



Water & Health Conference

SCIENCE · POLICY · PRACTICE



Clean water.
Global health.
Powered by science.



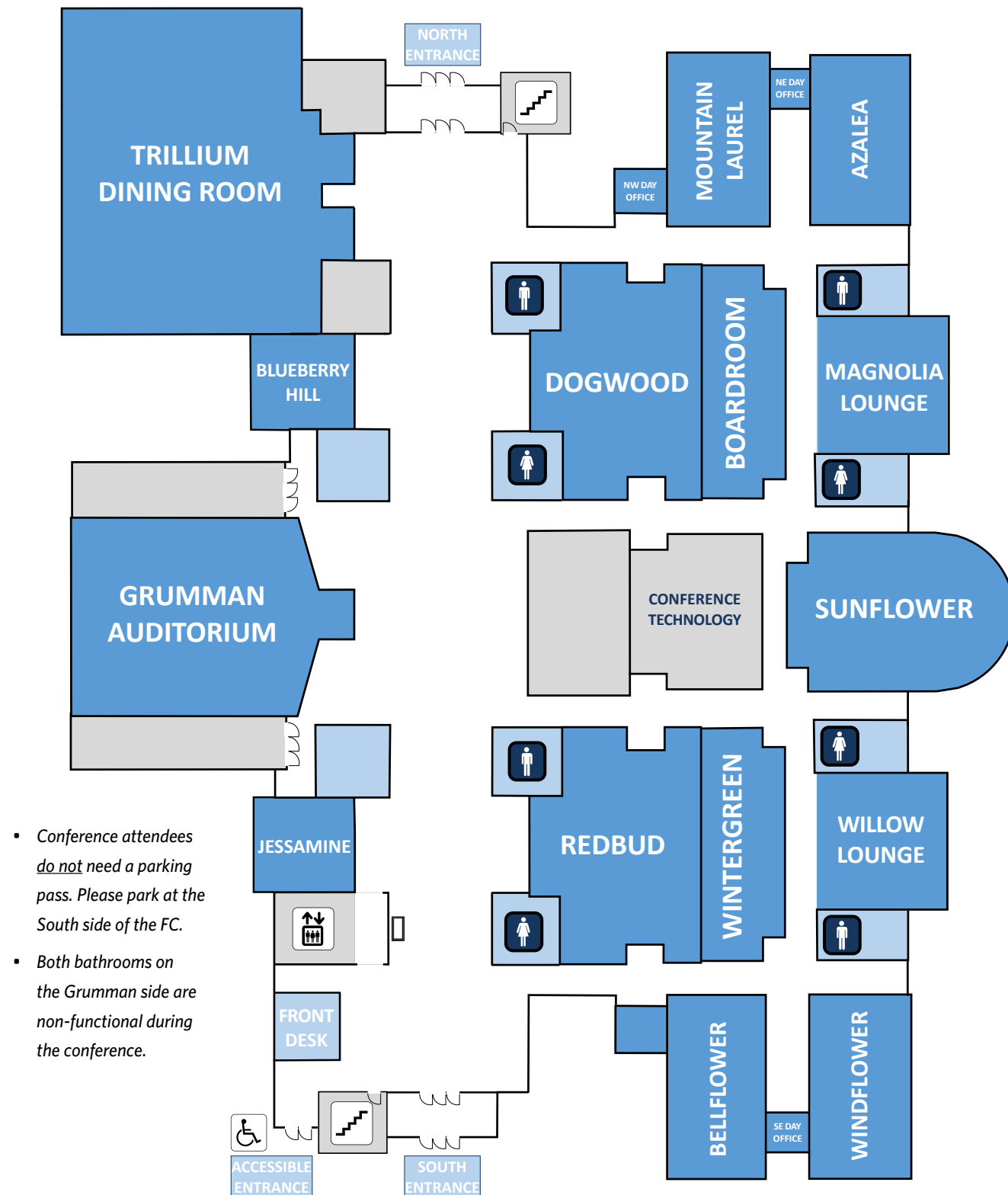
WATER
INSTITUTE

OCTOBER 27-31, 2025

#UNCwaterandhealth

FRIDAY

CONFERENCE CENTER



- Conference attendees do not need a parking pass. Please park at the South side of the FC.
- Both bathrooms on the Grumman side are non-functional during the conference.



