible education in sustainable development: investigating chocolate manufacturing in a laboratory-based undergraduate engineering course*. EESD15–The Seventh International Conference on Engineering Education for Sustainable Development, June 2015. \*: Presenting Author
6. Struck Jannini, A. V.\* , **Stahle, M.**, Stanzione, J. F., Wisniewski, C. M. *Green Chocolate? - Investigating the Sustainable Development of Chocolate Manufacturing in a Laboratory-Based Undergraduate Engineering Course*. ASEE Annual Conference and Exposition, June 2015 \*: Presenting Author
7. Sharp, M.\* , Green, E., Case, T., Costantini, N., Marino, S., Winterburn, S., Wyatt, M., Dahm, K., Stanzione, J., & **Stahle, M.**, *Bisphenol A Exposure Affects Cognitive Development in Schmidtea Mediterranea During Head Regeneration*, AIChE Midatlantic Regional meeting, April 2015.
8. Sweeney, K., J. Garrett, R. Vadigepalli, **M.M. Stahle**, *A Systems Biology Approach to Central Nervous System Development and the Effects of Prenatal Alcohol Exposure*, AIChE Annual Meeting, November 2014.
9. **Stahle, M.M.**, M.J. Savelski, *Semi-Flipped Classroom in an Energy Balance Course*, AIChE Annual Meeting, November 2014.
10. **Stahle, M.M.**, B.A. Ogunnaike, *Simulation-Based Guided Explorations in Process Dynamics and Control*, ASEE Conference, June 2014. (Highlighted in the Summer 2014 CACHE News Highlights)
11. **Stahle, M.M.**, T.L. Merrill, S. Farrell, *Artificial Organs Leading to Real Engineering Learning [Work-in-Progress]*, ASEE Conference, June 2014.
12. Cimorelli, M.J., R.W. Freiling, J.A. Kastelein, B. Medhaug\* , K. J. Rodier, E. Wolmark, K.C. Roller, R. Vadigepalli, K.D. Dahm, **M.M. Stahle**, *Combinatorial Effects on Cognitive Development in Planaria Exposed to Cadmium and Ethanol During Head Regeneration*. American Institute of Chemical Engineers MidAtlantic Regional Meeting, April 2014. \*: Presenting Author.
13. **Stahle, M.M.**, *Simulation Modules for Improving Learning in Process Dynamics and Control Courses*. American Institute of Chemical Engineers Annual Meeting, Oct. 2012.
14. **Stahle, M.M.**, *Head Regenerating Planaria as a Model for FASD Research*, Research Society on Alcoholism Annual Research Meeting, June 2012.
15. Soong, J.W.\* , B.M. Arnold, M.D. Avery, D. Beach, R.D. Cusack, J.R. Lowe, **M.M. Stahle**, *Alcohol's Effect on the Dynamics of Brain Development*, American Institute of Chemical Engineers Mid-Atlantic Region Conference, April 2012. \*: Presenting Author
16. **Stahle, M.M.**, B.A. Ogunnaike, J.S. Schwaber, R. Vadigepalli, *Uncovering "Hidden" Variability and Dynamic Patterns: Strategies for Analyzing High-Dimensional Data Sets*, American Institute of Chemical Engineers Annual Meeting, Oct., 2011.
17. **McDonald, M.K.**, R. Vadigepalli, B.A. Ogunnaike, J.S. Schwaber, *A High-Throughput, Multi-Dimensional Investigation of the Brain's Transcriptomic Response to Alcohol Withdrawal*, American Institute of Chemical Engineers Annual Meeting, Nov. 2009.

