

DIANA VANEGAS

PERSONAL DATA

Assistant Professor
Department of Environmental Engineering and Earth Sciences
Clemson University
Clemson, SC 29634
(864) 656 1001

EDUCATION

- Ph.D., University of Florida, 2015, Agricultural and Biological Engineering
- M.Sc., University of Florida, 2014, Agricultural and Biological Engineering
- B.S., Universidad del Valle, 2010, Food Engineering

PROFESSIONAL EXPERIENCE

- Clemson University, 2019- , Assistant Professor of Biosystems Engineering
- Universidad del Valle, 2015-2019, Assistant Professor of Food Engineering

MEMBERSHIPS

List current technical and professional society memberships.

- Member, Society for Electroanalytical Chemistry, SEAC (2023-)
- Member, Association of Environmental Engineering and Science Professors, AEESP (2019-)
- Member, Institute of Biological Engineering, IBE (2012-)
- Member, American Society of Agricultural and Biological Engineers, ASABE (2012-2020)
- Member, Institute of Food Technologist, IFT (2012-)
- Member of the Native American and Indigenous Studies Association, NAISA (2022-)

HONORS AND AWARDS

1. Faculty Fellows. Graduate Center for Transformational Mentorship. A select group of faculty received a GCTM fellowship to receive CIMER training and help expand initiatives for mentoring across campus. Clemson University (2024). <https://www.clemson.edu/graduate/professional-development/graduate-center-for-transformational-mentorship/index.html>
2. Norsaadah Husain International Graduate Student Support Award, Clemson University (2023). Presented to one staff or faculty member to recognize their excellence in supporting international graduate students. <https://www.clemson.edu/graduate/about/award-recipients.html>
3. AEESP Spotlight Article. Environmental Engineering Science. AEESP Newsletter, Vol. 56 Iss. 3 (2021).
4. Journal Issue Cover, Biosensors. Vol.8 Iss. 2 (2018).
5. Hot Article, Royal Society of Chemistry. Analyst, Vol.140, 1466-1476 (2015).
6. Doctoral Fellowship, Colciencias, Colombia (2012-2025). Full fellowship from the government of Colombia to complete PhD studies abroad.
7. Graduate Student Fellowship, Colfuturo (2010-2012). Partial fellowship for graduate studies provided by a private organization for graduate education.

PUBLICATIONS (* = mentee at Clemson University)

Web of Science H-Index: 13

Scopus H-Index: 14

Google Scholar H-Index: 18

Refereed Journal Publications (IF = impact factor; * = mentee at Clemson University)

1. *Tang, Y., *Moreira, G., Vanegas, D.C., Datta, S.P.A., McLamore, E.S. (2024). Batch-to-Batch Variation in Laser-Inscribed Graphene (LIG) Electrodes for Electrochemical Sensing. *Micromachines*, 15(7): 874. IF (2023): 3.0 <https://doi.org/10.3390/mi15070874>
2. *Bahamon-Pinzon, D., Velez-Torres, I., Estes, S.L., Lee, C., Moore, A., Bridges, W., Carraway, E., Blazer, H., Gutierrez-Zapata, H.M., Vanegas, D. (2024). Confined within a sugarcane monoculture: A

- participatory assessment of water pollution and potential health risks in the community of El Tiple, Colombia. *Science of the Total Environment*. 946: 174072. IF (2023): 9.8
<https://doi.org/10.1016/j.scitotenv.2024.174072>
3. *McCourt, K.M., *Sautter, G., Estes, S.L., McMahan, C., Lee, C., Carraway, E.R., Vélez-Torres, I., Vanegas, D.C. (2024). Participatory assessment of pollution and health risk in artisanal and small-scale gold mining communities in Colombia. *Groundwater for Sustainable Development*, 25: 101158. IF (2023): 5.9 <https://doi.org/10.1016/j.gsd.2024.101158>
 4. Qian, H., *Moreira, G., Vanegas, D.C., *Tang, Y., Pola, C., Gomes, C., McLamore, E.S., Bliznyuk, N. (2024) Improving high throughput manufacture of laser-inscribed graphene electrodes via hierarchical clustering. *Scientific Reports*. 14: 7980. IF (2022): 4.6 <https://doi.org/10.1038/s41598-024-57932-z>
 5. *Moreira, G., Qian, H., Datta, S.P.A., Bliznyuk, N., Carpenter, J., Dean, D., McLamore, E.S., Vanegas, D.C. (2023). A capacitive laser-induced graphene based aptasensor for SARS-CoV-2 detection in human saliva. *PLOS ONE*, 18(8): e0290256. IF (2023): 3.7 <https://doi.org/10.1371/journal.pone.0290256>
 6. Cannon, A.E., Vanegas, D.C., Sabharwal, T., Salmi, M.L., Wang, J., Clark, G., McLamore, E.S., Roux, S.J. (2023). Polarized distribution of extracellular nucleotides promotes gravity-directed polarization of development in spores of *Ceratopteris richardii*. *Front. Plant Sci.*, 14:1265458. IF (2022): 5.6
<https://doi.org/10.3389/fpls.2023.1265458>
 7. Hjort, R.G., Pola, C.C., *Casso-Hartmann, L., Vanegas, D.C., McLamore, E., Gomes, C.L. (2023). Carbon dots using a household cleaning liquid as a dopant for iron detection in hydroponic systems. *RSC Adv.*, 2023, 13, 17244-17252. IF (2022):3.9 <https://doi.org/10.1039/D3RA01713C>
 8. *McCourt, K.M., Cochran, J., Abdelbasir, S.M., Carraway E.R., Tzeng T.R.J, Tsyusko O.V., Vanegas, D.C. (2022). Potential Environmental and Health Implications from the Scaled-Up Production and Disposal of Nanomaterials Used in Biosensors. *Biosensors*, 12(12): 1082. IF (2021): 5.743
<https://doi.org/10.3390/bios12121082>
 9. *Ullah, S.F., *Moreira, G., Datta, S.P.A., McLamore, E., Vanegas, D. (2022). An Experimental Framework for Developing Point-of-Need Biosensors: Connecting Bio-Layer Interferometry and Electrochemical Impedance Spectroscopy. *Biosensors*, 12(11): 938. IF (2021): 5.743
<https://doi.org/10.3390/bios12110938>
 10. *Casso-Hartmann, L., *Rojas-Lamos, P., *McCourt, K., *Vélez-Torres, I., Barba-Ho, L.E., Bolaños, B.W., Montes, C.L., Mosquera, J., Vanegas, D. (2022). Water pollution and environmental policy in artisanal gold mining frontiers: The case of La Toma, Colombia. *Science of The Total Environment*, 852, 158417. IF (2021): 10.753 <https://doi.org/10.1016/j.scitotenv.2022.158417>
 11. *Moreira, G., *Casso-Hartmann, L., Datta, S., Dean, D., McLamore, E., Vanegas, D. (2022). Development of a Biosensor Based on Angiotensin-Converting Enzyme II for Severe Acute Respiratory Syndrome Coronavirus 2 Detection in Human Saliva. *Frontiers in Sensors*, 3, 917380. IF: Not yet available since the journal is new. <https://doi.org/10.3389/fsens.2022.917380>
 12. *Bahamon-Pinzon, D., *Moreira, G., Obare, S., Vanegas, D. (2022). Development of a nanocopper-decorated laser-scribed sensor for organophosphorus pesticide monitoring in aqueous samples. *Microchimica Acta*, 189, 254. IF (2021): 6.408 <https://doi.org/10.1007/s00604-022-05355-w>
 13. *Velez-Torres, I., Vanegas, D. (2022). Contentious environmental governance in polluted gold mining geographies: The case of La Toma, Colombia. *World Development*, 157, 105953. IF (2021): 6.678
<https://doi.org/10.1016/j.worlddev.2022.105953>
 14. McLamore, E., *Moreira, G., Vanegas, D., Datta, S. (2022). Context-Aware Diagnostic Specificity (CADS). *Biosensors*, 12(2), 101. IF (2021): 5.743 <https://doi.org/10.3390/bios12020101>
 15. Jiao, C., Guo, Z., Gong, J., Zuo, Y., Li, S., Vanegas, D., McLamore, E., Shen, Y. (2022). CML8 and GAD4 function in (Z)-3-hexenol-mediated defense by regulating γ -aminobutyric acid accumulation in *Arabidopsis*. *Plant Physiology and Biochemistry*, 186: 135-144. IF (2021): 5.437
<https://doi.org/10.1016/j.plaphy.2022.06.023>
 16. Payumo, J., Alocilja, E., Boodoo, C., Luchini-Colbry, K., Ruegg, P., McLamore, E., Vanegas, D., Briceno, R.K., Castaneda-Sabogal, A., Watanabe, K., et al. (2021). Next Generation of AMR Network. *Encyclopedia*, 1, 871-892. IF: Not yet available since the journal is new.
<https://doi.org/10.3390/encyclopedia1030067>
 17. Velez-Torres, I., Torres, A. M., Bernal, S., Muriel, I., Moreno, H., Alzate, J., *Bahamon-Pinzon, D., Vanegas, D.C. (2021). Afrocolombian Struggles for Food, Land, and Culture: The Case of El Tiple. *Environmental Engineering Science*, 38(5), 340-354. IF (2020): 2.172
<https://doi.org/10.1089/ees.2020.0282>