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Conference Information

CONFERENCE ADDRESS & PHONE

The Friday Center, 100 Friday Center Dr., Chapel Hill, NC 27517, (919) 962-3000. *Conference attendees do not need a parking pass.*

INTERNET/PHONES

Wireless Network: “UNC Guest” (open a web browser, click “Connect” then “Agree to Terms”). *Consider purchasing a cellular international plan with 5G to make local calls, access the Friday Center’s wifi, use rideshare apps, and access Conference voting polls.

LUGGAGE STORAGE

Store your luggage on Thursday and Friday in the Wintergreen room (look for signs). During the week, luggage and coats may also be stored outside of Grumman Auditorium. Luggage is stored at your own risk.

LOST & FOUND

Please check for any lost items at the Conference Registration and the Friday Center Information Desk.

SPECIAL SERVICES

Please check with the *Friday Center Information Desk* to make arrangements for special needs such as: private lactation rooms, prayer rooms, first aid, and gender-neutral bathrooms. Designated quiet working spaces will be available, and attendees can sign up for meeting tables on the second floor or use the outdoor tables.

EMERGENCY CONTACT INFORMATION

- **The Friday Center:** 100 Friday Center Dr., Chapel Hill, NC 27517, (919) 962-3000
- **UNC Hospital Emergency Department:** 101 Manning Drive Chapel Hill, NC 27514, (984)-974-1000
- **FastMed Urgent Care:** 407 E Franklin St, Chapel Hill, NC 27514, (919) 913-0996
- **UNC Police:** 285 Manning Dr, Chapel Hill, NC 27514, **Emergencies: Dial 911**

CONFERENCE WEBSITE

See our website for updated information:
waterinstitute.unc.edu/conf

SPECIAL NOTIFICATIONS

- Please wear your nametag/lanyard at all times while on the Friday Center premises. Please see the announcement board near conference registration for updates and sign ups.
- In the case of any situation requiring the delay or cancellation of any conference sessions or events, announcements on the conference website will be updated accordingly, and attendees will receive an email by 6:30am the day of the event.
- Email is based on registration information. If someone else registered you and listed their email instead of yours, you will need to contact them or check the conference website for updates.

CONFERENCE HOTELS

Aloft, 1001 S. Hamilton Rd.
Chapel Hill NC 27517, (919) 932-7772

Courtyard Marriott, 100 Marriott Way
Chapel Hill, NC 27517, (919) 883-0700

Hampton Inn & Suites Chapel Hill, 6121 Farrington Rd.
Chapel Hill, NC 27517(919) 403-8700

Holiday Inn Express Chapel Hill, 6119 Farrington Rd.
Chapel Hill, NC 27517, (919) 489-7555

SHUTTLE BUS SERVICE TO/FROM CONFERENCE HOTELS

Shuttle service is provided between the conference center and the Hampton Inn, Holiday Inn, and Aloft only. Please contact your individual hotel to inquire about alternative shuttle service. Shuttles do not wait and are first-come, first-served! Shuttles will NOT deviate from planned routes.

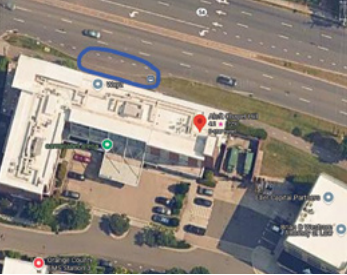
MORNING SHUTTLE TO CONFERENCE

- **Bus 1 serves the Aloft Hotel on S. Hamilton Rd.**
- **Bus 2 serves the Hampton Inn and Holiday Inn Hotels on Farrington Rd.**

