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William H.J. Strosnider, Ph.D.

Ecological Engineer

University of South Carolina
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Education:

Ph.D. Environmental Engineering University of Oklahoma, 2010
Dissertation: Augmenting the applicability and efficiency of ecological engineering solutions for water quality improvement (Supervised by Robert Nairn)

M.S. Environmental Studies College of Charleston, 2005
Thesis: Design for nitrogen reduction in estuarine systems: retrofitting coastal ponds with stormwater wetlands (Supervised by Marianne Burke)

B.S. Mechanical Engineering University of Dayton, 2003

Work Experience:

Associate Professor (Tenured) 2024→present
University of South Carolina, School of Earth, Ocean and Environment, Columbia, SC

- Teaching and service in support of the Environmental Studies, Environmental Sciences, Marine Science, and Geological Sciences programs
- Educational program and general administrative support of Baruch Marine Field Laboratory
- Facilitating the Arnold School of Public Health PHield Experience program
- Directing the ETHOS@BMFL engineering community service internship program

Director 2019→2024
University of South Carolina, Baruch Marine Field Laboratory, Georgetown, SC

- 75% administrative : 25% research appointment
- Orienting the lab towards greater fiscal viability via expanded research and educational activity
- Modernizing facilities, vehicles, fleet, tracking systems, and data management with ten core staff across administrative, IT, custodial, research, and trades
- Revamping visiting scientist and internship programs
- Establishing, overseeing, and teaching in the Semester@TheCoast program
- Restructuring courses with main campus faculty to leverage unique coastal access
- Establishing and mentoring a year-round rotation of engineering community service interns with the University of Dayton ETHOS program

Interim Director 2023→2024
University of South Carolina, Belle W. Baruch Institute for Marine and Coastal Sciences, Columbia, SC

- Overseeing the North Inlet – Winyah Bay National Estuarine Research Reserve, NOAA Centralized Data Management Office, and Baruch Marine Field Laboratory

Associate → Full Research Professor 2019→2024
University of South Carolina, School of Earth, Ocean and Environment, Columbia, SC
- Supporting the Marine Science, Environmental Studies, Environmental Sciences, and Geological Sciences programs
- Promoted from Associate to Full Research Professor in 2022

Assistant → Associate Professor (Tenured) 2010→2019
Saint Francis University, Environmental Engineering Program, Loretto, PA
- 4:4 teaching load
- Building and accrediting an environmental engineering program
- Guiding the development and accreditation of two other engineering programs
- Establishing and directing the Ecological Engineering concentration
- Establishing and assistant coaching the Club Ice Hockey team
- Establishing and directing the High Andes Research & Service study abroad program
- Director of the Rio Juckucha Restoration Project (Bolivia)
- Faculty in Residence – Ambialet, France campus (2018)
- Tenured in 2016

Founder and Center Director 2012-2019
Saint Francis University, Center for Watershed Research and Service, Loretto, PA
- Providing technical assistance to watershed associations, nonprofit groups, and governmental agencies in Pennsylvania and Andean Latin America
- Postdoctoral supervisor
- Grant writing and administration
- Fee-for-service project management
- Water quality extension project management

Visiting Scientist 2016
Clemson University, Baruch Institute of Coastal Ecology and Forest Science, Georgetown, SC
- Specialty crop nursery wastewater reuse research and extension
- Floating treatment wetland research and Extension

U.S. Dept. of Ed. GAANN Fellow → Graduate Research Associate 2005-2010
University of Oklahoma, Center for Restoration of Ecosystems and Watersheds, Norman, OK
- Researching methods to increase passive water and wastewater treatment efficiency
- Characterizing the impact of centuries of mining contamination across highland Bolivia
- Contamination characterization and solution implementation at the Tar Creek Superfund site
- Establishing the Project for the Restoration of Rio Juckucha
- Advising field engineer for Engineers Without Borders in Guatemala and Bolivia

Research Assistant 2003-2005
USDA Forest Service, Charleston, SC
- Designing and hydrogeochemically modeling a coastal stormwater wetland

Teaching Assistant 2003-2005
College of Charleston, Physics Department, Charleston, SC
- Teaching two physics labs per semester

Scholars Bowl Coach 2004-2005
Charleston Upward Bound, Charleston, SC
- Preparing teams of disadvantaged youths for statewide competition

Tutor 2003-2004
College of Charleston Center for Student Learning, Charleston, SC
- Certified College Reading and Learning Association tutor for science and math

Engineering Intern Summer 2003
Sistemática, La Paz, Bolivia
- Troubleshooting for biomass-fueled sugar-refining system underperformance

Engineering Intern
Proleña, Managua, Nicaragua and La Paz, Bolivia 2002, 2003
- Designed, built and tested new models of fuel-efficient woodburning cookstoves
- Surveyed indigenous peoples' cooking needs and related health issues

Engineering Intern Summer 2002
Grupo Fenix, Managua, Nicaragua
- Designing, building and testing new models of solar ovens and water heaters
- Researching cooking needs of indigenous women across western Nicaragua

Engineering Co-Op 2001-2002
Southwestern Ohio Council of Higher Education, Wright-Patterson Air Force Base, OH
- Corrosion investigations for EPA particulate emission reduction testing
- Aiding forensic failure analysis of airplane crash specimens

Engineering Co-Op 2000
TesTech, Inc., Centerville, OH
- Phase I, phase II, and wetland impact reports
- Construction inspection and concrete / soils testing

Tutor / Program Coordinator / Teacher's Aide 1995-1999
Woodland Hills School District / Pittsburgh Catholic Diocese, Pittsburgh, PA
- Aiding disadvantaged students with all subjects K-12 in after-school and summer programs

Journal Articles in Review/Prep (*graduate student, undergraduate student, +postdoctoral author):

XX. Berzonsky MP, B Roman+, C Cravotta III, RS Hedin, **WHJ Strosnider**, TL Tasker **(*In Preparation*)** Dairy manures amended with mine drainage residuals and their influence on rye grass yield and phosphorus retention. *Journal of Environmental Quality*.

XX. Bell NL*, LM Garcia Chance*, **WHJ Strosnider**, DR Hitchcock, JC Majsztrik, SA White **(*In Review*)** Water quality dynamics of irrigation reservoirs in series at a production plant nursery. *Agricultural Water Management*.

XX. McKercher LM*, LM Garcia Chance*, **WHJ Strosnider**, NL Bell*, JC Majsztrik, SA White **(*In Preparation*)** Temporal water quality dynamics of three specialty crop irrigation reservoirs in series. *Journal of Environmental Quality*.

XX. McKercher LM*, GM Ziegler, MC Livernois+, JP Stone, ME Kimball, **WHJ Strosnider (*In Preparation*)** Considering constructed floating treatment wetlands as fish habitats using simulated estuarine mesocosms. *Ecological Engineering*.

XX. McKercher LM*, C Escamilla, ME Kimball, SA White, AE Scaroni, **WHJ Strosnider (*In Preparation*)** Coastal stormwater pond water quality and habitat suitability varies with tidal connectivity. *Journal of Environmental Quality*.

XX. Mai LP, **WHJ Strosnider**, H Dozier, SL Whitmire **(*In Review*)** Common coastal best management practice materials are a microplastic source. *Journal of Environmental Quality*.

XX. Roman B+, CA Cravotta III, CD Spellman Jr.*, **WHJ Strosnider**, JE Goodwill, T Tasker **(*Accepted, In Revision*)** Enhanced phosphorus removal via cotreatment of mine drainage in municipal wastewater treatment facilities. *Water Environment Research*.

XX. Ownby-Connolly B*, M Connolly, R Chambers, L Knapp, **WHJ Strosnider (*Accepted, In Revision*)** Flaws in a common stormwater modeling method have negative watershed management implications. *Journal of Ecological Engineering Design*.

Journal Articles (*graduate student, undergraduate student, +postdoctoral author):

48. Landaverde AC*, SA White, **WHJ Strosnider (2025)** Salinity and nutrient uptake potential of two plant species in constructed floating wetlands. *Water, Air, & Soil Pollution*. https://doi.org/10.1007/s11270-025-08657-w

47. Thompson MA*, BM Lazo-Murphy, BW Pfirrmann, **WHJ Strosnider**, JL Pinckney, X Peng **(2025)** Beyond Dikarya: 28S metabarcoding uncovers cryptic fungal lineages across a tidal estuary. *Environmental Microbiome*. https://doi.org/10.1186/s40793-025-00786-3

46. Awad J, Walker C, D Page, M Arslan, SA White, T Lucke, S Beecham, RJ Winston, **WHJ Strosnider**, P Nicodemus, C Streb, J van Leeuwen **(2025)** Assessing the costs of constructed floating wetlands (CFWs) for the treatment of surface waters and wastewater. *ACS ES&T Water*. https://doi.org/10.1021/acsestwater.5c00439

45. Escamilla C*, DR Tyrpak, **WHJ Strosnider**, SA White **(2025)** Basil and Swiss chard: edible crops for use in floating treatment wetlands improving agricultural runoff. *Ecological Engineering* 213:107546. https://doi.org/10.1016/j.ecoleng.2025.107546

44. Xie H, J Sun, **WHJ Strosnider**, R Zhang, X Li, P Wu **(2025)** Geochemistry and stable isotopic composition of mine water at varying sulfurous coalfields. *Journal of Contaminant Hydrology*. https://doi.org/10.1016/j.jconhyd.2025.104624