18. Morgan, V., Casso-Hartman, L., Vanegas Gamboa, D., Vélez-Torres, I., McLamore, E., Muñoz-Carpena, R., Kiker, G. (2020). Modeling exposure risk and prevention of mercury in drinking water for artisanal-small scale gold mining communities. *Human and Ecological Risk Assessment: An International Journal*, 27(6) 1492-1508. IF (2020): 4.997 <https://doi.org/10.1080/10807039.2020.1855576>
19. Abdelbasir, S.M.; *McCourt, K.M.; Lee, C.M.; Vanegas, D.C. (2020). Waste-Derived Nanoparticles: Synthesis Approaches, Environmental Applications, and Sustainability Considerations. *Frontiers in Chemistry*, 8, 782. IF (2020): 5.221 <https://doi.org/10.3389/fchem.2020.00782>
20. Morgan, V.; Casso-Hartmann, L.; *Bahamon-Pinzon, D.; *McCourt, K.; Hjort, R.G.; Bahramzadeh, S.; Velez-Torres, I.; McLamore, E.; Gomes, C.; Alocilja, E.C.; Bhusal, N.; Shrestha, S.; Pote, N.; Briceno, R.K.; Datta, S.P.A.; Vanegas, D.C. (2020). Sensor-as-a-Service: Convergence of Sensor Analytic Point Solutions (SNAPS) and Pay-A-Penny-Per-Use (PAPPU) Paradigm as a Catalyst for Democratization of Healthcare in Underserved Communities. *Diagnostics*, 10, 22. IF (2020): 3.706 <https://doi.org/10.3390/diagnostics10010022>
21. McLamore, E.S., Austin Data, S.P., Morgan V.M., Cavallaro, N.D., Kiker, G., Jenkins, D.M., Rong, Y., Gomes, C., Claussen, J.C., Vanegas, D.C., Alocilja, E.C. (2019). SNAPS: Sensor Analytics Point Solutions for Detection and Decision Support Systems. *Sensors* 19(22), 4935. IF (2019): 3.275 <https://doi.org/10.3390/s19224935>

Prior to Clemson

22. Velez-Torres, I., Vanegas, D.C., McLamore, E.S., Hurtado, D. (2018). Mercury Pollution and Artisanal Gold Mining in Alto Cauca, Colombia: Women's Perception of Health and Environmental Impacts. *Journal of Environment and Development*, 27(4): 415-444. <https://doi.org/10.1177/1070496518794796>
23. Abdelbasir, S., El-Sheikh, S.M., Morgan, V.M., Schmidt, H., Casso-Hartmann, L.M., Vanegas, D.C., Velez-Torres, I., McLamore, E.S. (2018). Graphene-anchored cuprous oxide nanoparticles from waste electric cables for electrochemical sensing. *ACS Sustainable Chemistry & Engineering* 6(9): 12176-1218. <https://doi.org/10.1021/acssuschemeng.8b02510>
24. Vanegas, D.C., L. Patiño, C. Mendez, D. Alves de Oliveira, A.M. Torres, E.S. McLamore, C. Gomes (2018). Low-Cost Electrochemical Biosensor for Detection of Biogenic Amines in Food Samples. *Biosensors Journal*, 8(2). DOI: 10.3390/bios8020042. <http://www.mdpi.com/2079-6374/8/2/42>
25. Vanegas, DC., Gomes, C., Cavallaro, ND., Giraldo-Escobar, D., McLamore, ES. (2017). Emerging Biorecognition and Transduction Schemes for Rapid Detection of Pathogenic Bacteria in Food. *Comprehensive Reviews in Food Science and Food Safety*, 16(6): 1188-1205. <http://dx.doi.org/10.1111/1541-4337.12294>
26. Demirbas, A., Groszman, K., Pazmiño-Hernandez, M., Vanegas, DC., Welt, B., Hondred, JA., Garland, NT., Claussen, JC., McLamore, ES. (2017). Cryoconcentration of flavonoid extract for enhanced biophotovoltaics and pH sensitive thin films. *Biotechnology Progress*, 34(1):206-217. <http://dx.doi.org/10.1002/btpr.2557>
27. Chaturvedi, P., Vanegas, DC., Hauser, BA., Foster, JS., Sepúlveda, MS., McLamore, ES. (2017). Microprofiling real time nitric oxide flux for field studies using a stratified nanohybrid carbon-metal electrode. *Analytical Methods*, 9(42): 6061-6072 <https://doi.org/10.1039/C7AY01964E>
28. Vanegas, DC., Gomes, C., McLamore, ES. (2016). Biosensors for Indirect Monitoring of Foodborne Bacteria. *Biosensors Journal*, 5(1): 137. <http://dx.doi.org/10.4172/2090-4967.1000137>
29. Wang, J., Huang, Y., Li, K., Chen, Y., Vanegas D., McLamore, ES., Shen, Y. (2016). Leaf Extract from *Lithocarpus polystachyus* Rehd. Promote Glycogen Synthesis in T2DM Mice. *PloS one*, 11(11): e0166557. <http://dx.doi.org/10.1371/journal.pone.0166557>
30. Deng, WH., Chen, BY., Zhang, YQ., Yan, SL., Gao, HB., Zhang, JQ., McLamore, ES., Vanegas, DC., Shen, YB., Wu, B. (2016). Extracts of *Artemisia ordosica* can influence the growth of associated plants by regulating the absorption of NH₄⁺ and K⁺. *Allelopathy Journal*, 37(2): 175-193.
31. Taguchi, M., Schwalb, N., Vanegas, DC., Garland, N., Tan, M., Yamaguchi, H., Claussen, JC., McLamore, ES. (2016). pulSED: Pulsed sono-electrodeposition of nanometal for enhancing electrochemical biosensor performance. *Analyst*, 141(11): 3367-3378. <http://dx.doi.org/10.1039/c6an00069j>
32. Vanegas, DC., Clark, G., Cannon, AE., Roux, S., Chaturvedi, P., McLamore ES. (2015). A self-referencing biosensor for real-time monitoring of physiological ATP transport in plant systems. *Biosensors and Bioelectronics*, 74: 37-44. <http://dx.doi.org/10.1016/j.bios.2015.05.027>

