

Hanna Noel Brosky, PhD, MPH

Phone: 610-477-9475

Email: hannanoelbrosky@gmail.com

Secondary email: hnb218@lehigh.edu

LinkedIn: <https://www.linkedin.com/in/hanna-brosky-088849101/>

ResearchGate: <https://www.researchgate.net/profile/Hanna-Brosky>

Current Appointments

- 2026 – **Postdoctoral researcher**, Lehigh University
- 2022 – **Visiting researcher**, Yuma Center of Excellence for Desert Agriculture (YCEDA) University of Arizona, Yuma, AZ, USA; Designated Campus Colleague (DCC)
- 2023 – **Chief Executive Officer (CEO)**, Brosky Analytics, LLC, Chapel Hill, NC, USA

Education and Training

- 2022 – 2026 **Doctor of Philosophy**, Department of Environmental Sciences and Engineering – University of North Carolina, Chapel Hill, NC, USA
- 2020 – 2022 **Masters of Public Health**, Wastewater-based epidemiology – International Health and Sustainable Development, Tulane University, New Orleans, LA, USA
- 2022 **Qualitative Microbial Risk Assessment Interdisciplinary Vehicle**, Michigan State University, East Lansing, MI, USA
- 2014 – 2018 **Bachelor of Science**, Environmental Engineering – Lehigh University, PA, USA; Minor in Entrepreneurship

Previous Academic Appointments and Experience

- 2024 – 2025 **Galapagos Kenan Fellow**, UNC Center for Galapagos Studies
- 2022 – 2023 **Graduate Research Assistant**, Department of Environmental Sciences and Engineering – University of North Carolina, Chapel Hill, NC, USA
- 2021 – 2022 **Environmental Health Research Assistant**, Tulane University, New Orleans, LA, USA
- 2021 **Community Health Improvement Plan Intern**, New Orleans Health Department, New Orleans, LA, USA
- 2018 – 2020 **Water, Sanitation, and Hygiene Engineer**, Peace Corps Panama, Bajo Algodón, Panama
- 2017 – 2018 **Research Assistant**, Environmental Engineering, Lehigh University, PA, USA

Professional Leadership and Service

- 2022 **Visiting Engineer**, Water Engineers for the Americas (WEFTA), Comarca Ngabe-Bugle, Panama

- 2021 **Hurricane Response Volunteer**, New Orleans Mosquito, Termite and Rodent Control Board, New Orleans, LA, USA
- 2016-2018 **Women's Division I Track and Field Captain**, Lehigh University, Bethlehem, PA, USA
- 2016 **International Social Entrepreneurship member**, Lehigh University, Nairobi, Kenya

Bibliography

1. Innes GK, Patton AN, Prasek SM, **Brosky H**, Khoury K, Hodges T, Schmitz BW (2025) Introduction to WBE case estimation: A practical toolset for public health practitioners. *Science of The Total Environment* 2025; **980**: 179487.
2. **Brosky H**, Prasek SM, Innes GK, Pepper IL, Miranda J, Brierley PE, Slinski SL, Polashenski L, Betancourt WQ, Gronbach K, Gomez D, Neupane R, Johnson J, Weiss J, Yaglom HD, Engelthaler DM, Hepp CM, Crank K, Gerrity D, Stewart JR and Schmitz BW (2024) A framework for integrating wastewater-based epidemiology and public health. *Front. Public Health* 12:1418681.
3. A Shahin S, H Alarcon J, **Brosky H**, Lamori JG, Dada AC, Xue J, Gyawali P, P Sherchan S. Occurrence of *Naegleria fowleri* and faecal indicators in sediments from Lake Pontchartrain, Louisiana. *J Water Health*. 2022 Apr;20(4):657-669.
4. Sherchan S, Shahin S, Alarcon J, **Brosky H**, Potter C, Dada AC. Microbial source tracking of fecal contamination in stormwater runoff. *J Water Health*. 2022 Sep;20(9):1271-1283.

In Preparation - expected submission within 6 month

1. **Brosky H**, Stewart J, Ochoa-Herrera V, Jones C, Thompson A, Genomic Insights into Uropathogens in Galápagos Water Systems, Ecuador. *International Journal of Hygiene and Environmental Health*. In submission.
2. **Brosky H**, Stewart J, Ochoa-Herrera V, Jones C, Thompson A, “A mí no me gusta el agua hervida, es fea.”: Listening to women to understand the relationship between water use, quality, and urinary health in San Cristobal, Galapagos. *The American journal of tropical medicine and hygiene*. In submission.