43. McKercher L*, ME Kimball, A Scaroni, SA White, **WHJ Strosnider (2024)** Stormwater ponds serve as variable quality habitat for diverse taxa. *Wetlands Ecology and Management* 32:109-131. https://doi.org/10.1007/s11273-023-09964-x
42. Dekle J*, **WHJ Strosnider**, SA White **(2024)** Phosphorus removal from irrigation return flow using an iron oxide filter and denitrifying pine bark bioreactor treatment train. *Environmental Science and Pollution Research*. 31:66435-66444 https://doi.org/10.1007/s11356-024-35641-4
41. Tasker T+, B Roman, J Eckenrode, N Himes, H Warner, B Neely, C Denholm, **W Strosnider**, J LaBar+, T Danehy **(2024)** Batch operating limestone treatment systems (BOLTS): greater efficiency and cost savings. *Reclamation Sciences*. 1:63-72. https://doi.org/10.21000/RCSC-202300003
40. Landaverde AC*, **WHJ Strosnider**, SA White **(2024)** Plant suitability for floating treatment wetland applications in brackish waters. *Ecological Engineering* 200:107183. https://doi.org/10.1016/j.ecoleng.2024.107183
39. Dekle J*, **WHJ Strosnider**, SA White **(2024)** Phosphorus uptake and release patterns in overwintering constructed floating wetlands. *Water Science and Technology* 89(3):588. https://doi.org/10.2166/wst.2024.010
38. Spellman Jr. CD*, ZT Burton, K Ikuma, **WHJ Strosnider**, TL Tasker, B Roman+, JE Goodwill **(2024)** Continuous co-treatment of mine drainage with municipal wastewater. *Journal of Environmental Management* 354:120282. https://doi.org/10.1016/j.jenvman.2024.120282
37. Guo X*, P Wu, **WHJ Strosnider**, Y Takahashi, T Kogure, S Yang, J Sun **(2023)** A simple multilevel sampler for synchronous collection of stratified waters. *Environmental Monitoring and Assessment* 195:314 https://doi.org/10.1007/s10661-023-10944-0
36. Spellman Jr. CD*, PM Smyntek+, CA Cravotta III, TL Tasker+, **WHJ Strosnider (2022)** Pollutant co-attenuation via in-stream interactions between mine drainage and municipal wastewater. *Water Research* 214:118173. https://doi.org/10.1016/j.watres.2022.118173
35. Smyntek PM+, N Lamagna, CA Cravotta III, **WHJ Strosnider (2022)** Mine drainage precipitates attenuate and conceal phosphate pollution in stream water. *Science of the Total Environment* 815:152672. https://doi.org/10.1016/j.scitotenv.2021.152672
34. Hitchcock DR, NL Bell*, **WHJ Strosnider**, MC Smith **(2022)** Spatiotemporal water quality variability in a highly loaded surface flow wastewater treatment wetland. *Journal of Environmental Quality* 51:101-111. https://doi.org/10.1002/jeq2.20309
33. White SA, **WHJ Strosnider**, MEM Chase*, MA Schlautman **(2021)** Removal and reuse of phosphorus from plant nursery runoff with reclaimed iron oxides. *Ecological Engineering* 160:106153. https://doi.org/10.1016/j.ecoleng.2021.106153
32. Sun J, Y Takahashi, **WHJ Strosnider**, T Kogure, B Wang, P Wu, L Zhu, Z Dong **(2021)** Identification and quantification of contributions to karst groundwater using a triple stable isotope labeling and mass balance model. *Chemosphere* 263:127946. https://doi.org/10.1016/j.chemosphere.2020.127946
31. Spellman C*, T Tasker+, JE Goodwill, **WHJ Strosnider (2020)** Potential implications of mine drainage and wastewater co-treatment on solids handling: a review. *Journal of Environmental Engineering* 146(11):0310010. https://doi.org/10.1061/(ASCE)EE.1943-7870.0001814
30. Spellman C*, T Tasker+, **WHJ Strosnider**, J Goodwill **(2020)** Abatement of circumneutral mine drainage by co-treatment with secondary municipal wastewater. *Journal of Environmental Management* 271: 110982. https://doi.org/10.1016/j.jenvman.2020.110982

29. Sun J, **WHJ Strosnider**, RW Nairn, JA LaBar+ **(2020)** Water quality impacts of in-stream mine tailings on a headwaters tributary of the Rio Pilcomayo, Potosí, Bolivia. *Applied Geochemistry* 113:104464. https://doi.org/10.1016/j.apgeochem.2019.104464
28. **Strosnider WHJ**, J Hugo, NL Shepherd*, BK Holzbauer-Schweitzer*, C Wolkersdorfer, RW Nairn. **(2020)** A snapshot of coal mine drainage discharge limits for conductivity, sulfate, and manganese across the developed world. *Mine Water and the Environment* 39: 165-172. https://doi.org/10.1007/s10230-020-00669-8
27. Goodwill JE, JA LaBar+, D Slovikosky, **WHJ Strosnider (2019)** Preliminary assessment of ferrate treatment of metals in acid mine drainage. *Journal of Environmental Quality* 48(5): 1549-1556. https://doi.org/10.2134/jeq2019.02.0079
26. Sun J, T Kogure, **WHJ Strosnider**, P Wu, X Cao **(2019)** Tracing and quantifying contributions of end members to karst water at a coalfield in southwest China. *Chemosphere* 234: 777-788. http://dx.doi.org/10.1016/j.chemosphere.2019.06.066
25. Smyntek P+, JA Chastel, RAM Peer, E Anthony, J McCloskey, E Bach, RC Wagner, JZ Bandstra, **WHJ Strosnider (2018)** Assessment of sulfate and iron reduction rates during start-up for passive anaerobic co-treatment of acid mine drainage and sewage. *Geochemistry: Exploration, Environment, Analysis* 18(1): 76-84. https://doi.org/10.1144/geochem2017-001
24. **Strosnider WHJ**, SE Schultz, KA Johnson Strosnider*, RW Nairn **(2017)** Effects on the underlying water column by extensive floating treatment wetlands. *Journal of Environmental Quality* 46: 201-209. https://doi.org/10.2134/jeq2016.07.0257
23. Sun J*, T Kobayashi, **WHJ Strosnider,** P Wu **(2017)** Stable sulfur and oxygen isotopes as geochemical tracers of sulfate in karst waters. *Journal of Hydrology* 551: 245-252. https://doi.org/10.1016/j.jhydrol.2017.06.006
22. Garrido AE*, **WHJ Strosnider**, R Taylor Wilson, J Condori, RW Nairn **(2017)** Metal-contaminated potato crops and potential human health risk in Bolivian mining highlands. *Environmental Geochemistry and Health* 39(3): 681-700. https://doi.org/10.1007/s10653-017-9943-4
21. Smyntek PM+, RC Wagner, L Krometis, S Carvajal, T Wynn-Thompson, **WHJ Strosnider (2017)** Passive biological treatment of mine discharges to reduce conductivity: potential designs, challenges, and research needs. *Journal of Environmental Quality* 46: 1-9. https://doi.org/10.2134/jeq2016.06.0216
20. **Strosnider WHJ**, S Carvajal, F Llanos-López, RW Nairn, RAM Peer, BK Winfrey **(2015)** Análisis del co-tratamiento pasivo de aguas residuales municipales y drenaje acido de minas en Cerro Rico de Potosí, Bolivia. *Avances en Ciencias e Ingeniería* 6(2): 23-37. http://www.redalyc.org/articulo.oa?id=323639772003
19. Farag S*, R Das*, **WHJ Strosnider**, R Taylor Wilson **(2015)** Possible health effects of living in proximity to mining sites near Potosí, Bolivia. *Journal of Occupational and Environmental Medicine* 57(5): 543-551. http://dx.doi.org/10.1097/JOM.0000000000000401
18. Peer RAM, JA LaBar*, BK Winfrey*, RW Nairn, FS Llanos López, **WHJ Strosnider (2015)** Removal of less commonly addressed metals via passive co-treatment. *Journal of Environmental Quality* 44(2): 704-710. https://doi.org/10.2134/jeq2014.08.0338
17. Kruse NA, **WHJ Strosnider (2015)** Carbon dioxide dynamics and sequestration in mine water and waste: A review. *Mine Water and the Environment* 34: 3-9. https://doi.org/10.1007/s10230-014-0320-6

16. Winfrey BK*, RW Nairn, DR Tilley, **WHJ Strosnider (2015)** Emergy and carbon footprint analysis of the construction of passive and active treatment systems for net alkaline mine drainage. *Mine Water and the Environment* 34: 31-41. http://dx.doi.org/10.1007/s10230-014-0304-6
15. **Strosnider WHJ**, FS Llanos López, CE Marcillo, RR Callapa, RW Nairn **(2014)** Contaminantes adicionales de drenaje acido de mina de Cerro Rico de Potosí impactan la cabecera del Rio Pilcomayo. *Avances en Ciencias e Ingeniería* 5(3): 1-17. http://www.redalyc.org/articulo.oa?id=323632128001
14. Faldetta KF*, DA Reighard*, KL Dickinson*, CQ Wang*, DR George, LR Benavides, **WHJ Strosnider (2014)** Assessing domestic water quality in Belén municipality, Iquitos, Peru. *Journal of Water, Sanitation and Hygiene for Development*. 4(3):391-399. http://dx.doi.org/10.2166/washdev.2014.051
13. Santamaria B*, **WHJ Strosnider**, MR Apaza Q, RW Nairn **(2014)** Evaluating locally available organic substrates for vertical flow passive treatment cells at Cerro Rico de Potosí, Bolivia. *Environmental Earth Sciences* 72:731-741. http://dx.doi.org/10.1007/s12665-013-2997-4
12. Sun J*, C Tang*, P Wu, **WHJ Strosnider (2014)** Hydrogen and oxygen isotopic composition of karst waters with and without acid mine drainage: Impacts at a SW China coalfield. *Science of the Total Environment* 487: 123-129. http://dx.doi.org/10.1016/j.scitotenv.2014.04.008
11. **Strosnider WHJ**, FS Llanos López, JA LaBar*, KJ Palmer, RW Nairn **(2014)** Unabated acid mine drainage from Cerro Rico de Potosí, Bolivia: uncommon constituents of concern impact the Rio Pilcomayo headwaters. *Environmental Earth Sciences* 71: 3223-3234. http://dx.doi.org/10.1007/s12665-013-2734-z
10. Sun J*, C Tang, P Wu, **WHJ Strosnider**, Z Han **(2013)** Hydrogeochemical characteristics of streams with and without acid mine drainage impacts: A paired catchment study in karst geology, SW China. *Journal of Hydrology* 504: 115-124. http://dx.doi.org/10.1016/j.jhydrol.2013.09.029
9. **Strosnider WHJ**, BK Winfrey*, RAM Peer, RW Nairn **(2013)** Passive co-treatment of acid mine drainage and sewage: Anaerobic incubation reveals a regeneration technique and further treatment possibilities. *Ecological Engineering* 61: 268-273. https://doi.org/10.1016/j.ecoleng.2013.09.037
8. **Strosnider WHJ**, RW Nairn, RAM Peer, BK Winfrey* **(2013)** Passive co-treatment of Zn-rich acid mine drainage and raw municipal wastewater. *Journal of Geochemical Exploration* 125: 110-116. http://dx.doi.org/10.1016/j.gexplo.2012.11.015
7. **Strosnider WH**, BK Winfrey*, RW Nairn **(2011)** Alkalinity generation in a novel multi-stage high-strength acid mine drainage and municipal wastewater passive co-treatment system. *Mine Water and the Environment* 30(1): 47-53. http://dx.doi.org/10.1007/s10230-010-0124-2
6. **Strosnider WHJ**, FS Llanos López, RW Nairn **(2011)** Acid mine drainage at Cerro Rico de Potosí II: severe degradation of the Upper Rio Pilcomayo watershed. *Environmental Earth Sciences* 64: 911-923. http://dx.doi.org/10.1007/s12665-010-0899-2
5. **Strosnider WHJ**, FS Llanos López, RW Nairn **(2011)** Acid mine drainage at Cerro Rico de Potosí I: unabated high-strength discharges reflect a five century legacy of mining. *Environmental Earth Sciences* 64: 899-910. http://dx.doi.org/10.1007/s12665-011-0996-x
4. **Strosnider WHJ**, BK Winfrey*, RW Nairn **(2011)** Novel passive co-treatment of acid mine drainage and municipal wastewater. *Journal of Environmental Quality* 40(1): 206-213. http://dx.doi.org/10.2134/jeq2010.0176