33. Burrs, S.L., Vanegas, D.C., Bhargava, M., Mechulan, N., Hendershot, P., Yamaguchi, H., Gomes, C., McLamore, E.S. (2015). A comparative study of graphene–hydrogel hybrid bionanocomposites for biosensing. *Analyst*, 140: 1466-1476. <http://dx.doi.org/10.1039/C4AN01788A>
34. Marvasi, M., Durie, I., McLamore, E.S., Vanegas, D.C., Chaturvedi, P. (2015). Salmonella enterica biofilm-mediated dispersal by nitric oxide donors in association with cellulose nanocrystal hydrogels. *AMB Express*, 5: 1-9. <http://dx.doi.org/10.1186/s13568-015-0114-7>
35. Vanegas, D.C., Taguchi, M., Chaturvedi, P., Burrs, S., Tan, M., Yamaguchi, H., McLamore E.S. (2014). A comparative study of carbon-platinum hybrid nanostructure architecture for amperometric biosensing. *Analyst*, 139: 660-669. <http://dx.doi.org/10.1039/C3AN01718D>
36. Chaturvedi, P., Vanegas, D.C., Taguchi, M., Burrs, S.L., Sharma, P., McLamore, E.S. (2014). A nanoceria–platinum–graphene nanocomposite for electrochemical biosensing. *Biosensors and Bioelectronics*, 58: 179-185. <http://dx.doi.org/10.1016/j.bios.2014.02.021>
37. Chaturvedi, P., Hauser, B.A., Foster, J.S., Karplus, E., Levine, L.H., Coutts, J.L., Richards, J.T., Vanegas, D.C., McLamore E.S. (2014). A multiplexing fiber optic microsensor system for monitoring spatially resolved oxygen patterns. *Sensors and Actuators B: Chemical*, 196: 71-79. <http://dx.doi.org/10.1016/j.snb.2014.01.094>
38. Zhang, M., Gao, B., Vanegas, D.C., McLamore, E.S., Fang, J., Liu, L., Wu, L., Chen, H. (2014). Simple approach for large-scale production of reduced graphene oxide films. *Chemical Engineering Journal*, 243: 340-346. <http://dx.doi.org/10.1016/j.cej.2014.01.019>

Conference Proceedings (* = mentee at Clemson University)

1. *Moreira, G., Datta, S.P.A., Vanegas, D.C., McLamore, E.S. (2023). Development of an ssDNA aptamer-based electrochemical biosensor for SARS-CoV-2 Omicron detection in saliva. *Proc. SPIE PC1254802*, <https://doi.org/10.1117/12.2663105>
2. *Moreira, G., *Casso Hartmann, L., Datta, S.P.A., McLamore, E.S., Vanegas, D. (2022). Development of an ACE-2 biosensor for point-of-need saliva diagnostics and surveillance of SARS-CoV-2. *Proc. SPIE PC12123*, <https://doi.org/10.1117/12.2622984>

Prior to Clemson

3. Sidhu, R., Rong, Y., Vanegas, D.C., Claussen, J., McLamore, E.S., Gomes C. (2016). Impedance biosensor for the rapid detection of *Listeria* spp. based on aptamer functionalized Pt-interdigitated microelectrodes array. *Proc. SPIE 9863*. <http://dx.doi.org/10.1117/12.2223443>
4. Vanegas, D.C., Rong, Y., Schwalb, N., Hills, K.D., Gomes, C., McLamore E.S. (2015). Rapid detection of *Listeria* spp. using an internalin A aptasensor based on carbon-metal nanohybrid structures. *Proc. SPIE*, 9487 <http://dx.doi.org/10.1117/12.2177441>
5. Vanegas, D.C., Gomes, C., McLamore, E.S. (2014). Xanthine oxidase biosensor for monitoring meat spoilage. *Proc. SPIE*, 9107, <http://dx.doi.org/10.1117/12.2050489>
6. Vanegas, D.C., Taguchi, M., Chaturvedi, P., Burrs, S., McLamore, E.S. (2013). Non-invasive microsensors for studying cell/tissue physiology. *Proc. SPIE 8719* <http://dx.doi.org/10.1117/12.2016233>

Book Chapters

1. Datta, S. P., Saleem, T. J., Barati, M., Lopez, M. V., Furgala, M.-L., Vanegas, D. C., Santucci, G., Khargonekar, P. P., McLamore, E. S. (2021). Data, Analytics and Interoperability Between Systems (IoT) is Incongruous with the Economics of Technology. *Big Data Analytics for Internet of Things*. John Wiley & Sons, Inc. <https://doi.org/10.1002/9781119740780.ch2>

Prior to Clemson

2. McLamore, E.S., Convertino, M., Ocoy, I., Vanegas, D.C., Taguchi, M., Rong, Y., Gomes, C., Chaturvedi, P., Claussen, J.C. (2017). Biomimetic Fractal Nanometals as a Transducer Layer in Electrochemical Biosensing. In: *Semiconductor Device-Based Sensors for Gas, Chemical, and Biomedical Applications*. Ed by Fan Ren and Stephen J Pearton, CRC Press. pp 35-67.
3. Vanegas, D.C., Claussen, J.C., McLamore, E.S., Gomes, C. (2017). Microbial Pathogen Detection Strategies. In: *Encyclopedia of Agricultural, Food, and Biological Engineering*. Second Edition. Taylor and Francis.