18. **McDonald, M.K.**, J.S. Schwaber, B.A. Ogunnaike, R. Vadigepalli, *An Automated Framework for High-Throughput Kinetic Analysis of qRT-PCR Data*, American Institute of Chemical Engineers Annual Meeting, Nov. 2009.
19. **McDonald, M.K.**, J.S. Schwaber, B.A. Ogunnaike, *Modeling the Control of an Excitatory Neurotransmitter Receptor During Alcoholism and Alcohol Withdrawal*, American Institute of Chemical Engineers Annual Meeting, Nov. 2008.
20. **McDonald, M.K.**, J.S. Schwaber, B.A. Ogunnaike, *A Control System Hypothesis of the N-Methyl D-Aspartate Glutamate Receptor's Role in Alcoholism and Alcohol Withdrawal*, Invited Presentation. International Federation for Automatic Control, July 2008.
21. **McDonald, M.K.**, J.B. Hoek, J.S. Schwaber, *Central Nervous System's Gene Expression Response to Acute Alcohol Withdrawal*. National Institute on Alcohol Abuse and Alcoholism Trainee Meeting, Sept. 2007.
22. **McDonald, M.K.**, R.L. Khan, R. Vadigepalli, J.S. Schwaber, B.A. Ogunnaike, *Systems Analysis of the Cellular Response to Alcohol Withdrawal*. American Institute of Chemical Engineers Annual Meeting, Nov. 2006.
23. **McDonald, M.K.**, R.L. Khan, B.A. Ogunnaike, J.S. Schwaber, *A Systems Approach to Alcohol Withdrawal in the Visceral-Emotional Neuraxis*. National Institute on Alcohol Abuse and Alcoholism Trainee Meeting, Nov. 2005.
24. Kim, E.J., R.H. Allen, J.H. Yang, **M.K. McDonald** (presenter), W. Tam, E.D. Gurewitsch, *Simulating Complicated Human Birth for Research and Training*. IEEE Eng. Medicine & Biology Society Meeting, Sept. 2004. Corresponding paper published in conference proceedings, 4:2762-6.

## POSTER PRESENTATIONS

1. Case, T., Costantini, N., Green, E., Marino, S., Sharp, M., Winterburn, S., Wyatt, M., Dahm, K.D., Stanzone III, J.F., **Staehe, M.M.**, *Evaluating Developmental Toxicity of Novel Molecules: A New Model System*. AIChE Annual Meeting, November 2015.
2. Haden, N., Infusino, D., **Staehe, M.M.**, Struck Jannini, A.V., Slater, C.S., *Experiments Involving Pharmaceutical Concepts for Undergraduate Laboratory Courses: Students' Perspective on Development and Implementation*. BMES Annual Meeting, October 2015.
3. Seaman, D., Corrado, C., Murphy, R., Sigona, P., Vadigepalli, R. & **Staehe, M.** *A Quantitative Model of Transcription Factor Regulation in Stem Cells*. FOSBE 2015 – Foundations of Systems Biology in Engineering, August 2015.
4. Hanna, L., McGee, J., Srinivasan, D., & **Staehe, M.M.**, *Ethanol Affects the Progression of Planarian Head Regeneration in a Time-Dependent Manner*. Experimental Biology, March 2015.
5. Roller, K.C., M.J. Cimorelli, R.W. Freiling, J.A. Kastelein, B. Medhaug, R. Vadigepalli, K.D. Dahm, **M.M. Staehe**, *Combinatorial Co-Morbidity in Planaria Exposed to Cadmium and Ethanol During Head Regeneration*. Research Society on Alcoholism Annual Meeting, June 2014.
6. Arnold, B., M. Avery, D. Beach, R. Cusack, J. Soong, J. Lowe, **M. Staehe**, *The Effects of Ethanol on Regenerative Capabilities of Planarian Flatworms as a Model for Fetal Alcohol*

- Spectrum Disorders*. American Institute of Chemical Engineers Annual Meeting, October 2012.
7. Lowe, J.R., W.C. Platt, T.D. Mahool, R.D. Cusack, K. Grazel, **M.M. Staehle**, *Central Nervous System Development in Planaria as a Model for Studying the Dynamics of Fetal Alcohol Syndrome*. American Institute of Chemical Engineers Annual Meeting, October 2011.
  8. Mahool, T.D., J.R. Lowe, **M.M. Staehle**, *Alcohol and CNS Development*. American Institute of Chemical Engineers Annual Student Conference, October 2011.
  9. **McDonald, M.K.**, R. Vadigepalli, B.A. Ogunnaike, J.S. Schwaber, *A High-Throughput, Multi-Dimensional Investigation of the Brain's Response to Alcohol Withdrawal*. Biomedical Engineering Society Annual Meeting, October 2009.
  10. **McDonald, M.K.**, R. Vadigepalli, J.B. Hoek, J.S. Schwaber, *Distinguishable Dynamic Gene Expression Signatures During Alcohol Adaptation, Dependence, and Withdrawal in the NTS and CeA by High-Throughput qRT-PCR*. Research Society on Alcoholism Annual Meeting, June 2009.
  11. **McDonald, M.K.**, J.S. Schwaber, B.A. Ogunnaike, *A Predictive Computational Model of NMDA Receptor Dynamics During Alcohol Dependence and Acute Alcohol Withdrawal*. Research Society on Alcoholism Annual Meeting, June 2009.
  12. **McDonald, M.K.**, J.B. Hoek, B.A. Ogunnaike, J.S. Schwaber, *Alcohol as a Potential Anxiogenic During the Adaptation to Chronic Alcoholism*. Research Society on Alcoholism Annual Meeting, June 2008.
  13. **McDonald, M.K.**, J.B. Hoek, B.A. Ogunnaike, J.S. Schwaber, *Behavioral and Neurobiological Changes Within a Period of Heightened Susceptibility to Voluntary Alcohol Withdrawal*. Experimental Biology Meeting, April 2008.
  14. **McDonald, M.K.**, R.L. Khan, B.A. Ogunnaike, J.S. Schwaber, *Differential Gene Expression in the NTS and CeA in Response to Alcohol Withdrawal*. Research Society on Alcoholism Meeting, June 2006.