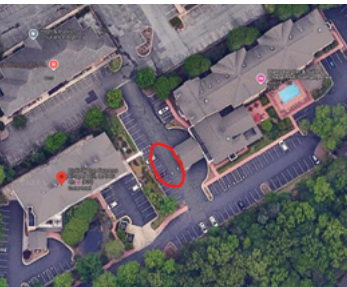
See pickup spots/times and Friday Center drop-off schedule below:

Pick-up	6:45a
Drop-off	7:00a
Pick-up	7:15a
Drop-off	7:30a
Pick-up	7:45a
Drop-off	8:00a
Pick-up	8:15a
Drop-off	8:30a

ALOFT PICKUP SPOT



HAMPTON INN & HOLIDAY INN PICKUP SPOT



SCAN TO VIEW LOCAL SERVICES

Scan the QR code to view local services, such as emergency services, restaurants, printing, etc.



The use of lighted tobacco products (e.g. cigarettes, cigars, hookah) is prohibited in the outdoor areas controlled by the University up to 100 feet from University facilities, according to the map (via QR code).

Electronic cigarettes, vaping devices, or other electronic delivery system which simulates tobacco smoking by producing an aerosol resembling smoke are prohibited in outdoor areas controlled by the university up to 25 feet from University facilities.

AFTERNOON/EVE SHUTTLE TO HOTELS

Departure Times from Conference Center

(Pickup near registration area)

Pick-up at Friday Center	5:30p
Drop-off at Farrington* / Aloft	5:40p / 5:45p
Pick-up at Friday Center	6:00p
Drop-off at Farrington* / Aloft	6:10p / 6:15p
Pick-up at Friday Center	6:30p
Drop-off at Farrington* / Aloft	6:40p / 6:45p
Friday PM Shuttle: Friday Center Pickup / Aloft Dropoff	1:00p / 1:15p

**Drop-off at Farrington includes Hampton Inn & Holiday Inn.*

Tuesday Evening Transportation for AY Young Performance: Take Chapel Hill Transit (S Bus to UNC Campus) to the campus venue and use Chapel Hill Transit to return to your hotel. Find more detailed instructions here: mychtransit.org

(Typically the S, FCX, and N Bus drive along hotel routes. Chapel Hill Transit buses are free but the 800 and 805 are not.)