Other Scholarly Publications

1. *Casso-Hartmann, L., *Moreira, G., *Tang, Y., Vanegas, DC., McLamore, ES. (2024). Fabrication of laser inscribed graphene (LIG) 3-electrode plug-and-play chip V.2. Protocols.io <https://dx.doi.org/10.17504/protocols.io.dm6gpze1dlzp/v2>
2. McLamore, ES., Vanegas, DC., *Bahamon-Pinzon, D., *McCourt, K., *Tang, Y. (2024). Protocol L2.3 (LIG fabrication). Protocols.io <https://dx.doi.org/10.17504/protocols.io.bp2l6b5y5gqe/v2>
3. *Tang, Y., *Casso-Hartmann, L., *Bahamon-Pinzon, D., *Moreira, G., Vanegas, DC., McLamore, ES. (2024). Electrochemical analysis of laser-inscribed graphene electrodes using cyclic voltammetry (ferri/ferrocyanide redox couple). Protocols.io <https://dx.doi.org/10.17504/protocols.io.4r3l27q7jg1y/v2>
4. *Moreira, G., Vanegas, DC., McLamore, ES. (2024). Agarose Gel Electrophoresis for quality control of DNA aptamers in biosensor assays. Protocols.io <https://dx.doi.org/10.17504/protocols.io.bydcps2w>
5. McLamore, ES., *Moreira, G., Vanegas, DC., *Bahamon-Pinzon, D., *Casso-Hartmann, *L., Agbomi L., *Torres, MJ. (2024). Food grade colorimetry of anthocyanins (A Youth Summer Camp Activity). Protocols.io <https://dx.doi.org/10.17504/protocols.io.yxmvmenqng3p/v1>
6. *Bahamon-Pinzon, D., Bergman, C., Vanegas, DC. (2023). Electrodes fabrication on Kapton film with NEJE mini laser - L-Cu1.1. Protocols.io <https://dx.doi.org/10.17504/protocols.io.kxygx9bykg8j/v1>

PRESENTATIONS (* = mentee at Clemson University)

1. Vanegas, D. (Invited Speaker), "Developing sensor technologies for expanding water pollution monitoring in rural communities". Civil and Environmental Engineering Graduate Colloquium, Duke University, Durham, NC (October, 2024).
2. *Paz, S.S (Author and Presenter), Alayande, A.B. (Co-Author), Lazar, K. (Co-Author), Ladner, D. (Co-Author), McLamore, E.S. (Co-Author), and Vanegas, D.C. (Co-Author), "Toward engineered wastewater reuse in hydroponic cultivation: Electrochemical AptaSensor for Escherichia coli O157: H7 monitoring in a combined AnMBR-NFT system", Nanoscale Science and Engineering for Agriculture and Food Systems, Southern New Hampshire University, Manchester, New Hampshire (June 2024).
3. Vanegas, D. (Invited Speaker), "Articulating Environmental Sustainability and Food Safety Goals in Emerging Engineered Wastewater Reuse Systems for Agricultural Production: The Case for Rapid Monitoring" Water-Food-Energy Nexus: Climate Technology Seminar, University of Korea, Seoul, South Korea (May 2024).
4. Vanegas, D. (Invited Speaker), "Articulating Environmental Sustainability and Food Safety Goals in Emerging Engineered Wastewater Reuse Systems for Agricultural Production: The Case for Rapid Monitoring" Symposium on Management of Water Resources for Controlled Environment Agriculture, Gyeongsang National University, Jinju, South Korea (May 2024).
5. *Paz, S.S., Vanegas D (Invited Speaker), Water-Food-Energy nexus: Climate Technology Seminar, "Biosensor for real-time monitoring of foodborne hazards in hydroponic cultivation", University of Korea, Seoul, South Korea (May 2024)
6. Vanegas, D. (Invited Speaker), 2024 Forum of the Global Alliance for Rapid Diagnostics, "Beyond performance: Sustainability considerations for the ethical development of nanotechnologies" Michigan State University (March 2024).
7. *Casso-Hartmann, L. M. (Author and Presenter), *Moreira, G. A. (Co-Author), Tzeng, T. R. J. (Co-Author), Vanegas, D. (Co-Author), McLamore, E. S. (Co-Author), ACS Annual Conference, "Electrochemical detection of Salmonella enterica in hydroponic systems," New Orleans, LA, United States. (March 2024).
8. *Casso-Hartmann, L. M. (Author and Presenter), *Moreira, G. (Co-Author), Tzeng T. R. J. (Co-Author), Vanegas, D. (Co-Author), McLamore, E. S. (Co-Author), IFT First Annual Conference and Expo, "Electrochemical Detection of Salmonella enterica in Hydroponic Solution," Chicago, IL, United States. (July 2023).
9. *Bahamon-Pinzon, D. (Author and Presenter), *Marissa, C. (Co-Author), Moore, A. (Co-Author), Mobley, C. (Co-Author), and Vanegas, D. (Co-Author), Institute of Food Technologists (IFT) Annual Conference,