## FUNDED RESEARCH

1. "Planaria as a high-throughput screening tool for assessing neurodevelopmental toxicity of BPA and BPA substitutes", NIH R21, \$394,500, 8/15/2017-7/31/2019, PI
2. "Scholarships to Enhance Southern New Jersey High-Tech Workforce", NSF S-STEM, \$612,823, 07/01/2015-06/30/2020 – co-PI
3. "Organ-izing the Curriculum – Enhancing Student Understanding of Core Engineering Concepts through Biomedical Activities", NSF-TUES, \$200,000, 06/01/2012-05/31/2016 – co-PI.
4. "Enhancing the Bioengineering Concentration with Team-Based Projects and Summer Immersive Program", NIH-R25, \$200,000, 07/15/2013-06/30/2018 – Senior Personnel.
5. "MRI: Acquisition of a High Performance Computer to Integrate Data Intensive Research and Education: Bringing HPC to South Jersey", NSF-MRI, \$397,024, 09/01/2014-08/31/2017 – Senior Personnel.



## **GRADUATE STUDENTS**

- J. Morris, “High-Throughput Early Assessment of Neurodevelopmental Toxicity Using Planaria Flatworms”, *in progress*.
- C.A. Gutierrez, “A Mathematical Model of a Controls Systems Hypothesis of N-methyl-D-aspartate Receptor-Mediated Ethanol Dependence and Withdrawal Dynamics”, 2015.
- J.R. Lowe, “*Schmidtea mediterranea* planaria as a Novel Animal Model System for Investigating the Dynamics of Nervous System Development in Fetal Alcohol Spectrum Disorder”, 2012.

## **MASTER’S STUDENT THESIS COMMITTEES**

- C.A. Gutierrez, “A Mathematical Model of a Controls Systems Hypothesis of N-methyl-D-aspartate Receptor-Mediated Ethanol Dependence and Withdrawal Dynamics”, 2015.
- J.R. Lowe, “*Schmidtea mediterranea* planaria as a Novel Animal Model System for Investigating the Dynamics of Nervous System Development in Fetal Alcohol Spectrum Disorder”, 2012.
- C. Wiltsey, “Self-Assembling Biomimetic Hydrogels with Bioadhesive Properties for Tissue Engineering Applications”, 2013.

## **REVIEWER FOR JOURNALS AND CONFERENCES**

- PLoS ONE
- American Journal of Drug and Alcohol Abuse
- Biology
- Chemical Engineering Education
- Alcoholism: Clinical and Experimental Research Journal
- International Federation of Automatic Control
- Biomedical Engineering Society
- American Society of Engineering Education, Biomedical Engineering Division
- American Society of Engineering Education, Educational Research and Methods Division
- American Society of Engineering Education, Women in Engineering Division
- American Society of Engineering Education, Chemical Engineering Division

## **SERVICE TO THE PROFESSION**

- Vice Chair of Awards, ASEE Biomedical Engineering Division, 2017-
- Symposium Organizer and Chair, Alternative Animal Models in Alcohol Research, Research Society on Alcoholism Annual Meeting, 2012.
- Rowan University AIChE Student Chapter Advisor, 2011-2015.
- Rowan University BMES Student Chapter Advisor, 2014-2015.