

Ian M. Bradley

Department of Civil, Structural & Environmental Engineering
RENEW Institute
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RESEARCH EMPHASES:

Biological Processes for Resource Recovery. Environmental Biotechnology. Microbial Ecology.

EDUCATION

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| 2017 | Ph.D. Environmental Engineering. University of Illinois at Urbana-Champaign
Dissertation: <i>Selection of lipid and carbohydrate accumulators for enhanced algal feedstock production and nutrient recovery from wastewater.</i> |
| 2011 | M.S. Environmental Engineering. University of Illinois at Urbana-Champaign
Thesis: <i>Iron-oxide amended biosand filters for virus removal.</i> |
| 2010 | M.S. Civil Engineering (Structures). University of Illinois at Urbana-Champaign |
| 2009 | B.S. Industrial & Enterprise Systems Engineering. University of Illinois at Urbana-Champaign. |

PROFESSIONAL EXPERIENCE

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| January 2018 | Assistant Professor , Dept. of Civil, Structural and Environmental Engineering and RENEW Institute. University at Buffalo SUNY. |
| 2010-2017 | Research and Teaching Assistant , Dept. of Civil and Environmental Engineering. University of Illinois at Urbana-Champaign. |

PUBLICATIONS (*denotes advised graduate student at UB, corresponding author underlined)

Google Scholar: <https://scholar.google.com/citations?user=nW9DGrEAAAJ>

**as of 8/14/23 total citations on Google Scholar are 701 with an h-index of 8.

1. Hill DT, Alawazi MA, Moran EJ, **Bradley IB**, Bennett LJ, Dunham CN, Wang M, Ye Y, Larsen DA, Wastewater Surveillance Provides 10-Days Forecasting of COVID-19 Hospitalizations Superior to Cases and Test Positivity: A Prediction Study. *Preprint with The Lancet*.
2. Neyra M, Hill DT, Bennett LJ, Dunham CN, Larsen DA, **New York State Wastewater Surveillance Network Team**. Establishing a statewide wastewater surveillance system in response to the COVID-19 pandemic: A reliable model for continuous and emerging public health threats. *Journal of Public Health Management & Practice*. *In press*.
3. *Emily Segelhurst, Jonathan E. Bard, *Annemarie N. Pillsbury, *Md Mahbulul Alam, Natalie A. Lamb, Chonglin Zhu, Alyssa Pohlman, Amanda Boccolucci, Jamaal Emerson, Brandon J. Marzullo, Donald A. Yergeau, Norma J. Nowak, **Ian M. Bradley**, Jennifer Surtees, Yinyin Ye, Improved Robustness of SARS-CoV-2 Whole-Genome Sequencing from Wastewater with a Nonselective Virus Concentration Method. *EST Water*. 2023, 3, 4, 954-962.
4. Halwatura, L.M., *McLerran, I.S., Weglarski, D.L., Ahmed, Z.U., Ye, Y., **Bradley, I.M.**, Aga, D.S. Complementing RNA Detection with Pharmaceutical Monitoring for Early Warning of Viral Outbreaks through Wastewater-Based Epidemiology. *Environmental Science & Technology Letters*. 2022, 9, 6, 567–574. Impact Factor: 7.65