- “Informing a training methodology on the use of a sensor for pesticides detection in the context of the rural community of El Tiple, Colombia,” Chicago, IL, United States. (July 2023).
10. *Bahamon-Pinzon, D. (Author and Presenter), *Long, I. (Co-Author), Moore, A. (Co-Author), Mobley, C. (Co-Author), *Blazer, H. (Co-Author), and Vanegas, D. (Co-Author), Institute of Food Technologists (IFT) Annual Conference, “Health risk assessment associated with the presence of environmental pollutants in water sources from the community of El Tiple, Colombia,” Chicago, IL, United States. (July 2023).
 11. *Moreira, G. (Author and Presenter), Dean, D. (Co-Author), Qian, H. (Co-Author), Datta, S. (Co-Author), Bliznyuk, N.A. (Co-Author), Vanegas, D. (Co-Author), McLamore, E. (Co-Author), 33rd Anniversary World Congress on Biosensors, “Development of a DNA aptasensor for detection of SARS-CoV-2 Omicron in saliva,” Busan, South Korea. (June 2023).
 12. *Moreira, G. (Author and Presenter), Dean, D. (Co-Author), Qian, H. (Co-Author), Datta, S. (Co-Author), Bliznyuk, N.A. (Co-Author), Vanegas, D. (Co-Author), McLamore, E. (Co-Author), Smart Biomedical and Physiological Sensor Technology XX, “Development of an ssDNA aptamer-based electrochemical biosensor for SARS-CoV-2 Omicron detection in saliva,” Orlando, FL, United States. (May 2023).
 13. *Moreira, G. (Author and Presenter), Dean, D. (Co-Author), Qian, H. (Co-Author), Datta, S. (Co-Author), Bliznyuk, N.A. (Co-Author), Vanegas, D. (Co-Author), McLamore, E.S. (Co-Author), 2nd Annual Postdoctoral Symposium, “Development of an aptamer-based biosensor for SARS-CoV-2 detection in saliva,” Clemson University, Clemson, SC, United States. (April 2023).
 14. *Bahamon-Pinzon, *D. (Author and Presenter), Coll, M., *Long, I., Moore, A., and Vanegas, D., 2023 Focus on Creative Inquiry (FoCI), “Knowledge, Assets, Needs, and Challenges of the Community of El Tiple, Colombia,” Clemson University, Clemson, SC, United States. (April 2023).
 15. *McCourt, K. (Author and Presenter), Vélez-Torres, I. (Co-Author), Vanegas, D. (Co-Author), American Water Resources Association (AWRA) Summer Conference, “Assessment of Water Pollution in Rural Mining Communities, the Case of La Toma Colombia,” Denver, CO, United States. (April, 2023).
 16. Vanegas, D. (Invited Speaker), 2023 Forum of the Global Alliance for Rapid Diagnostics, “Developing technologies for detection of health hazards in low-income communities” Michigan State University (March 2023).
 17. *Casso-Hartmann, L. M. (Author and Presenter), *Moreira, G. (Co-Author), McLamore, E. S. (Co-Author), Vanegas, D. C. (Co-Author), Commission on Latino Affairs Symposium, “Rapid and cost-effective aptasensor to detect *Listeria monocytogenes* and *Salmonella enterica* in irrigation water for hydroponic systems,” Clemson University, Clemson, SC, United States. (September 2022).
 18. *Casso-Hartmann, L.M. (Author and Presenter), *Rojas, P. (Co-Author), *McCourt, K. (Co-Author), Vélez-Torres, I. (Co-Author), Barba, H. (Co-Author), BolañoS, B. (Co-Author), Montes, C. (Co-Author), Mosquera, J. (Co-Author), Vanegas, D. (Co-Author), Commission on Latino Affairs Symposium, “Water Pollution and Environmental Policy in Artisanal Gold Mining Frontiers,” Clemson University, Clemson, SC, United States. (September 2022).
 19. *Bahamon-Pinzon, D. (Author and Presenter), Velez-Torres, I. (Co-Author), and Vanegas, D. (Co-Author), Commission on Latino Affairs Symposium, “Development of a sensor for pesticides detection in the context of rural communities in Colombia,” Clemson University, Clemson, SC, United States. (September 2022).
 20. *Moreira, G. (Author and Presenter), McLamore, E. (Co-Author), Vanegas, D. (Co-Author), 2nd Annual Pandemic Preparedness Symposium – REDDI Lab, “Development of electrochemical biosensors for SARS-CoV-2 detection in saliva,” Clemson University, Clemson, SC, United States. (August 2022).
 21. Ladner, D. A. (Presenter), Adelberg, J. W. (Author), Vanegas Gamboa, D., Amy, G. L. (Author), Karthikeyan, R. (Author), 2022 Clemson University Water Research Symposium, "South Carolina Plant Factories: Water Reuse and Resource Capture," College of Agriculture, Forestry and Life Sciences, Clemson University, Madren Center, Clemson University, SC, United States. (May 9, 2022).
 22. *McCourt, K. (Author and Presenter), *Rojas, P. (Co-Author), *Casso-Hartmann, L. M. (Co-Author), *Velez-Torres, I. (Co-Author), Madera, A. (Co-Author), Lopez, V. (Co-Author), Mejia-Jimenez, M. (Co-Author), Vanegas Gamboa, D. (Co-Author), Annual Meeting of the Institute of Biological Engineering,

- "Assessing the Effects of Mercury Pollution from Artisanal Gold Mining in Communities of Alto Cauca, Colombia," University of Georgia, Athens, GA, United States. (April 2022).
23. Vanegas Gamboa, D. (Presenter), Seminars of the Science and Technologies for Phosphorus Sustainability (STEPS), "Developing testing technologies for addressing health and environmental struggles of marginalized communities," Center of Science and Technologies for Phosphorus Sustainability (STEPS), North Carolina State University, Raleigh, NC, United States. (April 2022).
 24. *Moreira, G. A. (Author and Presenter), *Casso-Hartmann, L. M. (Co-Author), Datta, S. P. (Co-Author), McLamore, E. S. (Co-Author), Vanegas Gamboa, D. (Co-Author), Annual Meeting of the Institute of Biological Engineering, "Development of a low-cost enzyme-based biosensor for saliva diagnostics and surveillance of SARS-CoV- 2," University of Georgia, Athens, GA, United States. (April 2022).
 25. *Bahamon-Pinzon, D. (Author and Presenter), *Velez-Torres, I. (Co-Author), Vanegas Gamboa, D., Annual Meeting of the Institute of Biological Engineering, "Development of a training methodology on the use of a sensor for pesticides detection in marginalized communities in Colombia," University of Georgia, Athens, GA, United States. (April 2022).
 26. *Bahamon-Pinzon, D. (Author and Presenter), *Moreira, G. A. (Co-author), Vanegas Gamboa, D. (Co-Author), Annual Meeting of the Institute of Biological Engineering, "Development of an electrochemical sensor for monitoring organophosphorus agricultural pesticides in water," IBE, University of Georgia, Athens, GA, United States. (April 2022).
 27. *Moreira, G. A. (Author and Presenter), *Casso-Hartmann, L. M. (Co-Author), Datta, S. P. (Co-Author), McLamore, E. S. (Co-Author), Vanegas Gamboa, D. (Co-Author), Annual Meeting of the Institute of Biological Engineering, "Development of Biosensors for Point-of-Need Saliva Diagnostics and Surveillance of SARS-CoV-2," University of Georgia, Athens, GA, United States. (April 2022).
 28. *Moreira, G. A. (Author), *Casso-Hartmann, L. M. (Co-Author), Datta, S. A. (Co-Author), McLamore, E. S. (Co-Author and Presenter), Vanegas Gamboa, D. (Co-Author), SPIE(Society of Photonic Engineering), Smart Biomedical and Physiological SensorTechnology XVIII, "Development of Biosensors for Point-of-Need Saliva Diagnostics and Surveillance of SARS-CoV-2," Orlando, FL, United States. (April 2022).
 29. *Holberg, S. (Author and Presenter), Vanegas Gamboa, D. (Co-Author), *Bahamon-Pinzon, D. (Co-Author), McLamore, E. S. (Co-Author), Annual Meeting of the Institute of Biological Engineering, "Development of Lanthanum-Doped Carbon Dots for Rapid Phosphorus Sensing in Environmental Water Samples," University of Georgia, Athens, GA, United States. (April 2022).
 30. *Tan, A. M. (Presenter), Vanegas Gamboa, D. (Co-Author), Annual Meeting of the Institute of Biological Engineering (IBE), "Future Perspectives in Hydroponic Wastewater Reuse for Sustainable Urban Agriculture," Institute of Biological Engineering, University of Georgia, Athens, GA, United States. (April 2022).
 31. *Tan, A. M. (Presenter), Vanegas Gamboa, D. (Co-Author), Adelberg, J. (Co-Author), Walker, T. (Co-Author), Annual Meeting of the Institute of Biological Engineering (IBE), "Hydroponic Wastewater Reuse for Sustainable Urban Agriculture," Institute of Biological Engineering, University of Georgia, Athens, GA, United States. (April 2022).
 32. *McCourt, K. M. (Author and Presenter), *Rojas, P. (Co-Author), *Casso-Hartmann, L. M. (Co-Author), *Velez-Torres, I. (Co-Author), Vanegas Gamboa, D., Annual Meeting of the Institute of Biological Engineering, "Development of Low-Cost Monitoring Systems for Mercury Pollution Near ASGM Sites in Alto Cauca, Colombia," University of Georgia, Athens, GA, United States. (April 2022).
 33. *McCourt, K. M. (Author), *Rojas, P. (Co-Author), *Casso-Hartmann, L. M. (Co-Author), *Velez-Torres, I. (Co-Author), Vanegas Gamboa, D. (Co-Author), Annual Meeting of the Institute of Biological Engineering, "Development of Low-cost Sensors for the Detection of Mercury in Artisanal Gold Mining Communities of Southwest Colombia. Institute of Biological Engineering," University of Georgia, Athens, GA, United States. (April 2022).
 34. *Casso-Hartmann, L. M. (Author), McLamore, E. S. (Co-Author), Vanegas Gamboa, D., Annual Meeting of the Institute of Biological Engineering, "Rapid and costeffective aptasensor to detect *Listeria monocytogenes* in irrigation water for hydroponic systems," University of Georgia, Athens, GA, United States. (April 2022).