Media

1. **Brosky H**, Landa S, Tantum L. Students reflect on ‘once-in-a-generation’ UN Water Conference. May 17, 2023. <https://sph.unc.edu/sph-news/students-reflect-on-once-in-a-generation-un-water-conference/>
2. **Brosky, H**. UNC conducts research to help tackle global public health questions in Galapagos. July 27, 2023. https://www.youtube.com/watch?v=vwwCfVWiYfg&ab_channel=UNCCenterforGalapagosStudies

Presentations

- 2026 “Holistic Approaches to Waterborne Urinary Tract Infections (UTIs): Genomic Analysis, Antimicrobial Resistance, and Surveillance Strategies”, UNC Gillings, Doctoral Defense, Chapel Hill, NC, USA

2025	“From Source to Symptoms: Understanding Water’s Role in Urinary Tract Infections (UTIs)”, UNC Gillings, Environmental Sciences and Engineering Seminar, Chapel Hill, NC, USA
2025	“Investigating household water sources in Galápagos, Ecuador for uropathogenic Escherichia coli (UPEC)”, American Society of Tropical Medicine and Hygiene (ASTMH), New Orleans, LA, USA
2025	“From Source to Symptoms: Understanding Water’s Role in Urinary Tract Infections (UTIs)”, Galapagos Research and Conservation Symposium, San Cristobal, Galapagos
2024	“Holistic Approaches to Waterborne Urinary Tract Infections – A pilot study in the Galapagos islands”, American Society of Tropical Medicine and Hygiene (ASTMH), New Orleans, LA, USA
2024	“Holistic Approaches to Waterborne Urinary Tract Infections – A pilot study in the Galapagos islands”, Galapagos Research and Conservation Symposium, San Cristobal, Galapagos
2023	“Holistic Approaches to Waterborne Urinary Tract Infections”, UNC Water Institute Seminar, Chapel Hill, NC, USA
2023	World Water Week Speaker, Stockholm International Water Institute, Stockholm, Sweden
2023	5 under 5 Panelist, Tulane University, New Orleans, LA, USA

Presentation Awards

2023	National Science Foundation Poster Competition Precision Microbiome Engineering (PreMiEr) Award Winner
------	--

Fellowships and Scholarships

2024	Kenan Galapagos Fellow University of North Carolina Amount: \$39,644 Role: Recipient Fellow and principle-Investigator
2023	National Science Foundation Scholar Precision Microbiome Engineering (PreMiEr) Consortium Amount: \$27,000 Role: Recipient and Co-Investigator
2022	UNC Gillings Daniel A. Okun Scholarship University of North Carolina Amount: \$1000 Role: Recipient and Principal Investigator
2022	B.B. Parker Fellow and Gilinsky & Leonard Smock Scholarship in Water Research Tulane University Amount: \$25,000 Role: Recipient and Co-Investigator

2020	Coverdell Scholar Tulane University Amount: Partial tuition Role: Recipient student
2018	Presidential Scholar Lehigh University Amount: Full 4-year tuition Role: Recipient student

Certificates and Awards

2022	Carroll Behrhorst Primary Health Care Award, Tulane University, New Orleans, LA, USA
2022	The National Environmental Health Association, Safe Water Program Improvement, Tulane University, New Orleans, LA, USA
2021	USAID Global Health: Monitoring and Evaluation, Johns Hopkins, Baltimore, Maryland, USA
2018	UNICEF WASH (Water, Sanitation, and Hygiene) Certification
2018	Emotionally Intelligent Leadership, Lehigh University Leadership Legacies, Lehigh University, PA, USA
2014-2018	Athletic Leadership, Lehigh Emerging Leadership Program, Lehigh University, PA, USA

Advisor and Mentor Service

2025	University of North Carolina, Chapel Hill Environmental Sciences and Engineering Graduate Buddy Program Mentor, NC, USA
2024	Galapagos Kenan Undergraduate Student Mentor, San Cristobal, Galapagos
2020	Lehigh University Entrepreneurship Program Mentor, <i>Home Field Advantage</i> , Bethlehem, PA, USA