5. *Alam, M.M., Masud, A., *Scharf, B., **Bradley, I.M.**, Aich, Long-Term Exposure and Effects of rGO–nZVI Nanohybrids and Their Parent Nanomaterials on Wastewater-Nitrifying Microbial Communities. *Environmental Science & Technology*. 2022, 56(1), 512–524.
6. **Bradley, I.M.**, Li, Y., Guest, J.S. Solids Residence Time Impacts Carbon Dynamics and Bioenergy Feedstock Potential in Phototrophic Wastewater Treatment Systems. *Environmental Science & Technology*. 2021, 55, 18, 12574–12584.
7. **Bradley, I.M.**; Sevillano Rivera, Maria; Pinto, Ameet; Guest, Jeremy. Impact of Solids Residence Time on Community Structure and Nutrient Dynamics of Mixed Phototrophic Wastewater Treatment Systems. *Water Research*. 2019, 155 pp. 271-282. Impact Factor: 9.03
8. Fedders, Anna; DeBellis, Jennifer; **Bradley, I.M.**; Sevillano Rivera, Maria; Pinto, Ameet; Guest, Jeremy. Comparable nutrient uptake across diel cycles by three distinct algal communities. *Environmental Science and Technology*. 2019, 53(1) pp. 390-400.
9. Gardner-Dale, D.A., **Bradley, I.M.**, Guest, J.S. The Influence of Solids Residence Time and Dynamic Carbon Storage on Nitrogen and Phosphorus Recovery by Microalgae Across Diel Cycles. *Water Research*. 2017, 122 pp. 231-239.
10. **Bradley, I.M.**, Pinto, A.J., Guest, J.S. Design and Evaluation of Illumina MiSeq-Compatible, 18S rRNA Gene Specific Primers for Improved Characterization of Mixed Microalgal Communities. *Applied and Environmental Microbiology*. 2016, 82 (19), pp 5878-5891.
11. Shoener, B.D., **Bradley, I.M.**, Cusick, R.D., Guest, J.S. Energy Positive Domestic Wastewater Treatment: The Roles of Anaerobic and Phototrophic Technologies. *Environmental Science: Processes & Impacts*, 2014, 16(6): 1204-1222.
12. Wang, H., Narihiro, T., Straub, A.P., Pugh, C.R., Tamaki, H., Moor, J.F., **Bradley, I.M.**, Kamagata, Y., Liu, W.T., Nguyen, T.H., MS2 Bacteriophage Reduction and Microbial Communities in Biosand Filters, *Environmental Science and Technology*, 2014, 48(12): 6702-6709.
13. **Bradley, I.M.**, Straub, A., Maraccini, P., Markazi, S., Nguyen, T.H. Iron-oxide Amended Biosand Filters for Virus Removal. *Water Research*, 2014, 45 (15), pp. 4501-4510.

FUNDED PROJECTS

Total awards participating as PI or Co-PI:

\$ 4,929,520

Direct funding (as lead PI or co-PI % share)

\$2,462,846

1. Engineering-Scale Validation of Novel Algae CO₂ Capture and Bioproducts Technology

Funding Agency: DOE

Award Lead: HELIOS-NRG

UB PI: **Ian Bradley** (100%)

UB Subaward: \$201,070

(1/1/2022 – 8/31/2024)

2. Process Optimization and Real-Time Control for Synergistic Microalgae Cultivation and Wastewater Treatment.

Funding Agency: DOE

Award Lead: UIUC

PIs: Jeremy Guest (UIUC; PI, 40%), **Ian Bradley** (UB; Co-PI, 30%), Ameet Pinto (Georgia Tech; Co-PI, 30%)

Total award: \$2,000,000; Co-PI, UB Subaward: \$500,427

(2/1/2021 – 3/30/2024)

3. Model-aided Design and Integration of Functionalized Hybrid Nanomaterials for Enhanced Bioremediation of Per- and Polyfluoroalkyl Substances (PFASs)

Funding agency: NIH/NIEHS

PIs: Diana Aga (PI 34%), **Ian Bradley** (Co-PI, 33%), Nirupam Aich (Co-PI, 33%)

Total award: \$1,443,434, **Co-PI: \$476,333**

(1/1/2021 – 8/31/2024)

4. Wastewater Surveillance to Support COVID-19 Response and Expand New York State Health Security

Funding Agency: CDC/NYSDOH

Award Lead: Syracuse University

UB PIs: Ian Bradley (PI, 50%), Yinyin Ye (Co-PI, 50%)

UB Subaward: \$450,000 (pending)

(8/1/2023 – 7/31/2024)

UB PIs: Ian Bradley (PI, 50%), Yinyin Ye (Co-PI, 50%)

UB Subaward: \$755,282

(8/1/2022 – 7/31/2023)

UB PIs: Ian Bradley (PI, 50%), Yinyin Ye (Co-PI, 50%)

UB Subaward (new): \$50,000

(1/1/2022 – 7/31/2022)