35. *Moreira, G. A. (Author), *Casso-Hartmann, L. M. (Co-Author), Datta, S. P. (Co-Author), McLamore, E. S. (Co-Author), Vanegas Gamboa, D. (Co-Author), Annual Meeting of the Global Alliance for Rapid Diagnostics -GARD, "Development of a low-cost enzyme based biosensor for point-of-need saliva diagnostics of SARS-CoV-2," Michigan State University, Virtual. (February 2022).
36. *Bahamon-Pinzon, D. (Author and Presenter), *Moreira, G. A. (Co-Author), Vanegas Gamboa, D. (Co-Author), Annual Meeting of the Global Alliance for Rapid Diagnostics (GARD), "Development of an electrochemical sensor for in-field detection of organophosphorus pesticides in water," Michigan State University, Online. (February 2022).
37. Vanegas Gamboa, D. (Presenter), Seminars of the Joint School of Nanoscience and Nanoengineering, "Development of Biosensors for Point-of-Need Detection of Emerging Coronaviruses," University of North Carolina -Greensboro, Greensboro, NC, United States. (November 5, 2021).
38. Vanegas Gamboa, D. (Co-Presenter), *Velez-Torres, I. (Co-Presenter), Engineering for Change (E4C) - Seminar Series, "Transdisciplinary Research to Address Mercury Pollution from Artisanal Gold Mining," American Society of Mechanical Engineering, Virtual. (August 4, 2021).
39. Vanegas D.C., McLamore, E. S., Gomes, C., Claussen, J., Jenkins, D., Katz, J., Datta, S. A. "Development of an automated diagnostics platform for SARS-CoV-2 monitoring in vulnerable areas". IBE annual conference. Institute of Biological Engineering. Virtual. (April 10, 2021).
40. *McCourt, K. M., Casso-Hartmann, L. M., Velez-Torres, I., Vanegas, D.C. "SeNsor Analytic Point Solutions (SNAPS) for assessing mercury in La Toma, Colombia" IBE annual conference. Virtual. (April 10, 2021).
41. *Bahamon-Pinzon, D., Velez-Torres, I., Vanegas, D. C. "Glyphosate and its impacts on environment and human health: what can a sensor tell us?" IBE annual meeting. Virtual. (March 20, 2021).
42. *Tan, A., Adelberg, J. W., Walker, T. H., Vanegas, D.C., "Integrating Hydroponic Cultivation and Wastewater Reuse as a Sustainable Method of Urban Food Production" IBE annual conference. Virtual. (March 11, 2021).
43. *Tan, A., *Ullah, S., *VanBrunt, S., Vanegas, D. C. "Integrating hydroponic cultivation with wastewater reuse: Molecular detection of *E.coli* in irrigation water," IBE annual meeting. Virtual. (March 11, 2021).
44. *McCourt, K. M., Casso-Hartmann, L. M., Velez-Torres, I., Vanegas, D. C. "Mercury Pollution in Water Sources of Artisanal Gold Mining Communities of Southwest Colombia," 2020 Virtual Annual Water Resources Conference. American Water Resources Association. Virtual. (November 10, 2020).
45. Morgan, V., Casso-Hartmann, L., Vanegas D.C., Velez-Torres, I., Kiker G., McLamore, E.S., "Nanosensors and decision support models paired on a mobile device for establishing participatory monitoring programs". ACS Sustainable Chemistry and Engineering, San Diego, CA (August 27, 2019).
46. Vanegas, D.C., *Bahamon-Pinzon D., McLamore E.S., Velez-Torres, I., "Developing Biosensors for Detecting Pesticide Traces in Water for Human Use by Marginalized Communities", ACS Sustainable Chemistry and Engineering, San Diego, CA (August 25, 2019).

Prior to Clemson

47. Vanegas, D.C., "Addressing Pesticide Contamination in Water for Use by Marginalized Communities in Southwest Colombia". College of Biological Sciences and Biotechnology, Beijing Forestry University, Beijing, China (June 22, 2019).
48. Morgan, V., K. McCourt, D. Vanegas, I. Velez-Torres, L. Casso-Hartmann, E.S. McLamore "Low-Cost, Facile, and Rapid Nanosensors for Establishing a Participatory Monitoring Program on Mercury Exposure in Rural Colombia", Annual Meeting of the IBE (Institute of Biological Engineering), Salt Lake City, UT, (April 5, 2019).
49. Vanegas, D.C., "Nanotechnology-based Tools for Food Safety – How Feasible is it for Low-Income Communities?". Convergence of Nanotechnology and Food Manufacturing: The Future of Food Processing, Conference of Food Engineering Annual Conference. Minneapolis, MN (September 9, 2018).
50. Vanegas, D.C., E.S. McLamore, E.S., Velez-Torres, I., "Closed Loop Integration of Social Action and Analytical Chemistry Research (CLISAR)". Annual Conference of the Institute for Biological Engineering. Norfolk, VA. (April 6, 2018).