3. **Strosnider WH**, BK Winfrey*, RW Nairn **(2011)** Biochemical oxygen demand and nutrient processing in a novel multi-stage raw municipal wastewater and acid mine drainage passive co-treatment system. *Water Research* 45: 1079-1086. https://doi.org/10.1016/j.watres.2010.10.026
2. **Strosnider WH**, RW Nairn **(2010)** Effective passive treatment of high strength acid mine drainage and raw municipal wastewater in Potosí, Bolivia using simple incubations and limestone. *Journal of Geochemical Exploration* 105: 34-42. https://doi.org/10.1016/j.gexplo.2010.02.007
1. Winfrey BK*, **WH Strosnider**, RW Nairn, KA Strevett **(2010)** Highly effective reduction of fecal indicator bacteria counts in an ecologically-engineered acid mine drainage and municipal wastewater passive co-treatment system. *Ecological Engineering* 36(12): 1620-1626. http://dx.doi.org/10.1016/j.ecoleng.2010.06.025

External Grants ($3.2M as PI, $3.1M as Co-PI):

- **Strosnider W $1,000**. Organization of Biological Field Stations Station Exchange Program Award. "UGAMI and BMFL Interchange" 2025, PI
- B Ownby-Connolly, **W Strosnider $2,500**. Organization of Biological Field Stations Maxwell/Hanrahan Research Experience Grant. "Field-scale investigations of traditional oyster reef restoration approaches at Baruch Marine Field Laboratory" 2025, Co-PI
- Richardson T, L Pennington, **W Strosnider**, S Whitmire **$94,052**. NSF-CHIRRP. "Exploring a Gullah-Geechee community-driven effort to mitigate risks and impacts of coastal flooding" 2025-2026, Co-PI
- Pennington L, J Pinckney, **W Strosnider**, J Hess, M Hodgson, E Smith **$198,187**. NOAA. "Identifying adaptation and limits in the face of persistent river and coastal flooding and its impacts on Gullah communities" 2025-2027, Co-PI
- **Strosnider W**, M Carbajales-Dale, M Dugo, M Gorstein, A Guthrie, R Lowe, S Pedigo, B Pfirrmann, J Robinson, B Saari, S Schneider, S White **$2,619,856**. NOAA. "From blue-gray to blue-green: facilitating the transition to non-plastic natural material use within the coastal zone economy" 2023-2026, PI
- **Strosnider W**, L McKercher **$9,429**. SC Sea Grant Consortium. "Development of a fully biodegradable floating treatment wetland" 2023-2024, PI
- **Strosnider W**, J Stone, M Kimball, A Scaroni, S White **$33,545**. USGS-South Carolina Water Resources Center. "Quantifying ecological responses following floating treatment wetland application in brackish stormwater ponds" 2022-2023, PI
- **Strosnider WHJ**, S White, A Scaroni, M Kimball **$135,802**. SC Sea Grant Consortium. "Guiding successful applications of floating treatment wetlands in brackish coastal ponds" 2022-2024, PI
- Goodwill JE, T Tasker, **W Strosnider $199,630**. U.S. Department of the Interior. "Co-treatment of acid mine drainage in municipal wastewater plants for sustainable design in reclamation" 2021-2023, Co-PI
- White S, **W Strosnider**, A Landaverde **$9,986**. Clemson University SEED. "Plant selection for floating treatment wetlands in brackish waters" 2021-2022, Co-PI
- Hougham RJ, D Gannon, **W Strosnider**, KD Ryker **$97,450**. NSF-OCE. "Response to COVID-19 field research and education disruptions: creating virtual field experiences in coastal and estuarine science" 2020-2021, Co-PI

- Smith E, **W Strosnider $393,492**. NOAA. "The North Inlet – Winyah Bay NERR visiting scientist housing" 2020-2023, Co-PI
- Tasker T, J Eckenrode, **W Strosnider $16,742**. Trout Unlimited. "Influence of mine drainage residuals on rye grass yield in a greenhouse setting" 2019-2020, Co-PI
- Baldwin R, M Motallebi, A Landis, **W Strosnider**, H Majidzadeh, J Devkota, L Dickes **$149,755**. National Institute of Food and Agriculture – Agriculture and Food Research Initiative "Keeping the green heart healthy: an ecologically sound and economically viable conservation plan for the Cowasee Basin" 2018-2020, Co-PI
- **Strosnider W $25,000** Foundation for Pennsylvania Watersheds "Watershed Restoration EXtension (WREX) Program" 2018, PI
- **Strosnider W**, J Goodwill, J LaBar **$34,426.** Foundation for Pennsylvania Watersheds "Evaluation of Inclined Plane acid mine drainage co-treatment feasibility at the Dornick Point Wastewater Treatment Plant" 2018-2019, PI
- Smyntek P, J LaBar, R Wagner, J Duris, C Cravotta, L Krometis, **W Strosnider $281,500**. Colcom Foundation / USGS. "Assessing the combined effects of sewage and mine water pollution on human and ecosystem health in Southwestern PA" 2018-2020, Co-PI
- Baldwin R, M Motallebi, **W Strosnider $74,829**. South Carolina National Resources Conservation Service Conservation Innovation Grant "Design a framework for payment for ecosystem services and analysis of adoption behaviour in the Santee Basin" 2018-2021, Co-PI
- **Strosnider W**, P Smyntek, R Wagner **$4,698**. American Society of Mining & Reclamation. "Undergraduate Research-Learning via the Geolocation of Mine Reclamation Research Sites: Phase 2" 2017-2018, PI
- White S, J Majsztrik, **W Strosnider $26,144**. USGS-South Carolina Water Resources Center. "Phosphorus removal from nutrient enriched agricultural runoff water" 2017-2018, Co-PI
- **Strosnider W**, J LaBar **$40,000**. A.J. and Sigismunda Palumbo Charitable Trust. "Student Watershed Assistance Network (SWAN)" 2017, PI
- **Strosnider W $25,000**. Foundation for Pennsylvania Watersheds. "Student Watershed Restoration Network" 2017, PI
- **Strosnider W $700**. US State Department Fulbright Outreach Lecturing Fund. "Ruben Mamani-Paco: Guest Lectures in South Carolina" 2016, Author
- MacVean C, **W Strosnider $29,190**. US State Department Fulbright Program. "Ruben Mamani-Paco: Scholar-In-Residence Proposal" 2016-2017, Co-Author and Faculty Associate
- **Strosnider W,** K Palmer **$638,944**. Pennsylvania Department of Environmental Protection / United States Department of the Interior. "Puritan AMD Full Treatment" 2016, Primary Author
- **Strosnider W**, P Smyntek, R Wagner **$10,000**. American Society of Mining & Reclamation. "Undergraduate Research-Learning via the Geolocation of Mine Reclamation Research Sites" 2016, PI
- Beadle R **$49,675**. United Methodist Committee On Relief. "Engineers-In-Action: Restoration of the Juckucha River Basin" 2016, Co-author and Senior Personnel
- Krometis L, **W Strosnider**, T Thompson, R Wagner **$60,000**. Appalachian Research Initiative for Environmental Science. "Evaluation of potential biological treatment design options to reduce conductivity in mine discharges" 2015-2016, Co-PI

- Stephenson D **$33,055**. United Methodist Committee On Relief. "Engineers-In-Action: Restoration of the Juckucha River Basin" 2015, Co-author and Senior Personnel
- **Strosnider W**, D Johnson **$30,000**. Foundation for Pennsylvania Watersheds. "Saxton Borough Water Intake Structure Relocation Feasibility Study" 2015, PI
- **Strosnider W**, R Wagner, J Bandstra **$20,000**. USGS-Pennsylvania Water Resources Research Center. "Passive Co-Treatment of Acid Mine Drainage and Municipal Wastewater: A Novel Solution to Protect and Restore Water Quality" 2015-2016, PI
- **Strosnider WHJ $2,000**. Community Foundation for the Alleghenies. "Alleghenies Service-Learning Scholar" 2014-2015, PI
- Wagner RC, **WH Strosnider $15,000**. Dominion Foundation. "Inspiring and Retaining Women in Engineering through Mentoring, Service, and Research" 2014-2015, Co-PI
- **Strosnider WH $30,000**. Dominion Foundation. "Environmental Engineering Service-Research-Learning Via Community Outreach" 2013-2014, PI
- Bandstra JZ, RA Clark, Y Li, **W Strosnider**, N Youmbi **$499,755**. NSF-STEP. "STEPping Up: An Interdisciplinary Mentoring Network to Recruit and Retain STEM Majors" 2012-2016, Co-PI
- **Strosnider WH $168,000**. Foundation for Pennsylvania Watersheds. "Watershed Restoration Amplification Program (WRAP)" 2012-2015, PI
- Felix A, J Bandstra, R Clark, E Zovinka, J Harris, **W Strosnider**, B Hargittai **$285,000**. PA Dept. of Education. "STEM Engaging Educators in Design-based Science." 2010-2012, Co-PI
- Cooper T **$77,635**. Rotary International. "Project for the Rehabilitation of Rio Juckucha" 2009-2012, Author

Internal Grants:

- **Strosnider W**, T Wilson, B Pfirrmann **$26,339**. UofSC McCausland Innovation Fund. "Engaging the African American community and acknowledging the Black experience at Baruch Marine Field Laboratory" 2022-2023, PI
- **Strosnider W $9,991.** UofSC ASPIRE. "Plant species suitability for floating treatment wetlands in brackish systems" 2021-2022, PI
- Pinckney J, **W Strosnider**, E Smith **$79,496**. UofSC Office of Research. "Enhancing research and education capacity at the Baruch Marine Field Lab: expansion of research capabilities" 2020-2021, Co-PI

Conference Proceedings (*graduate, <u>undergraduate</u> student author):

150. Dorman D, **W Strosnider**, R Nairn **(2025)** Getting back to our roots: Ecological engineering foundations are critical for sustainability and resilience. American Ecological Engineering Society Annual Conference, Athens, Georgia.
149. Montoya AC*, **WHJ Strosnider**, SA White **(2025)** AeroFTWs: Floating treatment wetlands without plastic are possible. American Ecological Engineering Society Annual Conference, Athens, Georgia.
148. Smyjunas E*, L Leitzel*, M Livernois, B Pfirrmann, M Savage*, N Williams, J Robinson, **W Strosnider**, S Schneider, R Lowe **(2025)** Performance and degradation of plastic-free geotextiles along the tidal exposure gradient in a warm-temperate salt marsh estuary. American Ecological Engineering Society Annual Conference, Athens, Georgia.