5. SARS-CoV-2 Wastewater Monitoring Program for Erie County – Detection of Variants of Concern and Full Genome Sequencing

Funding Agency: Erie County, NY

PIs: Ian Bradley (PI, 50%), Yinyin Ye (Co-PI, 50%)

Total award (continuation): \$48,288

(1/1/2022 – 8/31/2022)

PIs: Ian Bradley (PI, 67%), Yinyin Ye (Co-PI, 33%)

Total award (continuation): \$177,884

(6/1/2021 – 12/31/2021)

PIs: Ian Bradley (PI, 50%), Yinyin Ye (Co-PI, 40%), Ning Dai (Co-PI, 10%),

Total award (new): \$89,187

(9/1/2020 – 12/31/2020)

6. PIPP Phase I: Center for Ecosystems Data Integration and Pandemic Early Warning

Funding Agency: NSF

PIs: Jennifer Surtees (PI), Dong (Co-PI), Pitman (Co-PI), Tumiel-Berhalter (Co-PI), Ye (Co-PI)

Senior Personnel: Bard, **Bradley**, Crooks, Feeley, Gokcumen, Jacobs, Masuda, Orom, Sariyuce, Xu

Total award: \$1,063,676

(9/1/2022 – 8/31/2023)

7. Great Lakes Research Consortium: Advancing the prediction and mitigation of harmful algal blooms (HABs) through the inclusion of algal ecology and nutrient dynamics in systems modeling

PIs: **Ian Bradley** (PI, 50%), Zhenduo Zhu (Co-PI, 50%)

Total award: \$25,000

(2/1/2021 – 8/31/2022)

8. SARS-CoV-2 Wastewater Monitoring Program for University at Buffalo

PIs: **Ian Bradley** (PI, 67%), Yinyin Ye (Co-PI, 33%), John Tomaszewski, Tom Russo, Jean Wactawski-Wende, Jeff Angiel, Jocelyn Jakubus, Greg Wilding, Craig Abbey, Brian Haggerty
Funding agency: University at Buffalo
Total award: \$106,875
 (9/1/2020 – 1/31/2021)

9. Towards Complete Removal of Per- and Polyfluoroalkyl Substances (PFAS) Using a Nanotechnology Assisted Advanced Wastewater Treatment Process
Funding agency: Great Lakes Research Consortium
PIs: Nirupam Aich (PI), **Ian Bradley** (Co-PI, 25%)
Total award: \$25,000
 Term: 5/1/2019 – 8/31/2020

10. Real-time DNA sequencing to track sewage pollution and inform advisories to protect public health
Funding agency: Buffalo Blue Sky
PIs: Lauren Sassoubre (PI, coin holder), **Ian Bradley** (PI, new faculty), Jaroslaw Zola (PI, coin holder)
Total award: \$7,500
 (5/1/2019 – 8/31/2020)

CONFERENCE PRESENTATIONS & POSTERS (denotes advised student, presenter underlined)**