OTHER TRANSPORTATION

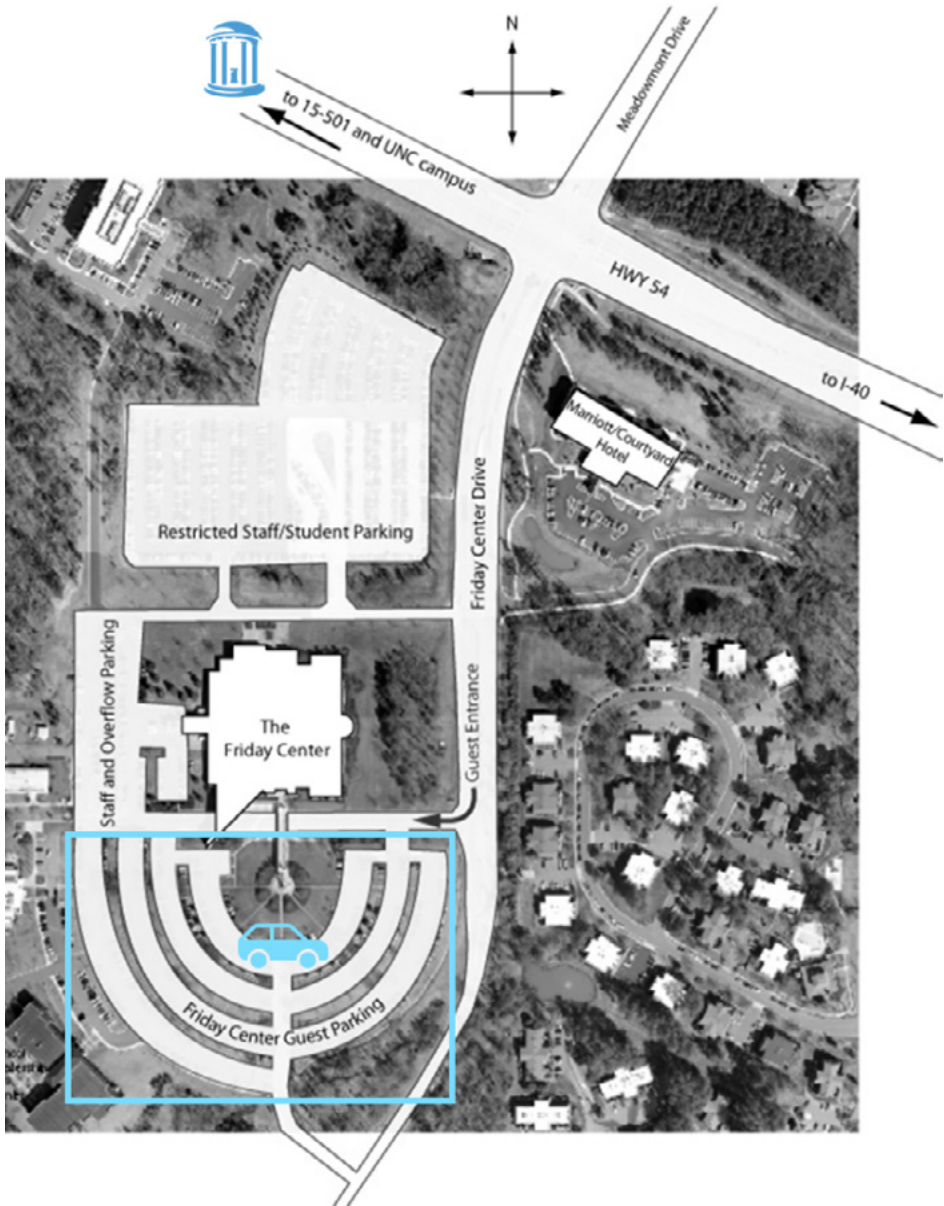
(Local Bus Service, Taxi, Rideshare)

- ★ **Chapel Hill Transit**
(919) 969-4900 mychtransit.org
(Use S, FCX, V, and HU Routes to the Friday Center.)
- **Carolina Sedan Service** - call 919-924-0568 (Beck Kasimov, Manager) or email booking@carolinasedan.com
- **Triangle Transit** - call (919) 485-7433 or visit triangletransit.org
- **Chapel Hill Taxi and Shuttle** - call (919) 933-9595 or visit chapelhilltaxi.com
- **RDU Airport Taxi** - call (919) 333-3333 or visit rdu.com/ground-transportation/taxis
- **RDU Express Taxi** - call (919) 771-8222, (800) 840-8098, or visit rduexpresstaxi.com
- **Uber** - sign up for UBER at get.uber.com
- **Lyft** - sign up for Lyft at lyft.com/rider

CHILDCARE SERVICES

The conference is not designed for minors under the age of 18 to attend. Minors must be supervised at all times (within arm’s reach of the guardian). If parents have infants who are still nursing, there are designated areas for breastfeeding and lactation rooms available. There are private daycare centers located nearby. These services are not endorsed or vetted by the Friday Center or UNC. Private childcare caretakers are not permitted to provide services on-site at the Friday Center. If you intend to bring minors to any event at the Friday Center, please notify the Conference organizers for special arrangements.

Courtney’s Drop-In Kids Care
(919) 381-4330 or dropinkidscare.org



2025 Schedule at a Glance

FRIDAY CONFERENCE CENTER, CHAPEL HILL, NORTH CAROLINA

Note: Early check-in begins Sunday, October 26 from 2-5pm Eastern Time (ET) at the William and Ida Friday Center.