147. McKercher L*, ME Kimball, **W Strosnider (2025)** Changing with the tides: Estuarine influence on the function of coastal stormwater ponds. American Ecological Engineering Society Annual Conference, Athens, Georgia.
146. Ownby-Connolly B*, M Livernois, **W Strosnider (2025)** Influence of material and density on intertidal oyster enhancement success using wood and bamboo stakes in a subtropical estuary. American Ecological Engineering Society Annual Conference, Athens, Georgia.
145. Pyatt T*, T Richardson, E Smith, J Pinckney, **W Strosnider (2025)** Investigating the impacts of coastal flooding on Sandy Island's ecological and cultural resilience. American Ecological Engineering Society Annual Conference, Athens, Georgia.
144. Livernois M, J Robinson, L Watson, **W Strosnider (2025)** Wood stakes as substrate for oyster enhancement in coastal South Carolina. American Ecological Engineering Society Annual Conference, Athens, Georgia.
143. McKercher LJ*, **WHJ Strosnider (2025)** Floating treatment wetlands: Learning from the past, designing for the future. Grand Strand Stormwater Pond Management Conference, Myrtle Beach, South Carolina.
142. **Strosnider W**, T Muenz, M McCartney **(2024)** Connection to place: addressing difficult histories of field stations and their land. Organization of Biological Field Stations Annual Meeting, Georgetown, South Carolina.
141. McKercher L*, M Livernois, M Kimball, **W Strosnider (2024)** Something's fishy here: considering the role of coastal stormwater retention ponds as habitat for fish. American Ecological Engineering Society Annual Conference, Blacksburg, Virginia.
140. Livernois M, B Pfirrmann, S White, S Schneider, B Saari, J Robinson, S Pedigo, S Lovelace, R Lowe, A Guthrie, M Gorstein, M Dugo, M Carbajales-Dale, **W Strosnider (2024)** Natural materials as non-plastic alternatives in coastal sectors: engineering solutions with traditional ecological knowledge. American Ecological Engineering Society Annual Conference, Blacksburg, Virginia.
139. McKercher LJ*, **WHJ Strosnider (2024)** Tidally influenced stormwater retention ponds: considering the drivers of microalgae community composition. South Carolina Water Resources Conference, Columbia, South Carolina.
138. Escamilla C*, AE Scaroni, D Sahoo, **WHJ Strosnider**, SA White **(2024)** Right plant, right place: Determining plant selection for floating wetlands in brackish, coastal ponds. South Carolina Water Resources Conference, Columbia, South Carolina.
137. Montoya AC*, SA White, **WHJ Strosnider**, S Whitmire **(2024)** Eco-friendly floating wetland scaffolds: a non-plastic approach. South Carolina Water Resources Conference, Columbia, South Carolina.
136. White SA, **WHJ Strosnider (2024)** Constructed floating wetlands: Part 1 – Current knowledge and opportunities. South Carolina Water Resources Conference, Columbia, South Carolina.
135. **Strosnider WHJ**, SA White **(2024)** Constructed floating wetlands: Part 2 – Advances and expanding applications. South Carolina Water Resources Conference, Columbia, South Carolina.
134. White SA, BR Saari, S Pedigo, AC Guthrie, **WHJ Strosnider (2024)** Stakeholder perspectives on alternatives to plastics for use in restoration, aquaculture, and water quality sectors. South Carolina Water Resources Conference, Columbia, South Carolina.

133. **Strosnider W**, M Livernois, B Pfirrmann, SA White, S Schneider, B Saari, J Robinson, S Pedigo, S Lovelace, R Lowe, A Guthrie, M Gorstein, M Dugo, M Carbajales-Dale **(2024)** Plastics-free alternatives in the coastal environment: traditional ecological knowledge coupled with modern engineering. South Carolina Water Resources Conference, Columbia, South Carolina.
132. Livernois M, B Pfirrmann, SA White, S Schneider, B Saari, J Robinson, S Pedigo, S Lovelace, R Lowe, A Guthrie, M Gorstein, M Dugo, M Carbajales-Dale, **W Strosnider (2024)** Facilitating the transition to non-plastic natural material use within the coastal zone. Microplastics in the Coastal Region Conference, Charleston, South Carolina.
131. **Strosnider W**, B Roman, C Spellman Jr., J Goodwill, T Tasker **(2024)** Expanding possibilities for the co-treatment of mine drainage with municipal wastewater. International Mine Water Association Congress, Morgantown, West Virginia.
130. Hougham J, **W Strosnider**, J Bauer **(2023)** Anti-racism work in natural sciences: status and needs survey of environmental education organizations. Organization of Biological Field Stations, La Selva, Costa Rica.
129. **Strosnider W**, S White, L McKercher*, C Escamilla*, A Scaroni **(2023)** The ongoing evolution of floating treatment wetlands: pending advances and coastal zone applications. Coastal & Estuarine Research Federation, Portland, Oregon.
128. McKercher L*, M Kimball, **W Strosnider (2023)** Not just for runoff: tidally connected stormwater ponds support diverse nekton communities. Coastal & Estuarine Research Federation, Portland, Oregon.
127. **Strosnider W**, S Pedigo, R Lowe **(2023)** From blue-gray to blue-green: facilitating the transition to non-plastic natural material use within the coastal zone economy. Sea Grant Marine Debris Symposium, virtual.
126. **Strosnider W**, S White, L McKercher*, C Escamilla*, M Kimball, A Scaroni **(2023)** Floating treatment wetlands: recent advances and coastal applications. Beaufort Area Stormwater Pond Conference, Beaufort, South Carolina.
125. Como D, L McKercher*, **W Strosnider**, E LoPresti **(2023)** Floating treatment wetlands in brackish stormwater ponds provide habitat for a diverse range of insects. South Carolina Entomological Society Annual Meeting, Columbia, South Carolina.
124. **Strosnider W**, L McKercher* **(2023)** Fully biodegradable floating treatment wetlands: a logical evolution. International EcoSummit, Gold Coast, Australia.
123. McKercher L*, C Escamilla*, SA White, A Scaroni, **Strosnider W (2023)** Harvesting floating treatment wetlands: when, why, and how? International EcoSummit, Gold Coast, Australia.
122. White SA, A Landaverde*, **Strosnider W (2023)** Brackish floating treatment wetland applications: plant nutrient partitioning shifts from soil-based applications. International EcoSummit, Gold Coast, Australia.
121. **Strosnider W**, L McKercher* **(2023)** Towards fully biodegradable floating treatment wetlands. American Ecological Engineering Society Annual Conference, Tampa, Florida.
120. LaRosa V, B Roman, CD Spellman Jr., T Tasker, **WHJ Strosnider**, JE Goodwill **(2022)** Co-treatment of acid mine drainage in municipal wastewater plants for sustainable design in reclamation. Pennsylvania Water Environment Association Annual Technical Conference, State College, Pennsylvania.

119. **Strosnider W**, L McKercher* **(2022)** Floating treatment wetlands: challenges and opportunities. American Ecological Engineering Society Annual Conference, Baltimore, Maryland.
118. **Strosnider W (2022)** Domestic application of international development project best practices and principles. International Water Conference, Norman, Oklahoma.
117. McKercher L*, C Escamilla*, M Kimball, J Stone, S White, A Scaroni, **W Strosnider (2022)** Fish assemblages in coastal brackish stormwater ponds. South Carolina Water Resources Conference, Columbia, South Carolina.
116. **Strosnider W**, J Hugo, N Shepherd*, B Holzbauer-Schweitzer*, P Hervé-Fernández, C Wolkersdorfer, R Nairn **(2022)** Coal mine discharge limits for conductivity, sulfate, and manganese: a survey across developed nations. International Mine Water Association Congress, Christchurch, New Zealand.
115. Escamilla C*, A Scaroni, D Sahoo, **W Strosnider**, S White **(2022)** Determining plant suitability for floating treatment wetlands in coastal brackish stormwater ponds. Southeast Stormwater Association Conference, Hilton Head, South Carolina.
114. Berzonsky M, B Dumm, J Eckenrode, R Hedin, **W Strosnider**, T Tasker **(2022)** Determining the effect of mine drainage residuals on phosphorus sequestration and rye grass yield. American Society of Reclamation Science Annual Conference, Duluth, Minnesota.
113. Spellman CJ*, **W Strosnider**, T Tasker, B Roman, M Caless, A Meyers, J Goodwill **(2022)** Mine drainage co-treatment in municipal wastewater sequencing batch reactors. American Society of Reclamation Science Annual Conference, Duluth, Minnesota.
112. Burt G, J Oakes, N Himes, H Warner, B Roman, B Neely, C Denholm, **W Strosnider**, J LaBar, J Eckenrode, T Tasker **(2022)** Treating mine drainage using batch operating limestone treatment systems (BOLTS) can reduce treatment costs. American Society of Reclamation Science Annual Conference, Duluth, Minnesota.
111. Roman B, V LaRosa, CD Spellman Jr.*, T Tasker, **WHJ Strosnider**, JE Goodwill **(2022)** Metal and phosphate precipitation and BOD removal rates of acid-mine drainage cotreatment with municipal wastewater. American Society of Reclamation Science Annual Conference, Duluth, Minnesota.
110. **Strosnider W (2021)** Better stormwater management practices: plastics and habitat. American Society of Agricultural and Biological Engineers, Annual International Meeting, Virtual. **(invited)**
109. Dekle J*, M Schlautman, **WHJ Strosnider**, SA White **(2021)** Nutrient dynamics in a floating treatment wetland system after overwintering in eutrophic conditions. Carolinas Society of Environmental Toxicology and Chemistry Annual Meeting, Virtual.
108. Dekle J*, M Schlautman, **WHJ Strosnider**, SA White **(2020)** Nutrient dynamics and remediation potential of floating treatment wetlands over winter. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Virtual.
107. White SA, JC Majsztrik, **WHJ Strosnider**, LM Garcia Chance*, NL Bell*, DR Hitchcock **(2020)** From pot to reservoir: tracking nitrogen movement at a SC nursery. American Society for Horticultural Science Southern Region Annual Conference, Louisville, Kentucky.
106. White SA, JC Majsztrik, **WHJ Strosnider**, LM Garcia Chance*, NL Bell*, DR Hitchcock **(2020)** Tracking nitrogen from pot to reservoir: a SC nursery case study. Southern Nursery Association Conference, Baltimore, Maryland.

105. Majsztrik JC, **WHJ Strosnider**, ME Chase*, LM Garcia Chance*, SA White **(2019)** Phosphorus removal from nursery runoff using pilot scale filters. Southern Nursery Association Conference, Baltimore, Maryland.
104. Smyntek PM, CA Cravotta III, J Duris, TL Tasker, RC Wagner, JA LaBar, ES Vargo, WR Stouffer, MJ Russell, **WHJ Strosnider (2019)** Hydrogeochemical and microbial interactions during field mixing of abandoned mine drainage and sewage-impacted streams. National Association of State Land Reclamationists Annual Conference, Pittsburgh, Pennsylvania.
103. Spellman CJ*, T Tasker, **W Strosnider**, J Goodwill **(2019)** Co-treating acid mine drainage and municipal wastewater in existing conventional wastewater treatment plants. National Association of State Land Reclamationists Annual Conference, Pittsburgh, Pennsylvania.
102. Goodwill J, C Spellman*, J LaBar, J Eckenrode, T Tasker, **W Strosnider (2019)** Acid mine drainage addition to secondary wastewater treatment processes for co-treatment. World Environmental & Water Resources Congress, Pittsburgh, Pennsylvania.
101. Goodwill J, J LaBar, D Slovikosky, **W Strosnider (2019)** Preliminary assessment of ferrate for reduced metal oxidation in acid mine drainage treatment. World Environmental & Water Resources Congress, Pittsburgh, Pennsylvania.
100. Spellman C*, T Tasker, J Goodwill, **W Strosnider (2019)** Bench scale examination of acid mine drainage addition to municipal wastewater for co-treatment. New England Water Environment Association Annual Conference, Boston, Massachusetts.
99. Tasker T, J Eckenrode, **W Strosnider (2019)** Mine water reclamation in Appalachia facilitated by student support and technical assistance from academia. American Society of Mining and Reclamation National Conference, Big Sky, Montana.
98. Smyntek PM, RC Wagner, CE Marcillo, JZ Bandstra, **WHJ Strosnider (2019)** Microbial community structure and diversity in co-treatment of acid mine drainage with municipal wastewater. American Society of Mining and Reclamation National Conference, Big Sky, Montana.
97. Lagan K, T Tasker, J Bandstra, **W Strosnider (2019)** Optimization of drainable limestone beds for treatment of acid mine drainage. American Society of Mining and Reclamation National Conference, Big Sky, Montana.
96. LaBar JA, CA Neely, CF Denholm, TP Danehy, **WHJ Strosnider (2019)** Laboratory testing to optimize retention time in auto-flushing limestone beds. American Society of Mining and Reclamation National Conference, Big Sky, Montana.
95. Bandstra JZ, **WHJ Strosnider (2019)** Modeling the effects of mass transfer limitations in limestone-based passive treatment systems. American Society of Mining and Reclamation National Conference, Big Sky, Montana.
94. Shoemaker S, J Hugo, J Bandstra, **W Strosnider (2019)** Modeling the effects of improved stormwater management at a large open-pit mine. American Society of Mining and Reclamation National Conference, Big Sky, Montana.
93. Rovder A, S Wolfe, K Lagan, L Currie, **W Strosnider**, P Smyntek **(2019)** Geocoding American Society of Mining and Reclamation Proceedings to preserve and easily access reclamation research. American Society of Mining and Reclamation National Conference, Big Sky, Montana.
92. Goodwill J, J LaBar, D Slovikosky, **W Strosnider (2019)** Preliminarily assessing ferrate (Fe(VI)) as an acid mine drainage treatment option. American Society of Mining and Reclamation National Conference, Big Sky, Montana.