Produced at UB

1. **Saifur, S.; **Vyverberg, N.; Antle, J.; Aguilar, J.M.; **Hanin, D.; Aga, Diana; **Bradley, I.M.**; Selection of microbial communities and assessment of their potential for aerobic and anaerobic biodegradation of PFAS compounds. Association of Environmental Engineering and Science Professors (AEESP) Research and Education Conference; AEESP; Boston, MA; June 20-23, 2023.
2. **Hodaei, M.; **Alam, M.M.; **Bradley, I.M.** Effects of solid residence time (SRT) and nutrient availability on mixed community membrane photobioreactor performance for wastewater treatment. Association of Environmental Engineering and Science Professors (AEESP) Research and Education Conference; AEESP; Boston, MA; June 20-23, 2023.
3. **Alam, M.M.; **Hodaei, M.; Molitor, H.R.; Kim, G.-Y.; Avila, N.M.; Gincley, B., A.J.; Guest, J.S.; **Bradley, I.M.**; Community Structure and Function During Periods of High-Performance and Upset at a Full-Scale Algal Wastewater Resource Recovery Facility. Association of Environmental Engineering and Science Professors (AEESP) Research and Education Conference; AEESP; Boston, MA; June 20-23, 2023.
4. Molitor, H.R.; **Alam, M.M.; **Hodaei, M.; Kim, G.-Y.; Avila, N.M.; Gincley, B., Pinto, A.J.; **Bradley, I.M.**, Guest, J.S.; Intensive Tertiary Nutrient Removal and Recovery from Municipal Wastewater by Microalgae: Characterization of the EcoRecover Process. Association of Environmental Engineering and Science Professors (AEESP) Research and Education Conference; AEESP; Boston, MA; June 20-23, 2023.
5. Kim, G.-Y.; Molitor, H.R.; Zhang, X.; Li, Y.; Avila, N.M.; Shoener, B.D.; Schramm, S.M.; Snowling, S.D.; Bradley, I.M.; Pinto, A.J.; Guest, J.S. (Abstract, Poster) Development of a phototrophic-mixotrophic process model (PM²) and a process simulator for microalgae-based wastewater treatment. IWA Leading Edge Conference on Water and Wastewater Technologies (LET); International Water Association (IWA); Daegu, South Korea; May 29-June 2, 2023.
6. Hill DT, Alazawi M, Moran EJ, Bennett LJ, Bradley I, Collins MB, Gobler CJ, Green H, Insaf TZ, Kmush B, Neigel D, Raymond S, Wang M, Ye Y, Larsen DA. Wastewater surveillance provides 10-days forecasting of COVID-19 hospitalizations superior to cases and test positivity: A prediction study. Testing the Waters. Oxford, England, 2023.

7. ****Alam, M.M.;** ****Hodaei, M.;** Molitor, H.R.; Kim, G.-Y.; Avila, N.M.; Gincley, B., A.J.; Guest, J.S.; **Bradley, I.M.;** Temporal Variation in Community Structure and Functions of a Mixed Microalgal Community from a Full-Scale Municipal Wastewater Treatment Plant. Association of Environmental Engineering and Science Professors (AEESP) Research and Education Conference; AEESP; St. Louis, Missouri; June 28-30, 2022.
8. ****Hodaei, M.;** ****Alam, M.M.;** Molitor, H.R.; Kim, G.-Y.; Avila, N.M.; Gincley, B., A.J.; Guest, J.S.; **Bradley, I.M.** Effects of algal community diversity on wastewater treatment performance and stability during environmental perturbations. Association of Environmental Engineering and Science Professors (AEESP) Research and Education Conference; AEESP; St. Louis, Missouri; June 28-30, 2022.
9. **Molitor, H.R.;** Kim, G.-Y.; Avila, N.M.; Gincley, B.; ****Alam, M.M.;** ****Hodaei, M.;** Pinto, A.J.; **Bradley, I.M.;** Guest, J.S. Intensive mixed community microalgal cultivation for nutrient recovery from municipal wastewater. Association of Environmental Engineering and Science Professors (AEESP) Research and Education Conference; AEESP; St. Louis, Missouri; June 28-30, 2022.
10. ****Alam, M.M.,** *Masud, A., **Bradley, I.M.,** Aich, N. Interaction of carbon-metal nanohybrids with biological wastewater treatment; Sustainable Nanotechnology Organization (SNO) Conference 2019. San Diego, CA. November 9-11, 2019.
11. ****Jarin, M.,** *Masud, A., **Bradley, I.M.,** Aich, N. Nano-enabled Water Treatment Technologies for PFAS Degradation and Removal, NSF REU Symposium, University at Buffalo, SUNY, Buffalo, NY, August 2019
12. ****Ahrens-Viquez, M.,** ****Alam, M.M.,** **Bradley, I.M.** Microalgal Community Structure and Function for Nutrient Recovery from Wastewater, NSF REU Symposium, University at Buffalo, SUNY, Buffalo, NY, August 2019.
13. ****Scharf, B.,** *Masud, A., ****Alam, M.M.,** **Bradley, I.M.,** Aich, N. The Effects of Reduced Graphene Oxide Nano Zero Valent Iron (rGO-nZVI) Hybrids on Nitrifying Microbial Communities in Biological Wastewater Treatment; Sustainable Nanotechnology Organization (SNO) Conference 2018. Washington, DC. November 8-10, 2018.
14. ****Scharf, B.,** *Masud, A., ****Alam, M.M.,** **Bradley, I.M.,** Aich, N. The Effects of Reduced Graphene Oxide Nano Zero Valent Iron (rGO-nZVI) Hybrids on Nitrifying Microbial Communities in Biological Wastewater Treatment; NSF REU Symposium, University at Buffalo, SUNY, Buffalo, NY, August ,2018.
15. ****Garcia, Kyle.,** ****Alam, M.M.,** **Bradley, I.M.** Effect of Nutrient Loading on Microalgal Community Structure and Function in Wastewater, NSF REU Symposium, University at Buffalo, SUNY, Buffalo, NY, August, 2018.