START	MON, OCT. 27	TUE, OCT. 28	WED, OCT. 29	THU, OCT. 30	FRI, OCT. 31
7:30a	REGISTRATION & BREAKFAST				
8:30a	MORNING SIDE EVENTS	MORNING SIDE EVENTS	MORNING SIDE EVENTS	MORNING SIDE EVENTS	CHECK-IN & BREAKFAST - Networking Meetings - Working Group Meetings
10:00a	NETWORKING BREAK	NETWORKING BREAK	NETWORKING BREAK	NETWORKING BREAK	BREAK: FIELD TRIPS**
10:30a	PLENARY 1 Oh Shit!, Now What?	PLENARY 2 The Role of the State	PLENARY 3 The Emerging Global Public Health Emergency: Drivers, Diseases, and Diplomacy, What Role for WASH?	PLENARY 4 Measuring Climate Resilience in WASH: From Indicators to Impact	- Networking Meetings - Working Group Meetings
12:00p		ALUMNI LUNCH SPECIAL SESSIONS 1. Josh's Water Jobs 2. Beyond the Post-Mortem: From Toilet Talk to Tactical Influence 3. Tech Showcase	LUNCH SPECIAL SESSIONS 1. Josh's Water Jobs 2. Soft Power, Safe Water 3. Tech Showcase	LUNCH SPECIAL SESSIONS 1. Josh's Water Jobs 2. Soft Power, Safe Water 3. Tech Showcase	LUNCH
12:30p	LUNCH				
1:30p	SIDE EVENTS	SPOTLIGHT SPEAKER SERIES & SIDE EVENTS	SPOTLIGHT SPEAKER SERIES & SIDE EVENTS	SPOTLIGHT SPEAKER SERIES & SIDE EVENTS	
3:00p		15-MINUTE NETWORKING BREAK			
3:15p		VERBAL PRESENTATIONS			
4:30p		POSTER PRESENTATIONS			
5:45p		AY YOUNG PERFORMANCE 7:00p	CONFERENCE DINNER 6:00p		 HALLOWEEN ON FRANKLIN ST. Optional (not a Conference-sponsored event)

**Friday Field trips: Jones Ferry Road Water Treatment Plant, Mason Farm Wastewater Treatment Plant, Falls Lake Dam

Josh's Water Jobs

12:15-1:15 PM • TUES-THURS

Since 2016, Josh's Water Jobs has helped thousands of professionals find their place in the global water and WaSH community. What began as a small email list has grown into a trusted platform that posts thousands of jobs each year, all centered around water. These roles span policy, law, economics, finance, science, advocacy, WaSH, and more.

This special lunch series is designed to give job seekers practical support, insights, and mentoring to navigate the evolving water sector. Each session will spotlight a different angle, from improving your CV to understanding hiring trends and connecting with potential employers.

Josh's Water Jobs isn't just a job board. It's part of a growing movement to build a more connected, equitable water workforce ... one that actively works to close gender and resource gaps in the sector. Whether you're just starting out or looking to grow your career, these sessions are here to help you move forward.

Come for inspiration.
Leave with *momentum*.



OCT 28

CV pointers for WaSH careers

This session will offer practical, real-time guidance on how to craft compelling CVs. Using anonymized submissions from participants, live CV "teardowns" will be (constructively!) conducted to highlight what works and what doesn't.

OCT 29

Trends in WaSH jobs (insights from our data)

This session will present emerging trends in the WaSH job market based on Josh's Water Jobs Data. A brief data-driven presentation will be followed by a short panel featuring two to three employers offering their perspectives. Audience Q&A will follow.

OCT 30

Job search tips for young WaSH professionals

This is a speed mentoring session! Attendees will move from table-to-table to have quick one-on-one, professional development meetings with individuals from various organization types and leadership levels.

Rethinking USAID's WaSH Legacy

BEYOND THE POSTMORTEM

One of the many important pieces lost in the dismantling of USAID is the ability to formally continue the institutional memory held by the USAID WaSH team and its collaborators. This series will attempt to record a sector review of the strategy, structure, approach and learnings of the USAID WaSH team and USAID WaSH programming. It will be led by former members of the USAID WaSH team, and will attempt to collect perspectives from researchers and practitioners from across the sector. This series will attempt to record a sector review of the strategy, structure, approach and learnings of the USAID WaSH team and USAID WaSH programming. It will be led by former members of the USAID WaSH team, and will attempt to collect perspectives from researchers and practitioners from across the sector.