91. Gaughan J, N McKnight, L Madison, T Tasker, J Eckenrode, **W Strosnider (2019)** Spaghetti Hole: Retrofit options for an aging passive treatment system. American Society of Mining and Reclamation National Conference, Big Sky, Montana.
90. Slovikosky D, **W Strosnider**, J LaBar, J Goodwill **(2019)** Can acid mine drainage be treated with ferrate (Fe(IV))? American Society of Mining and Reclamation National Conference, Big Sky, Montana.
89. Spellman C, T Tasker, J Goodwill, **W Strosnider (2019)** Bench scale assessment of acid mine drainage addition to secondary municipal wastewater treatment processes for co-treatment. American Society of Mining and Reclamation National Conference, Big Sky, Montana.
88. Bell NL*, **WHJ Strosnider**, DR Hitchcock, SA White **(2018)** Floating treatment wetland influences hydraulic performance of a pond receiving irrigation runoff. Society of Wetland Scientists Annual Meeting, Denver, Colorado.
87. Majsztrik JC, **WHJ Strosnider**, M Chase*, SA White **(2018)** Pilot scale phosphorus adsorption by iron oxide and calcined clay from specialty crop runoff. South Carolina Water Resources Conference, Columbia, South Carolina.
86. **Strosnider WHJ**, DR Hitchcock **(2018)** Ecological engineering: ecosystem design from the headwaters to the coast. III Encuentro Internacional de Ingenieria y II Simposio Internacional de Gestion Ambiental, Neiva, Colombia. **(invited)**
85. R Taylor Wilson, **WHJ Strosnider (2018)** The importance of collaboration between engineers and epidemiologists: how to understand environmental fate in preventing disease. III Encuentro Internacional de Ingenieria y II Simposio Internacional de Gestion Ambiental, Neiva, Colombia. **(invited)**
84. Goodwill JE, JA LaBar, D Slovikosky, **WHJ Strosnider (2018)** Removing iron with iron: preliminary assessment of ferrate (Fe(VI)) for acid mine drainage treatment. Green & Sustainable Chemistry Conference, Berlin, Germany.
83. Rovder A, K Lagan, L Currie, S Wolfe, Z Shoff, D Madl, S Long, **W Strosnider**, P Smyntek **(2018)** Preserving reclamation research by geocoding American Society of Mining and Reclamation proceedings. American Society of Mining and Reclamation National Conference, St. Louis, Missouri.
82. Baily G, A Ferko, R Fife, R Siwy, CJ West, **W Strosnider**, J LaBar **(2018)** Rehabilitation of the Reitz #1 passive treatment system. American Society of Mining and Reclamation National Conference, St. Louis, Missouri.
81. Potopa A, D Slovikosky, J Hugo, L Madison, N McKnight, J Goodwill, **W Strosnider (2018)** Continued assessment of acid mine drainage treatment systems in the Greater Kumurana Valley, Bolivia. American Society of Mining and Reclamation National Conference, St. Louis, Missouri.
80. Hugo J, N McKnight, L Madison, **W Strosnider (2018)** Stormwater management for a large open-cast coal mine: a case study and proposed solutions. American Society of Mining and Reclamation National Conference, St. Louis, Missouri.
79. Chase M*, **WH Strosnider**, SA White **(2017)** Blue Valley iron oxide substrate and sand mixture capacity to remove phosphorus from solution. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Minneapolis, Minnesota.
78. Nairn RW, **WHJ Strosnider (2017)** Why aren't all mine reclamationists considered ecological engineers? American Society of Mining and Reclamation National Conference, Morgantown, USA.

77. Damico D, A Remillard, **B Strosnider (2017)** American freedom, individualism, and the common good: experiencing public history in Boston. Society for Values in Higher Education Annual Fellows Meeting, Boston, Massachusetts.
76. Patton H, L Mignogna, K Tomkowski, J Vinglish, K Palmer, M Whited, M Crittenden, G Shustrick, **W Strosnider (2017)** Pollution loading tracking to characterize success of an anoxic limestone drain installation on Lamberts Run, Southwestern Pennsylvania. American Society of Mining and Reclamation National Conference, Morgantown, West Virginia.
75. Long S, **W Strosnider**, J Eckenrode **(2017)** Reclassification of the Upper Little Juniata River based on continuous in-stream monitoring. American Society of Mining and Reclamation National Conference, Morgantown, West Virginia.
74. Whited M, PM Smyntek, J Gaughan, S Rensel, J Hugo, **WHJ Strosnider (2017)** Seasonal recovery of an Appalachian stream affected by acid mine drainage and municipal wastewater. American Society of Mining and Reclamation National Conference, Morgantown, West Virginia.
73. Green KJ, MH Whited, **WHJ Strosnider (2017)** Coupling technical assistance with student service learning in mine water reclamation. American Society of Mining and Reclamation National Conference, Morgantown, West Virginia.
72. Rovder A, Z Shoff, D Madl, S Wolfe, S Long, **W Strosnider**, P Smyntek **(2017)** Georeferencing of American Society of Mining and Reclamation Proceedings: a new tool and patterns in reclamation research. American Society of Mining and Reclamation National Conference, Morgantown, WV, West Virginia.
71. Spellman C, D Madl, A Rose, E Zovinka, J Bandstra, **W Strosnider (2017)** Mass transport controls on aluminum removal in limestone based treatment systems. American Society of Mining and Reclamation National Conference, Morgantown, West Virginia.
70. Moriarty C, J Short, **W Strosnider**, S White, D Hitchcock **(2016)** Floating treatment wetlands: effects of varying coverage on eutrophic pond mesocosms. South Carolina Water Resources Conference, Columbia, South Carolina.
69. Hitchcock DR, **W Strosnider**, JC Majsztrik, DJ Sample, S Kumar, SA White **(2016)** Development of online tools for ornamental container nursery water conservation, remediation, and reuse. South Carolina Water Resources Conference, Columbia, South Carolina.
68. Whited MC, S Rensel, J Hugo, J Gaughan, **W Strosnider (2016)** Macroinvertebrate recovery: a study of Bradley Run as in-situ co-treatment of acid mine drainage and municipal wastewater. Susquehanna River Symposium, Lewisburg, Pennsylvania.
67. Krometis LH, PM Smyntek, RC Wagner, S Carvajal-Sanchez, TM Wynn-Thompson, **WHJ Strosnider (2016)** The potential for passive biological treatment approaches to reduce conductivity in mining wastewaters: past efforts, current challenges, and future research needs. International EcoSummit, Montpellier, France.
66. Sayers M, J Williams, J Rumfelt, E Ecklund, D Damico, **B Strosnider**, K Tonkin, J Wilsey, A Remillard **(2016)** Is civility possible in the climate change "debate"? An interfaith and interdisciplinary panel on Pope Francis and Laudato Si. Society for Values in Higher Education Annual Fellows Meeting, Boston, Massachusetts.
65. Mosier DR, CJ Spellman, JP Krug, CJ Weyant, LJ Stern, RC Krupa, TR Spangler, DK Wolfe, JZ Bandstra, **WH Strosnider**, EP Zovinka **(2016)** Analysis of the open limestone channel at the Swank

13 Abandoned Coal Mine, Reade Township, Pennsylvania. Council on Undergraduate Research: Posters on the Hill, Washington, District of Columbia.

64. Patton HE, C Evans, F Llanos, P O'Connor, P Muiño, R Wagner, **WH Strosnider (2016)** Contaminant and treatment dynamics in the greater Kumurana Watershed: an evaluation of water quality and treatment efficiency. American Society of Mining and Reclamation National Conference, Spokane, Washington.
63. Rovder A, S Wolfe, S Long, D Madl, P Smyntek, R Wagner, **W Strosnider (2016)** Georeferencing of American Society of Mining and Reclamation Proceedings: preliminary trend analysis. American Society of Mining and Reclamation National Conference, Spokane, Washington.
62. **Strosnider B**, T Danehy **(2016)** AMD in the Bolivian Altiplano: Unique problems and solutions. West Virginia Mine Drainage Task Force Symposium, Morgantown, West Virginia. **(invited)**
61. Palmer KJ, JS Vinglish, MA Reckner, **WHJ Strosnider (2016)** The relationship between student service learning and technical assistance in mine water reclamation. American Society of Mining and Reclamation National Conference, Spokane, Washington.
60. Hollern AP, AT Hajec, JE Fortunato, **WHJ Strosnider**, CA Neely, DJ Daley **(2016)** Lab scale batch weathered limestone testing to determine system sizing. American Society of Mining and Reclamation National Conference, Spokane, Washington.
59. Mignogna LG, ST Long, BA Pillot, P Muiño, **WHJ Strosnider**, RC Wagner **(2016)** Geochemistry and biota of Bolivian hypersaline lakes. American Society of Mining and Reclamation National Conference, Spokane, Washington.
58. Smyntek PM, RC Wagner, S Carvajal-Sanchez, TM Wynn-Thompson, LH Krometis, **WHJ Strosnider (2016)** Passive biological treatment approaches to reduce conductivity in waters affected by mine drainage: Key challenges & research needs. American Society of Mining and Reclamation National Conference, Spokane, Washington.
57. Rensel S, J Gaughan, S Wolfe, L Aviles, C Spellman, K Tomkowski, **W Strosnider**, J Bandstra **(2016)** Open limestone channels for acid mine drainage treatment: Effects of agitation on pH increase. American Society of Mining and Reclamation National Conference, Spokane, Washington.
56. Spellman C, K Tomkowski, S Carvajal Sanchez, C Weyant, J Krug, L Stern, D Wolfe, D Mosier, A Rose, EP Zovinka, J Bandstra, **W Strosnider (2016)** Open limestone channel performance for aluminum-rich acid mine drainage. American Society of Mining and Reclamation National Conference, Spokane, Washington.
55. Marcillo C, **WHJ Strosnider**, P Smyntek **(2015)** Sustainable co-treatment of acid mine drainage and municipal wastewater: Performance factors and developing world possibilities. International WaTER Conference, Norman, Oklahoma.
54. Smyntek P, H Patton, D Mack, W Cabral de Andrade, L Mignogna, J Vinglish, CD Spellman, **WHJ Strosnider (2015)** Co-treatment of acid mine drainage and municipal wastewater within an Appalachian stream. Environmental Considerations in Energy Production Conference, Pittsburgh, Pennsylvania.
53. **Strosnider WHJ**, BK Winfrey, RAM Peer, JA McCloskey, J Chastel, P Smyntek, RW Nairn **(2015)** Passive co-treatment of mine drainage with sewage: An approach to save material, energy, and fiscal resources. Environmental Considerations in Energy Production Conference, Pittsburgh, Pennsylvania.