SPONSORED RESEARCH (TAV= TOTAL AWARD VALUE; ISA= INVESTIGTOR’S SHARE OF THE AWARD)

1. IGE Track 2: EMPOWERS: Elevating Mentoring Practices for Optimal Work-Life balance in Education and Research in STEM graduate studies, Co-PI, TAV: \$1,000,000; ISA: \$11,000 (2024-2028)
2. "Climate-Resilient Sustainable Food Production: Controlled Environment Hydroponic Agriculture with Novel Wastewater Treatment & Reuse", National Science Foundation, Partnerships for International Research and Education, Co-PI, TAV: \$1,500,000; ISA: \$187,500 (2023-2025)
3. "Development of an Automated Diagnostic Platform for SARS-CoV-2 Monitoring in Vulnerable Areas", National Institutes of Health/DHHS, PI, TAV: \$897,241; ISA: \$583,207 (2020-2023)
4. "Development of an Automated Diagnostic Platform for SARS-CoV-2 Monitoring in Vulnerable Areas", 2020 Covid Lab Seed Grant. Clemson University, School of Health Research. PI, TAV: \$24,885; ISA: \$24,885 (2021).
5. "NSF Graduate Fellowship - Kelli McCourt," National Science Foundation, PI, TAV: \$138,000; ISA: \$138,000 (2020-2023)
6. "Rapid in-field monitoring of salmonella species for food safety using disposable laser-induced graphene biosensor", NIFA/USDA Agriculture & Food Research Initiative (AFRI), co-PI, TAV: \$500,000; ISA: \$9,961 (2020-2022).

Prior to Clemson

7. "Synoptic and participatory assessment of environmental pollution and health effects due to exposure to mercury from artisanal gold mining in the Alto Cauca basin, Colombia", IHE-Delft, Global Partnership for Water and Development, co-PI, TAV: \$100,000; ISA: \$20,000 (2019-2020)
8. "Encouraging Family Agriculture and Traditional Practices by Afrodescendant Women in Valle del Cauca", Women’s World Banking Foundation, co-PI, TAV: \$20,000; ISA: \$7,000 (2018-2020)
9. "Participatory implementation of alternative agricultural practices in confined spaces affected by agrochemical contamination", Universidad del Valle (Colombia), PI, TAV: \$15,000; ISA: \$10,000 (2017-2019).
10. "Adaptable hydroponic systems for urban food production in marginal neighborhoods of Cali", Universidad Santiago de Cali (Colombia), co-PI, TAV: \$15,000; ISA: \$5,000 (2017-2019).
11. "Synoptic and participatory assessment of environmental pollution and health effects due to exposure to mercury from artisanal gold mining in the Alto Cauca basin, Colombia," Global Partnership for Water and Development IHE-Delft, Co-PI, \$100,000 (\$20,000) (2019-2020)
12. "Encouraging Family Agriculture and Traditional Practices by Afrodescendant Women in Valle del Cauca," Women’s World Banking Foundation, Co-PI, \$20,000 (\$7,000) (2018-2020)
13. "Participatory implementation of alternative agricultural practices in confined spaces affected by agrochemical contamination," Universidad del Valle, PI, \$15,000, (\$10,000), (2017-2019)
14. "Adaptable hydroponic systems for urban food production in marginal neighborhoods of Cali," Universidad Santiago de Cali (Colombia), Co-PI, \$15,000, (\$5,000), (2017-2019)

OTHER SPONSORED ACTIVITY

1. Conference Participation Grant (nominated by EEES Department and CECAS College), Faculty Women of Color in the Academy -Virginia Tech. Sponsored by Clemson University’s Office of the Provost and Office and Inclusion and Equity. Arlington, VA (2024)
2. Bridge to Doctorate Mentoring: Introduction to Mentor Training and Maintaining Effective Communication; Aligning Expectations and Assessing Understanding; Addressing Equity and Inclusion and Fostering Independence; Promoting Professional Development and Articulating Your Mentoring Philosophy and Plan. Sponsored by Clemson University (2023)
3. Diversity, Equity & Inclusion 101: A 10-Day Foundational Program. Academic Impressions. Sponsored by Clemson University (2022)
4. Team Science Training - UC San Diego. Sponsored by RADx-rad Discovery and Data Consortium Coordinating Center and the NIH (2022)
5. LGBTQ+ ally training. Harvey and Lucinda Gantt Multicultural Center | Division of Inclusion and Equity. Clemson University (2022)
6. Antiracism Training, Living for Liberation -UC San Diego. Sponsored by RADx-rad Discovery and Data Consortium Coordinating Center and the NIH (2021)
7. Conference Participation Grant, Faculty Women of Color in the Academy -Virginia Tech. Sponsored by Clemson University’s Office of the Provost and Office and Inclusion and Equity (2021)

8. Travel Grant, Graduate Students Council, University of Florida (2013).

GRADUATE STUDENT ADVISING

Doctoral Graduates

1. McCourt, K (PhD) "Development of sensor analytic point solutions for assessing mercury pollution in water", Dec 2023, (Main Advisor). Current position: Postdoctoral Researcher. School of Civil and Environmental Engineering and Earth Sciences, Clemson University, Clemson, South Carolina.
2. Bahamon-Pinzon, D (PhD) "Development of integrated monitoring systems for pesticide exposure mitigation by vulnerable communities", August 2023, (Main Advisor). Current position: Postdoctoral Researcher. Jackson School of Geosciences, University of Texas, Austin, Texas.

Master's Graduates

1. Kelli McCourt (Enroute MS), "Addressing mercury contamination from artisanal gold mining in Colombia: pollution exposure, health risk, and educational efforts in the communities of La Toma, Colombia," 7/2023, (Main Advisor). Current position: Postdoctoral Researcher. School of Civil and Environmental Engineering and Earth Sciences, Clemson University, Clemson, South Carolina.
2. Tan, A (MSc) "Reuse of alternative water sources in hydroponic cultivation for sustainable urban farming", May 2022, (Main Advisor). Current position: Environmental Engineer at AECOM, Greenville, South Carolina.
3. Van Brunt, S (MSc) "Assessing sustainability and safety aspects of hydroponic food production based on the reuse of municipal wastewater". July 2020, (Main Advisor). Current position: Quality Engineer at Kite Pharma, Los Angeles, California.