Produced prior to UB or with PhD/MS advisor

1. **Bradley, I.M.;** Sevillano-Rivera, M.C.; Pinto, A.J.; Guest, J.S. Impact of Solids Residence Time on Community Structure and Nutrient Dynamics of Mixed Phototrophic Wastewater Treatment Systems. International Water Association (IWA) Conference on Algal Technologies and Stabilization Ponds for Wastewater Treatment and Resource Recovery. Valladolid, Spain; July 1-2, 2019.
2. **Bradley, I.M.,** Guest, J.S.; Gardner-Dale, D.A.; Fedders, A.C.; DeBellis, J.L. Development of selective pressures for nitrogen and phosphorus recovery by microalgae across diurnal cycles. 1st IWA Conference on Algal Technologies for Wastewater Treatment and Resource Recovery; International Water Association; Delft, The Netherlands. March 16-17, 2017.
3. **Gardner-Dale, D.,** **Bradley, I.M.,** Guest, J.S. The Effects of Solids Residence Time and Diurnal Cycles on Nutrient Recovery and Biochemical Composition in Microalgae. The 89th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC), New Orleans, Louisiana. September 24-27, 2016.

4. **Bradley I.M.**, Pinto A.J., Guest, J.S., Improved Characterization of Mixed Phototrophic Communities through 18S rRNA Amplicon Sequencing. IWA Microbial Ecology in Water Engineering & Biofilms 2016. Copenhagen, Denmark. September 4-7, 2016.
5. **Bradley, I.M.**, DeBellis, J., Fedders, A., Guest, J.S. Selective Pressures Drive Algal Community Function, Nutrient Recovery, and Bioenergy Feedstock Production in Phototrophic Wastewater Treatment. IWA Leading Edge Conference on Water and Wastewater Technologies, Jerez de la Frontera, Spain. June 13-16, 2016.
6. **Gardner-Dale, D.**; **Bradley, I.M.**; Guest, J.S. Solids residence time dictates N:P recovery in microalgae. WEF / IWA Nutrient Removal and Recovery Conference; International Water Association (IWA), Water Environment Federation (WEF); Denver, CO; July 10-13, 2016.
7. **Bradley I.M.**, Pinto A.J., Guest, J.S., Design of 18S Primers for Improved Determination of Mixed Phototrophic Communities in Wastewater Treatment, Illinois Water Environment Association's (IWEA's) 37th Annual Conference. Urbana, IL. February 29, 2016.
8. **Bradley I.M.**, Pinto A.J., Guest, J.S., Design of 18S Primers for Improved Determination of Mixed Phototrophic Communities in Wastewater Treatment, Women Exploring Graduate Opportunities (We Go) in Engineering Symposium. University of Illinois, Urbana, IL . September 18, 2015.
9. **Bradley I.M.**, Pinto A.J., Guest, J.S., Design of 18S Primers for Improved Determination of Mixed Phototrophic Communities in Wastewater Treatment, Association of Environmental Engineering and Science Professors 2015. New Haven, CT. June 13-16, 2015.
10. **Bradley, I.M.**, Gardner-Dale, D., Guest, J.S. Selection of lipid and carbohydrate accumulators for enhanced algal feedstock production and nutrient recovery from wastewater. 21st Annual Environmental Engineering and Science Symposium, EES UIUC, Urbana, IL, April 9, 2015.
11. **Bradley, I.M.**, Gardner-Dale, D., Guest, J.S. Selection of lipid and carbohydrate accumulators for enhanced algal feedstock production and nutrient recovery from wastewater. Illinois Water 2014 Conference, Illinois State Water Survey, Urbana, IL, October 14-15, 2014.