52. Damico DH, **W Strosnider (2015)** A confluence of crises: One example of interdisciplinary collaboration on sustainability. Society for Values in Higher Education Fellows Meeting, Bowling Green, Kentucky.
51. Smyntek P, J Bandstra, R Wagner, **W Strosnider**, C Marcillo **(2015)** Removal and behavior of metal contaminants during passive co-treatment of synthetic acid mine drainage and synthetic municipal wastewater. American Chemical Society National Meeting, Boston, Massachusetts.
50. Li Y, E Zovinka, R Clark, **W Strosnider**, N Youmbi, J Bandstra **(2015)** STEPping Up: An Interdisciplinary Mentoring Network to Recruit and Retain STEM Majors. Joint Mathematics Meeting, San Antonio, Texas.
49. Chastel J, R Peer, E Bach, E Anthony, J McCloskey, P Smyntek, R Wagner, J Bandstra, **W Strosnider (2014)** Single-stage anaerobic passive co-treatment of acid mine drainage and municipal wastewater. Geological Society of America Annual Meeting, Vancouver, Canada.
48. **Strosnider WH**, S Adams, RW Nairn **(2014)** Engineered floating vegetation mats for the passive treatment of acid mine drainage. American Ecological Engineering Society National Conference.
47. **Strosnider WH (2014)** Acid mine drainage Research-Service-Learning in the Laurel Highlands. Susquehanna River Symposium, Lewisburg, Pennsylvania.
46. Carvajal-Sanchez S, **WH Strosnider**, C Spellman, J Vinglish, A Rose, E Zovinka, J Bandstra **(2014)** Open limestone channels for acid mine drainage treatment: Performance and design guidance. Susquehanna River Symposium, Lewisburg, Pennsylvania.
45. McCloskey J, R Peer, E Bach, E Anthony, J Chastel, P Smyntek, R Wagner, J Bandstra, **W Strosnider (2014)** Passive co-treatment of acid mine drainage and municipal wastewater: Simple anaerobic trials. Susquehanna River Symposium, Lewisburg, Pennsylvania.
44. Mazzur JE, MA Messina, JA Golanoski, AW Renz, NJ Frank, S Carvajal, J Bandstra, **BHJ Strosnider**, R Wagner, CD Spellman **(2014)** The effect of sodium chloride on the rate of calcite dissolution for acid mine drainage. Susquehanna River Symposium, Lewisburg, Pennsylvania.
43. Zoubareva T, L Mignogna, D Mack, D Civis, J Skipper, N Lassak, A Conrad, J Bandstra, A Rose, **W Strosnider (2014)** Dissolution variability in open limestone channel substrate: Simple lab trials. American Society of Mining and Reclamation National Conference, Oklahoma City, Oklahoma.
42. Conrad A, K Palmer, A Rose, **W Strosnider (2014)** Open limestone channel treatment dynamics: A case study treating low-pH coal mine drainage. American Society of Mining and Reclamation National Conference, Oklahoma City, Oklahoma.
41. Peer R, J LaBar*, B Winfrey, R Nairn, F Llanos López, **W Strosnider (2014)** Passive co-treatment of polymetallic acid mine drainage at Cerro Rico de Potosí, Bolivia. American Society of Mining and Reclamation National Conference, Oklahoma City, Oklahoma.
40. **Strosnider W**, A Conrad, A Rose **(2014)** Performance of the Swank open limestone channel, Cambria County, PA. American Society of Mining and Reclamation National Conference, Oklahoma City, Oklahoma.
39. Nairn RW, **WH Strosnider** (**2013**) Challenges and opportunities in mine land and water restoration in the developing world. National Association of State Land Reclamationists Annual Conference, Hot Springs, Arkansas.
37. Llanos López F, **WH Strosnider**, R Nairn (**2013**) Tratamiento de aguas contaminadas por actividad minera en la cuenca Kumurana, Potosí-Bolivia. II Congreso Tecnico de la Industria Petrolera, Quimica y Minera, Oruro, Bolivia.

37. Peer RAM, **W Strosnider**, B Winfrey*, R Nairn **(2013)** Passive co-treatment of acid mine drainage and municipal wastewater: removal of less commonly addressed metals at Cerro Rico de Potosí, Bolivia. International Mine Water Association International Conference, Denver, Colorado.
36. **Strosnider WHJ**, F Llanos López, JA LaBar*, KJ Palmer, RAM Peer, RW Nairn **(2013)** Cerro Rico de Potosí, Bolivia: broader impacts from unabated acid mine drainage. International Mine Water Association International Conference, Denver Colorado.
35. Nairn RW, K Strevett, JA LaBar*, **WH Strosnider**, FS Llanos Lopez, LR Oxenford* **(2012)** Ecological engineering to restore drastically disturbed watersheds: from Superfund to 16,000 feet. International EcoSummit, Columbus, Ohio.
34. Mignogna LJ, WA Runyon, RW Nairn, **WHJ Strosnider (2012)** Preliminary assessment of floodplain soil metal concentrations: Neosho River, Oklahoma. American Society of Mining and Reclamation National Conference, Tupelo, Mississippi.
33. Neptune AA, FS Llanos Lopez, RR Callapa, KJ Palmer, RW Nairn, JZ Bandstra, **WH Strosnider (2012)** The Pailaviri tailings deposit, Potosí, Bolivia: extreme acid mine drainage generation. American Society of Mining and Reclamation National Conference, Tupelo, Mississippi.
32. Palmer KJ, F Llanos Lopez, RR Callapa, AA Neptune, CT Breazile, RW Nairn, **WH Strosnider (2012)** Preliminary evaluation of limestone-based passive treatment systems for low-pH acid mine drainage in Andean Bolivia. American Society of Mining and Reclamation National Conference, Tupelo, Mississippi.
31. **Strosnider WHJ**, BK Winfrey*, RW Nairn **(2012)** Expanding the scope of passive treatment: co-treatment of acid mine drainage with municipal wastewater. American Society of Mining and Reclamation National Conference, Tupelo, Mississippi.
30. **Strosnider WH**, J Alvarez*, FS Llanos Lopez, C Breazile, S Crook, P Monje, T Cooper, RW Nairn **(2012)** Design and construction challenges for limestone-based passive treatment systems in the rural Andes, Potosí, Bolivia. American Society of Mining and Reclamation National Conference, Tupelo, Mississippi.
29. Faldetta KF*, DA Reighard*, KL Dickinson*, CQ Wang*, DR George, **WH Strosnider (2012)** The need for point of use water treatments in areas of peri-urban poverty: case study outside Iquitos, Peru. American Society of Tropical Medicine and Health Annual Meeting, Atlanta, Georgia.
28. Llanos López F, **WH Strosnider**, RW Nairn **(2011)** Passive treatment implementation in the Kumurana-Juckucha watershed, Potosí, Bolivia. International WaTER Conference, Norman, Oklahoma.
27. Rogers R, S Alegre, D Carroll, T Montgomery, K Raus, S Bush, C Breazile, A Neptune, K Palmer, JZ Bandstra, **WH Strosnider**, F Llanos López, J Alvarez, RW Nairn **(2011)** Treating severely contaminated mine waters at 16,000 feet: a project based service learning opportunity in the Bolivian Andes. International WaTER Conference, Norman, Oklahoma.
26. **Strosnider WH**, BK Winfrey*, RW Nairn **(2011)** Passive co-treatment of municipal wastewater and acid mine drainage: a promising new ecological engineering approach. American Ecological Engineering Society Annual Meeting, Asheville, North Carolina.
25. **Strosnider WH**, FS Llanos López, RW Nairn **(2011)** Managing a project from half a world away: a case study of the rehabilitation of Rio Juckucha, Bolivia. International WaTER Conference, Norman, Oklahoma.

24. **Strosnider WH**, RW Nairn, H Ríos Montero, F Llanos Pinto **(2011)** Water quality impacts from in-stream mine tailings in Rio Tarapaya, Potosí, Bolivia. American Society of Mining and Reclamation National Conference, Bismarck, North Dakota.
23. Nairn RW, JA LaBar*, KA Strevett, **WH Strosnider**, D Morris*, CA Neely*, A Garrido*, B Santamaria*, L Oxenford*, K Kauk*, S Carter*, B Furneaux* **(2010)** A large, multi-cell, ecologically-engineered passive treatment system for ferruginous lead-zinc mine waters. International Mine Water Association Symposium, Sydney, Nova Scotia.
22. LaBar JA*, RW Nairn, KA Strevett, **WH Strosnider**, D Morris*, CA Neely*, AE Garrido*, K Kauk* **(2010)** Stream water quality improvements after installation of a passive treatment system. American Society of Mining and Reclamation National Conference, Pittsburgh, Pennsylvania.
21. Nairn RW, JA LaBar*, KA Strevett, **WH Strosnider**, D Morris*, AE Garrido*, CA Neely*, K Kauk* **(2010)** Evaluation of a large multi-cell passive treatment system for net-alkaline ferruginous lead-zinc mine waters. American Society of Mining and Reclamation National Conference, Pittsburgh, Pennsylvania.
20. Garrido AE*, **WH Strosnider**, RW Nairn **(2010)** Accumulation of ecotoxic metals in potato tubers irrigated with acid mine drainage impacted water. American Society of Mining and Reclamation National Conference, Pittsburgh, Pennsylvania.
19. **Strosnider WH,** RW Nairn **(2010)** Effects on the underlying water column by ecologically engineered floating vegetation mats. American Society of Mining and Reclamation National Conference, Pittsburgh, Pennsylvania.
18. Winfrey BK*, RW Nairn, DR Tilley, **WH Strosnider (2010)** Assessing the benefits of a passive treatment system for mine drainage in Northeast Oklahoma using emergy analysis. American Society of Mining and Reclamation National Conference, Pittsburgh, Pennsylvania.
17. Nairn RW, JA LaBar*, KA Strevett, **WH Strosnider**, LR Oxenford*, TH Beisel, RC Thomas, JS Bays **(2010)** Passively addressing ferruginous lead-zinc mine waters through hydro-biogeochemical and ecological engineering: the first full-scale mine water treatment system in the Tri-State District. North-Central and South-Central Section Joint Meeting of the Geological Society of America, Branson, Missouri.
16. Felix AL, JZ Bandstra, **WHJ Strosnider (2010)** Design-based science for STEM student recruitment and teacher professional development. Mid-Atlantic American Society for Engineering Education Conference, Easton, Pennsylvania.
15. Garrido AE*, J Condori, **WH Strosnider**, RW Nairn **(2009)** Acid mine drainage impacts on irrigation water resources, agricultural soils, and potatoes in Potosí, Bolivia. American Society of Mining and Reclamation National Conference, Billings, Montana.
14. Santamaria B*, MR Apoza Q., **WH Strosnider**, RW Nairn **(2009)** Preliminary evaluation of locally available organic substrates for vertical flow passive treatment cells in Potosí, Bolivia. American Society of Mining and Reclamation National Conference, Billings, Montana.
13. Nairn RW, T Beisel, RC Thomas, JA LaBar*, KA Strevett, D Fuller, **WH Strosnider**, WJ Andrews*, J Bays, RC Knox **(2009)** Challenges in design and construction of a large multi-cell passive treatment system for ferruginous lead-zinc mine waters. American Society of Mining and Reclamation National Conference, Billings, Montana.