Current Graduate Advising

1. Saylen Paz (PhD), "Sustainable hydroponic cultivation: Integrating nutrient solution monitoring and life cycle analysis for enhanced crop production," 04/26, (Main Advisor)
2. Lisseth Casso-Hartmann (MS), "Development of an electrochemical biosensor to detect *S. enterica* in hydroponic solution," 12/2024, (Main Advisor)
3. Joana Temeng (MS), "TBD," 04/25, (Main Advisor)

Post-Doctoral Research Advisees

1. Dr. David Bahamon (Research Specialist) "Participatory Assessment of Water Pollution and Community Exposure in Agrochemical-Impacted Territories (July-December 2023). Current Position: Postdoctoral Researcher, Jackson School of Geosciences, University of Texas, Austin, Texas.
2. Dr. Geisianny Moreira (Postdoctoral Associate) "Development of Biosensors for Automatic Detection and Tracing of SARS-CoV-2 in saliva" (January 2020-December 2022). Current position: Research Scientist, UNM Metals Superfund Research Center, University of New Mexico
3. Dr. Irene Velez-Torres (Fulbright Visiting Scholar) "Intersecting Low-Cost Technology for Pollution Monitoring and Environmental Health Struggles of Marginalized Communities in Colombia" (April-October 2022). Current position: Consul General, Consulate of Colombia in London, London, UK.
4. Dr. Sadia Ullah (Research Scientist) "Development of a Loop-mediated Molecular Amplification Method for *E. coli* detection in hydroponic cultivation" (January-July 2021). Current position: Research Scientist, School of Engineering Sciences in Chemistry, Biotechnology and Health, KTH Royal Institute of Technology, Stockholm, Sweden.

Undergraduate Student Mentoring

1. Sarah Cribb (Honors Research) "Monitoring plant growth in hydroponics run on hardwater". (2023). Current position: Searching for jobs.
2. Samuel Holberg (Honors Research) "Characterization of fluorescent carbon quantum dots as phosphorus sensors". (2022). Current position: Graduate Student. Biological and Agricultural Engineering Department. North Carolina State University.

3. Mary Yvonne Atieh (Research Intern) “Characterization of laser-induced graphene electrodes for electrochemical detection of SARS-CoV-2”. (2021). Current position: Engineer in Training. Division of Water Resources. KCI Technoogies, Inc.
4. Paulina Rojas (International Undergraduate Research Experience) “Development of a lay-users protocol for mercury monitoring in mining-impacted waters”. (2021). Current position: Graduate Student. Environmental Science and Engineering. Universidad Nacional de Colombia.
5. Michael Smith (Honors Research) “Fermented plant juice as organic fertilizer for hydroponic cultivation”. (2020). Current position: Graduate Student. Biological and Agricultural Engineering Department. University of California Davis.

TEACHING

Courses Taught

Beginning Fall 2019

- BE 3100, Biosystems Engineering Thermodynamics. Fall 2019-24.
- BE 2100, Introduction to Biosystems Engineering. Fall 2020-24.
- BE 4510/6510, Sustainable Engineering Seminar. Fall 2020-24.

New Course Development

- BE 8710 Special Topics: Fundamentals and Applications of Biosensing, Spring 2022-23.
- BE 4990 Creative Inquiry: Biosensing Tools. Fall 2022, Spring 2023.

PROFESSIONAL ACTIVITIES

List committees, committee offices, boards, and commissions.

- Guest Editor, Special Issue in Progress in Biophysics and Molecular Biology, (2023-)
- Guest Editor, Special Issue in Biosensors, (2022-2023)
- Panelist, Community Resilience, Clemson University Sustainability Summit (2023)
- Panelist, Sustainability and ethics considerations of fast fashion, Biosystems Engineering Club (2022)
- Organizer. Webinar Series “Mercury, environmental health, and territory in mining sites” In partnership with Universidad del Valle (Colombia), Minciencias (Colombia), Fulbright (USA), and UNESCO-IHE (the Netherlands) (2021)
- Reviewer, WIREs Water (2020-).
- Reviewer, Environmental Engineering Science (2020-)
- Reviewer, Biosensors (2019-)
- Reviewer, New Journal of Chemistry (2015-2016)
- Reviewer, LWT - Food Science and Technology (2016-)
- Reviewer, Challenges (2019-)
- Panelist, Greenville (Upstate) Climate Action organization (2020)

UNIVERSITY AND PUBLIC SERVICE

Graduate Student Committees

- Marcela Florez-Garcia (MS), “Microbial-chemical degradation of styrene in co-mingled plumes with ethylbenzene, benzene, and carbon tetrachloride” 12/2024 (Committee Member)
- Abi Roberts (MS), “Towards validating satellite remote sensing of aerosols with ground-based low-cost sensors” 7/2023 (Committee Member)
- Drew Ewing, MS, “A Comparison of Methods to Measure Crop Water Use in South Carolina,” 07/2020, (Committee Member)

Department Committees

- Department: Member, Hiring committee for Assistant/Associate Professor position (2023)
- Department: Member, Hiring committee for lab manager position (2023)
- Department: Member, Diversity, equity, and inclusion committee (2020-)
- Department: Member, Biosystems Engineering Curriculum Committee, (2019-)
- Department: Member, Environmental Engineering and Earth Sciences Advisory Committee, (2019-)

University Committees

- Faculty Senate. CECAS representative. Finance Committee Member. Clemson University (2024-2027).

Other Service

- Proposals reviewer. National Science Foundation, Virtual Panel(June 2024)
- Proposals reviewer. National Institutes of Health, Virtual Panel (February 2024)
- Proposals reviewer. National Institutes of Health, Virtual Panel (March 2023)
- Proposals reviewer. National Institutes of Health, Washington D.C. (November 2022)
- Proposals reviewer. National Science Foundation, Virtual Panel (May 2022)
- Proposals reviewer. National Institutes of Health, Virtual Panel (June 2022)
- Invited Panelist. Community Resilience. Sustainability Summit. Clemson University. April 2023.
- Invited Panelist. Sustainability and ethics considerations of fast fashion. Biosystems Engineering Club. March 2022.
- Webinar Series Organizer. Mercury, environmental health, and territory in mining sites. In partnership with Universidad del Valle (Colombia), Clemson University (USA), and sponsored by Minciencias (Colombia), Fulbright (USA), and UNESCO-IHE (the Netherlands) (09/03/2021, 09/10/2021)
- Webinar Panelist, KeSEBAE, University of Nairobi, Kenya (10/15/20).
- Panelist, Greenville (Upstate) Climate Action organization (2020).
- Speaker, EEES Department Seminar (2020).
- Article reviewer, WIREs Water (2020-).
- Article reviewer, Environmental Engineering Science (2020-)
- Article reviewer, Biosensors (2019-)
- Article Reviewer, New Journal of Chemistry (2015-2016).
- Article Reviewer, LWT - Food Science and Technology (2016-).
- Article Reviewer, Challenges (2019-)
- Research Proposal Reviewer, North Carolina State University (2019)

Last Updated on September 20, 2024.