12. **Wang, H.**, Narihiro, T., Straub, A.P., Pugh, C.R., Tamaki, H., Moor, J.F., **Bradley, I.M.**, Kamagata, Y., Liu, W-T, Nguyen, T.H. Role of diverse microbial communities in MS2 bacteriophage removal in biosand filters. 248th American Chemical Society National Meeting & Exposition. San Francisco, CA, August 10-14, 2014.
13. **Bradley, I.M.**, Gardner-Dale, D., Guest, J.S. (Poster). Selection of lipid and carbohydrate accumulators for enhanced algal feedstock production and nutrient recovery from wastewater. 20th Annual Environmental Engineering and Science Symposium, EES UIUC, Urbana, IL, April 4th 2014.
14. **Leow, S.**, **Bradley, I.M.**, Vardon, D.R., Sharma, B.K., Guest, J.S., Strathmann, T.J. (Presentation). Hydrothermal liquefaction of microalgae: Influence of varying cell composition on liquid fuel yield and quality. American Chemical Society National Meeting & Exposition. Indianapolis, IN, September 8-12, 2013.
15. **Bradley I.M.**, Straub A., Markazi S.D., Maraccini P.A., Nguyen T.H., Removal of Waterborne Viruses Using Iron-Amended Biosand Filters, Association of Environmental Engineering and Science Professors 2013. Golden, CO. July 14-16, 2013.
16. **Bradley I.M.**, **Straub A.**, Markazi S.D., Parker K.M., Maraccini P.A., Nguyen T.H., Removal of Waterborne Viruses Using Iron-Amended Biosand Filters, EPA's People, Planet, and Prosperity (P3) National Design Expo 2011. Washington, D.C. April 16-17, 2011.
17. **Bradley I.M.**, Straub A., Markazi S.D., Maraccini P.A., Nguyen T.H., Removal of Waterborne Viruses Using Iron-Amended Biosand Filters. 2010 Water and Health Conference, University of North Carolina Chapel-Hill. October 25-26, 2010.

18. Parker K.M., Patel A., Bradley I.M., Maraccini P.A., Nguyen T.H., (Poster) The Guatemala Water Project: Removal of Waterborne Viruses Using Iron-Amended Biosand Filters, National Academy of Engineering Grand Challenges for the 21st Century: LA Summit 2010. Los Angeles, CA. October 6-8, 2010.
19. Bradley I.M., Straub A., Sohn A., Nguyen T.H., Removal of Waterborne Viruses Using Iron-Amended Biosand Filters, 2010 Water Environment Federation National Student Design Competition. New Orleans, LA. October 2-6, 2010.
20. Bradley I.M., Straub A., Markazi S.D., Maraccini P.A., Nguyen T.H., Removal of Waterborne Viruses Using Iron-Amended Biosand Filters, 2010 American Water Works Association Annual Conference and Exposition. Chicago, IL. June 20-24, 2010.
21. Bradley I.M., Markazi S.D., Parker K.M., Maraccini P.A., Nguyen T.H., Removal of Waterborne Viruses Using Iron-Amended Biosand Filters, EPA's People, Planet, and Prosperity (P3) National Design Expo 2010. Washington, D.C. April 24-25, 2010.
22. Bradley I.M., Parker K.M., Patel A., Maraccini P.A., Nguyen T.H., (Poster) The Guatemala Water Project: Removal of Waterborne Viruses Using Iron-Amended Biosand Filters, National Academy of Engineering Grand Challenges for the 21st Century: Chicago Summit 2010. Chicago, IL. April 21-22, 2010.
23. Bradley I.M., Straub A., Sohn A., Nguyen T.H., Removal of Waterborne Viruses Using Iron-Amended Biosand Filters, 2010 Central State Water Environment Association Student Design Competition. Madison, WI. April 5, 2010.
24. Markazi S.D., Bradley I.M., Swanson K.J., Maraccini P.A., Parker K.M., Nguyen T.H., (Poster) Retention of viruses in biosand filters amended with iron oxides, 239th American Chemical Society National Meeting. 2010. San Francisco, CA. March 21-25, 2010.