12. Winfrey BK*, **WH Strosnider,** RW Nairn **(2009)** Reduction of fecal indicator bacteria counts in an ecologically-engineered acid mine drainage and municipal wastewater passive co-treatment system. American Society of Mining and Reclamation National Conference, Billings, Montana.
11. **Strosnider WH**, BK Winfrey*, RW Nairn **(2009)** Performance of an ecologically-engineered multi-stage acid mine drainage and municipal wastewater passive co-treatment system. American Society of Mining and Reclamation National Conference, Billings, Montana.
10. Llanos L. FS, **WH Strosnider**, RW Nairn **(2009)** Mining in Potosí, Bolivia and the struggle to conserve or reclaim crucial water resources in high altitude alpine desert. International WaTER Conference, Norman, Oklahoma.
9. **Strosnider WH**, RW Nairn **(2009)** The Project for the Rehabilitation of Rio Juckucha, Bolivia: unique challenges, coalition formation and the road ahead. International WaTER Conference, Norman, Oklahoma.
8. Nairn R, K Strevett, J LaBar*, A Sutter*, J Clifton*, **W Strosnider**, J Brumley*, D Lutes*, B Santamaria*, J McAllister*, A Brewer*, M Roberts*, K Kauk* **(2008)** Watershed-scale environmental monitoring to prioritize mine drainage passive treatment implementation. American Society of Mining and Reclamation National Conference, Richmond, Virginia.
7. **Strosnider W**, R Nairn, F Llanos **(2008)** A legacy of nearly 500 years of mining in Potosí, Bolivia: stream water quality. American Society of Mining and Reclamation National Conference, Richmond, Virginia.
6. **Strosnider WH**, B Santamaria*, R Nairn, L Oxenford*, A Garrido*, F.S. Llanos **(2008)** A legacy of nearly 500 years mining in Potosí, Bolivia: environmental degradation and indigenous impacts. 10th National Tar Creek Conference, Miami, Oklahoma.
5. **Strosnider W**, R Nairn, F Llanos **(2007)** A legacy of nearly 500 years of mining in Potosí, Bolivia: acid mine drainage source identification and characterization. American Society of Mining and Reclamation National Conference, Gillette, Wyoming.
4. **Strosnider W**, D Hitchcock, M Burke, A Lewitus **(2007)** Predicting hydrology in wetlands designed for coastal stormwater management. American Society of Agricultural and Biological Engineers Annual International Conference, Minneapolis, Minnesota.
3. Nairn R, K Strevett, J LaBar*, D Ertugrul*, D Hensley*, K Walker*, D Lutes*, **W Strosnider**, B Winfrey, M Roberts*, T Traw*, P Baczynski*, B Johnson* **(2007)** Watershed-scale environmental monitoring to examine remediation and restoration success: water quality and hydrology in the Tri-State lead-zinc mining district. American Society of Mining and Reclamation National Conference, Gillette, Wyoming.
2. **Strosnider W**, D Hitchcock, M Burke, N Shea, A Lewitus **(2005)** Design for nitrogen reduction in estuarine systems: retrofitting coastal ponds with constructed wetlands. American Ecological Engineering Society Annual Conference, Columbus, Ohio.
1. **Strosnider W**, M Burke, D Hitchcock, A Lewitus, N Shea, L Kolowith **(2005)** Continuous hydrologic modelling as a constructed wetland design tool. Society of Wetland Scientists Annual International Conference, Charleston, South Carolina.

Trade Journals / Academic Forums (*graduate, undergraduate student author):

8. Spellman Jr. C*, T Tasker, **W Strosnider**, J Goodwill **(2021)** Municipal wastewater co-treatment for cost-effective mine drainage reclamation. *Reclamation Matters*, Fall ’21: 32-35

7. Rovder A, **W Strosnider (2019)** Preserving past research via geolocation: a tool for the next generation of reclamationists. *Reclamation Matters*, Fall ’19: 33-36.
6. Patton H, **W Strosnider**, K Green **(2017)** The Center for Watershed Research and Service at Saint Francis University. *Reclamation Matters*, Fall ’17: 27.
5. **Strosnider WHJ (2017)** Community engagement for the liberal arts? *Forum Engaging Values, Education, and Responsibility*
4. Nairn R, R Kleinmann, R Hedin, **W Strosnider (2015)** Reflections on two decades of passive treatment. *Reclamation Matters*, Spring ’15: 8-9.
3. Spellman Jr. C, S Carvajal, C Weyant, J Krug, R Krupa, D Wolfe, Y Li, EP Zovinka, A Rose, **W Strosnider (2015)** Research, teaching and service with open limestone channels and undergraduates in the Allegheny Highlands. *Reclamation Matters*, Spring ’15: 28-31.
2. **Strosnider WHJ**, TA Hughes, RAM Peer, BK Winfrey*, NF Gray, RW Nairn **(2012)** Co-treatment of acid mine drainage with municipal wastewater: A Promising New Approach. *Reclamation Matters*, Fall ’12: 26-29.
1. **Strosnider WH**, RW Nairn, B Santamaria*, FS Llanos, A Garrido*, LR Oxenford* **(2009)** Strengthening scientific expertise in the Bolivian Andes through research, teaching and outreach: tackling severe mining-related pollution in Potosí, Bolivia. *Reclamation Matters*, Fall ‘09: 16-19.

Engineering Consulting (> $200K gross income thus far in addition to pro-bono* work):

- 2024-present: Carolina Wildlands Foundation –
  Pollutant loading and source characterization on Thompson Creek (South Carolina)

- 2024-present: Loy Yang Mine / Monash University –
  Pollutant source characterization and remediation (Australia)

- 2023-2024: National Wildlife Refuge Association / Loxahatchee National Wildlife Refuge –
  Floating wetland installation and educational program delivery (Florida)

- 2017-present: Confidential client –
  Coastal stormwater, revegetation, and pit lake management in Patagonian Chile

- 2022: One Living Sanctuary –
  Water resource management (California)*

- 2018-2019: BioMost Inc. / Altoona Water Authority –
  Passive treatment redesign for the Spaghetti Hole discharge (Pennsylvania)

- 2018-2019: BioMost Inc. / Altoona Water Authority –
  Passive treatment retrofits for the Squatter Falls discharge (Pennsylvania)

- 2018-2019: BioMost Inc. / Stonycreek Conemaugh River Improvement Project –
  Passive treatment redesign for the Oven Run B discharge (Pennsylvania)

- 2017: BioMost Inc. / Shade Creek Watershed Association –
  Reitz #1 wetland treatment system rehabilitation in Central City, Pennsylvania
- 2016-2019: BioMost Inc. / Stonycreek Conemaugh River Improvement Project –
  Pollutant loading on the Quemahoning River (Pennsylvania)
- 2016-2017: BioMost Inc. / PADEP –
  Pollutant loading on Lambert's Run (Pennsylvania)
- 2014-2016: Engineers In Action –
  Drinking water management in Yulo, Bolivia*
- 2015-2016: BioMost Inc. / Clearfield Creek Watershed Association –
  Pollutant loading on Brubaker Run (Pennsylvania)
- 2015-2020: BioMost Inc. / Trout Run Watershed Association –
  Passive treatment for the Puritan discharge in Portage, Pennsylvania
- 2009: Engineers Without Borders / Engineers In Action –
  Eco-latrines in Cotani, Bolivia*
- 2007-2008: Sooners Without Borders –
  Drinking water quality assessment in Rio Bravo, Guatemala*

Program Consulting:

- 2023-2024: US National Academy of Sciences, Engineering, and Medicine –
  Mesopotamian River Revival team
- 2023-2024: Inter-American Development Bank –
  Bahamas Agriculture & Marine Science Institute assessment team leader
- 2021-present: Juniata College Environmental Engineering program external advisor
- 2022: UNC Coastal Studies Institute external reviewer

Courses Taught:

Appropriate Technologies for Humanitarian and Environmental Service	Lead – SFU
Aquatic and Atmospheric Chemistry	Lead – SFU
Chemical and Biological Reactor Design	Lead – SFU
Coastal Nature-Based Solutions	Lead - UofSC
College Physics I & II	Lead – SFU
Ecological Engineering	Lead – SFU
Ecological Engineering Science	Co-taught – OU
Environmental Engineering Case Studies	Co-taught – OU
Environmental Engineering Field Measurements	Lead – SFU
Environmental Engineering Laboratory Measurements	Lead – SFU

Environmental Engineering Senior Capstone Sequence	Lead – SFU
Environmental Engineering Statistics Laboratory	Lead – SFU
Environmental and Human Health Issues in Western Europe	Lead – SFU
Environmental and Hazards and Human Health	Lead - UofSC
Engineering Seminar	Lead – SFU
Engineering Physics I	Lead – SFU
Field and Laboratory Investigations in Marine Science	Co-taught – UofSC
Introduction to Engineering II	Lead – SFU
Lowcountry Culture and History	Lead – UofSC
Mining and the Environment (bilingual English/Spanish)	Lead – UATF
Nonpoint Source Management in Engineered Ecosystems	Co-taught – CU
Stormwater Management	Lead – SFU
Transport Processes	Lead – SFU
Water Wars: Power, Technology, Violence	Lead – SFU
Watershed Monitoring and Management	Lead - UofSC
Wetland Science and Management	Co-taught – OU

Awards, Honors, and Fellowships:

- 2025 Organization of Biological Field Stations Station Exchange Program Award (Baruch Marine Field Laboratory)
- 2024 Organization of Biological Field Stations IDEA+ Innovation Advancing Equity and Community Connections Award (Baruch Marine Field Laboratory)
- 2021 American Society of Reclamation Science Researcher of the Year
- 2017 Western Pennsylvania Environmental Award (Center for Watershed Research & Service)
- 2017 American Society of Reclamation Science Early Career Award
- 2016 Gerald and Helen Swatsworth Award for Excellence in Teaching, Research, and Service
- 2015 Society for Values in Higher Education Robert Atwood Spivey Excellence in Scholarship Award
- 2015 Saint Francis University Student Government Outstanding Organization Award (Club Ice Hockey)
- 2012 American Society of Reclamation Science Recruiter of the Year
- 2011, 2012, 2013, 2015, 2017 Saint Francis University Excellence in Education Grants
- 2011, 2016, 2018 Saint Francis University Faculty Development Grants
- 2009 American Society of Reclamation Science Memorial Ph.D. Scholarship
- 2009 Scholarship for Wetland Science and Management Study at Universität Hamburg
- 2009 University of Oklahoma Graduate Student Senate Travel Grant
- 2007, 2008 & 2010 American Society of Reclamation Science Student Presentation Awards
- 2006 University of Oklahoma Graduate College Robberson Travel Grant
- 2006 University of Oklahoma Graduate Student Senate Research and Activity Grant
- 2005-2007 United States Department of Education GAANN Fellow
- 2005, 2007, 2008 University of Oklahoma Presidential International Travel Fellowships
- 2004, 2005 College of Charleston Summer Research Awards

- 2003 Br. Andrew R. Weber Award for Outstanding Service and Achievement in Mechanical Engineering
- 2002, 2003 Cordell W. Hull International Service Fellow

Professional Societies (*lifetime):

American Ecological Engineering Society*
American Society of Reclamation Sciences*
International Mine Water Association
Coastal and Estuarine Research Federation
Southeastern Estuarine Research Society
National Association of Marine Laboratories
Organization of Biological Field Stations
Society for the Future of Higher Education

Advising:

I. Postdoctoral researchers

Mariah Livernois — Supervisor: 2024-present

- Productivity: TBD
- Current employment: Baruch Ecological Engineering Laboratory

Travis Tasker — Supervisor: 2018-2019

- Productivity: three journal articles published, fifteen conference proceedings, co-PI on $216K of total awarded grants, $20K of consulting income
- Current employment: Saint Francis University Environmental Engineering Program, tenure-track assistant professor

Julie LaBar — Supervisor: 2017-2018

- Productivity: three journal articles, nine conference proceedings, co-PI on $356K of total awarded grants, $15K of consulting income
- Current employment: Oklahoma State University Environmental Science Program, tenure-track assistant professor

Peter Smyntek — Supervisor: 2015-2017

- Productivity: four journal articles, fifteen conference proceedings, co-author on $310K of total awarded grants
- Current employment: Saint Vincent College Interdisciplinary Science Program, tenured associate professor

II. Graduate students

Lucas Debatin Vieira — Committee member: 2025-present

- Ph.D. in Geosciences, Universidade de São Paulo
- Thesis: *TBD, will concern mine drainage impacts and remediation*

DeMarcus Turner — Committee member: 2025-present

- Ph.D. in Public Health, University of South Carolina
- Thesis: *TBD, will concern tire wear particle fate in stormwater ponds*

Tyler Pyatt — Primary advisor: 2025-present

- M.S. in Biology, University of South Carolina
- Thesis: *TBD, will concern flooding risks in Gullah communities of South Carolina*

Briar Ownby-Connolly — Primary advisor: 2025-present

- Ph.D. in Biology, University of South Carolina
- Thesis: *TBD, will concern living shoreline oyster populations and associated habitats*

Anna Privette — Primary advisor: 2024-present

- M.S. in Earth and Environmental Resource Management, University of South Carolina
- Thesis: *TBD, will concern watershed monitoring and management*

Melissa Shugart — Committee member: 2024-present

- M.S. in Environmental Resource Management, University of South Carolina
- Thesis: *TBD, will concern the effects of aeration on lake sediment phosphorus mobility*

Evan Smyjunas — Committee member: 2024-present

- M.S. in Mechanical Engineering, University of Dayton
- Thesis: *TBD, will concern geotextile degradation in estuarine settings*

Loring Leitzel — Committee member: 2024-present

- M.S. in Mechanical Engineering, University of Dayton
- Thesis: *TBD, will concern geotextile degradation in estuarine settings*

Camila Montoya — Committee member: 2023-present

- M.S. in Plant and Environmental Sciences, Clemson University
- Thesis: *TBD, will concern biodegradable floating treatment wetland structure and performance*

Clare Escamilla — Committee member: 2022-2025

- Ph.D. in Plant and Environmental Sciences, Clemson University
- Dissertation: Developing guidance for the use of floating treatment wetlands in brackish stormwater ponds

Levi McKercher — Primary advisor: 2021-present

- Ph.D. in Biology, University of South Carolina
- Dissertation: *TBD, will concern floating treatment wetland habitat provisioning capacity*

Kristen Laccetti — Committee member: 2020-2021

- M.S. in Marine Science, University of South Carolina
- Thesis: *Harmful algal bloom dynamics in coastal South Carolina stormwater control ponds*

Jack Dekle — Committee member: 2020-2022

- M.S. in Environmental Toxicology, Clemson University
- Thesis: *Overwintering floating treatment wetlands: nutrient cycling dynamics and remediation*

Charles Spellman, Jr. Committee member: 2019-2021
- M.S. in Environmental Engineering, University of Rhode Island
- Dissertation: *Feasibility assessment of acid mine drainage and municipal wastewater co-treatment*

Megan Chase Committee member: 2017-2018
- M.S. in Environmental Toxicology, Clemson University
- Thesis: *Iron hydroxide from abandoned coal mine drainage to remove and re-use phosphorus from greenhouse and plant nursery runoff*

Marie Shoenenberger Committee member: 2015-2016
- M.S. in Ecological Engineering, SUNY College of Environmental Science and Forestry
- Thesis: *Mycorrhizal colonization of Salix spp. in amended Solvay process waste*

III. Undergraduate students (*due to large volume, limited to one per cohort of SFU environmental engineering students or summer interns at USC*)

Ashley Rovder Geospatial trends in reclamation research: 2016-2019
- Productivity: four conference proceedings, one trade journal article
- Current employment: engineer at Charleston Naval Nuclear Laboratory

Hannah Patton Watershed contamination dynamics: 2016-2018
- Productivity: one trade journal article, three conference proceedings
- Current employment: Environmental Engineering with ERG (after Ph.D. in Biological Systems Engineering at Virginia Tech)

Cristina Marcillo Bolivian Altiplano trace metal pollution dynamics: 2014-2016
- Productivity: one journal article, two conference proceedings
- Current employment: Interdisciplinary Scientist with US EPA (after Ph.D. in Biological Systems Engineering at Virginia Tech)

Rebecca Peer Co-treatment of mine drainage and sewage: 2012-2014
- Productivity: five journal articles, one trade journal article, six conference proceedings
- Current employment: Lecturer in Civil Systems Engineering at the University of Canterbury (after Ph.D. at the University of Southern California and postdoc at Stanford University)

Kelsea Palmer Mine drainage contamination in Bolivia and Pennsylvania: 2010-2013
- Productivity: one journal article, one trade journal article, five conference proceedings
- Current employment: Environmental engineer at BioMost Inc.

Luke Mignogna — Floodplain soil metal dynamics in the Neosho River: 2010-2012

- Productivity: one conference proceeding
- Current employment: P.E. Construction Engineer at Fluor Corp. (after M.S. in Civil & Environmental Engineering at the University of Pittsburgh)

IV. Penn State Medical College Global Health Scholars

Kimberly Faldetta, Derek Reighard, Katie Dickinson, Chloe Wang — Co-advisor: 2012-2013

- Topic: Seasonal flooding and disease prevention along the Amazon River in Iquitos, Peru
- Current employment: all licensed and employed M.D.'s

Sarah Farag, Riva Das — Co-advisor: 2008-2009

- Topic: Heavy metal pollution and human health in Highland Bolivian mining communities
- Current employment: both licensed and employed M.D.'s

Peer Reviewer:

Over eight dozen manuscripts for the following journals:

- *Applied Geochemistry*
- *Applied Microbiology and Biotechnology*
- *Chemosphere*
- *Ecological Engineering*
- *Ecotoxicology and Environmental Safety*
- *Environmental Earth Sciences*
- *Environmental Impact Assessment Review*
- *Environmental Management*
- *Environmental Monitoring and Assessment*
- *Environmental Science and Pollution Research*
- *Environmental Science & Technology*
- *Environmental Technology*
- *Geochemistry: Exploration, Environment, Analysis*
- *International Journal of Analytical Chemistry*
- *International Journal of Coal Geology*
- *Journal of Cleaner Production*
- *Journal of Contaminant Hydrology*
- *Journal of Ecological Engineering Design*
- *Journal of Environmental Engineering*
- *Journal of Environmental Management*
- *Journal of Environmental Chemical Engineering*
- *Journal of Environmental Planning and Management*
- *Journal of Environmental Quality*
- *Journal of Geochemical Exploration*
- *Journal of Hazardous Materials*
- *Journal of Hydrology*

- *Journal of Natural Resources and Agricultural Ecosystems*
- *Journal of Water Process Engineering*
- *Journal of Water, Sanitation & Hygiene for Development*
- *Land-Grant Press*
- *Mine Water and the Environment*
- *Mineralogical Magazine*
- *Resources, Conservation & Recycling*
- *Science of the Total Environment*
- *Scientific Reports*
- *Water Research*
- *Water SA*
- *Water Science & Technology*
- *Water, Air & Soil Pollution*

Grant proposals/reports/fellowships:

- National Science Foundation
    - Environmental Engineering Program (CBET)
    - Partnership for International Research and Education (PIRE)
    - Excellence Research Infrastructure Improvement Program (E-RISE)
- United States Department of Agriculture
    - McIntire-Stennis Cooperative Forestry Research Program
- National Environment Research Council (UK)
- United States Geological Survey
- National Oceanic and Atmospheric Administration
- Minnesota Sea Grant
- American Society of Reclamation Science
- Indo-US Science & Technology Forum
- Kazakhstan National Centre of Science and Technology
- Maryland Industrial Partnerships Program
- Belle W. Baruch Foundation
- Chesapeake Bay Trust
- College of Charleston Environmental & Sustainability Science Program
- Internal
    - Saint Francis University Faculty Development Grants
    - NI-WB NERR Mary Davidson Graduate Fellowships
    - UofSC Vernberg, Spivey, and Golde Fellowships
    - UofSC SC EPSCoR letters of intent

Boards, Committees, and Professional Service:

- *Journal of Environmental Quality* Associate Editor (2023-present)
- *Reclamation Sciences* Associate Editor (2022-present)
- American Ecological Engineering Society, Treasurer (2022-present)

- Universities Council on Water Resources Member Delegate for UofSC (2022-present)
- South Carolina Sea Grant Consortium, Contaminants of Emerging Concern Advisory Committee (2023-present)
- Saint Francis University Environmental Engineering Visiting Council (2019-present)
- Coastal Carolina University Engineering Science External Advisory Board (2019-2023)
- University of Wisconsin Upham Woods Outdoor Learning Center Research and Innovation Advisory Committee (2021-2023)
- UofSC Faculty Senator (2022-2023)
- Engineers In Action, Advisory Board (2019-2022)
- Engineers In Action, Board of Directors (2010-2019)
- Stonycreek Conemaugh River Improvement Project, Board of Directors (2010-2019)