TEACHING

Teaching

Spring 2018-2022

CIE 568 (previously CIE 500 – Special Topics), Biological Treatment Processes and Resource Recovery (enrollment average 6-8)
Overall instructor: 4.5 Overall course: 4.3

Fall 2018-2022

CIE 360, Environmental Engineering Laboratory (enrollment average 30)
Overall instructor: 4.3 Overall course: 3.9

STUDENT ADVISING

PhD

Md. Mahbubul Alam (advisor; 2018-current)

Syedmahdi Hodaiesfahani (advisor; 2020-current)

Sasha Gallimore-Repole (co-advisor; 2020-current)

Md. Arafat Ali (co-advisor; 2021-current)

Sumaiya Saifur (advisor; 2021-current)

Brandon Durant (advisor; **graduated 2021**)

Abdulrahman Hassaballah (committee member, graduated 2020)

MS (THESIS)

Madalyn Benson (advisor; **graduated 2023**)

Annemarie Pillsbury (advisor; **graduated 2022**)

Isabella (Scout) McLerran (advisor; **graduated 2021**)

MS (PROJECT)

Christie Rajcic (advisor; **graduated 2021**)

Carly Staebell (advisor, **graduated 2020**)

David Fournier (advisor, **graduated 2019**)

UG RESEARCHERS

Joyce Wang (undergraduate researcher, 2022-current)
Ashley Monton (undergraduate researcher, 2021-current)
Sydney Gallo (undergraduate researcher, 2022-current)
Danya Hanin (undergraduate researcher, 2021-current)
Nisa Vyverberg (undergraduate researcher, 2022-current)
Willa Egan (undergraduate researcher, 2020-2022)
Madalyn Benson (undergraduate researcher, 2020-2022)
Morgan Connelly (undergraduate researcher, 2020-2021)
Charlotte Kuhl (undergraduate researcher, 2018-2020)
Mourin Jarin (REU, co-advised by Dr. Nirupam Aich, 2019-2020)
Melissa Ahrens-Viquez (REU, 2019)
Justin Bracci (undergraduate researcher, 2018-2019)
Brianna Scharf (REU, co-advised by Dr. Nirupam Aich, 2018-2019)
Ruben Aponte (undergraduate researcher, 2018-2019)
Kyle Garcia (REU, 2018)

STUDENT AWARDS

Brianna Scharf, Sustainable Nanotechnology Organization (SNO) Student Award, 2018.
Brianna Scharf, 3rd Place, Poster Competition, Sustainable Nanotechnology Organization (SNO) Conference, Washington, DC, 2018.

SERVICE AND ACTIVITIES**University**

University at Buffalo – COVID-19 Advisory Subcommittee (Wastewater Co-Chair; Fall 2020-current)
CSEE faculty hiring committee (2019-2020)
CSEE undergraduate studies committee (Fall 2019-current)
CSEE space committee (Spring 2019-current)
Faculty advisor for NYWEA (NY Water Environment Association) (Fall 2018-current)
Graduate Faculty Committee Member (2018-current)
CSEE Lab renovation committee for Jarvis 215 (2018)
Judge for annual CSEE Poster Competition (March 9, 2018)

Reviewing grants for agencies

NSF CBET

Reviewing for peer-reviewed publications

Environmental Science & Technology
Water Research
Scientific Reports
Environmental Engineering Science
Green Chemistry
Environmental Science: Water Research & Technology

Affiliations

Association of Environmental Engineers and Science Professors (AEESP)
International Water Association (IWA)
Water Environment Federation (WEF)
E.I.T., State of IL (2009)