USAID was not perfect. It had strengths, and weaknesses, in structure, strategy and approach. USAID had learned a lot but there was still more to learn, and not all of the learnings have been adequately recorded and publicly shared. The future is unknowable, but if the US invests in strategic, long-term WaSH programming again, what should that look like? What can we learn and record now, in order to benefit any future efforts in US WaSH programming? The absence of USAID has created a space — how might we do things differently in the space that's been created, and what should we leave behind?



OCT 27

SIDE EVENT *Beyond the Postmortem: Charting USAID's Technical Trajectory*

Time: 8:30-10 am • Location: Azalea

OCT 28

SIDE EVENT *Beyond the Postmortem: Blueprints for a Better Bureaucracy*

Time: 8:30-10 am • Location: Azalea

OCT 28

SIDE EVENT *Beyond the Postmortem: From Toilet Talk to Tactical Influence*

Time: 12:15-1:15 pm • Location: Redbud

OCT 29

SIDE EVENT *Beyond the Postmortem: Ripple Effects of USAID's WaSH Learning Approach*

Time: 8:30-10 am • Location: Azalea



Detailed schedule: Monday, October 27

7:30–8:30 AM – REGISTRATION & BREAKFAST	
8:30–10:00 AM – SIDE EVENTS	
DOGWOOD	Exploring the impact of water and sanitation challenges in Alabama’s Black Belt through community voices – University of North Carolina at Chapel Hill, and Hale County, Alabama community members
REDBUD	Beyond Basic: Harmonizing Advanced Indicators for Global WaSH in Schools Monitoring – UNICEF, WHO, GIZ, the Global WinS Network, SPLASH, Helvetas, Swiss Water and Sanitation Consortium, Stanford, Northwestern, London School of Hygiene and Tropical Medicine
SUNFLOWER	The Additionality of Climate Resilient Sanitation in National Programs – UNICEF, WHO, WaterAid, WSUP
WINDFLOWER	Menstrual Friendly Public Toilets: What Does it Take to Get Started? – School of Public Health, Georgia State University; Mailman School of Public Health, Columbia University; Sanitation and Health Rights in India
BELLFLOWER	Will private companies invest in solarizing rural piped water systems? – Winrock International
AZALEA	Beyond the Post-mortem: Charting USAID’s Technical Trajectory – Former USAID
BOARDROOM	Plastic Waste: A Public Health Challenge – Malawi University of Business and Applied Sciences, University of Strathclyde, University of Stirling
10:00–10:30 AM – 30-MINUTE NETWORKING BREAK	
10:30 AM – 12:30 PM – PLENARY SESSION	
GRUMMAN AUDITORIUM	OPENING PLENARY SESSION: OH SH!T!, NOW WHAT? – Panelists: Raj Kumar, Jeff Goldberg, Jane Nabunnya, Joel Kolker, Bruce Gordon, Barbara Evans; Moderators: Joe Brown, Clarissa Brocklehurst
12:30 – 1:30 PM – LUNCH	
TRILLIUM DINING RM	Lunch for all participants is served. Please ensure that you are wearing your lanyard when checking in for lunch. <i>*Meals are prepared using halal methods, with a variety of options available to meet dietary needs.</i>
1:30 – 3:00 PM – SPOTLIGHT SERIES	
GRUMMAN AUDITORIUM	Spotlight on India: Rural Water Programming. Spotlight Speaker: Shri Ashok K. K. Meena. Secretary, Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India.

1:30 – 3:00 PM – SIDE EVENTS	
DOGWOOD	Improving WaSH Education: Successes, Challenges, and Future Opportunities for WaSH in the Classroom – Auburn University, Indiana University, and University of Michigan
REDBUD	Can technical innovation really increase handpump functionality? Experiences from Uganda, Malawi, and Zambia – Design Outreach, Living Water International, WaterAid
SUNFLOWER	Understanding the Pathogen Flows Associated with Sanitation in Urban Communities and Health Care Facilities – Uganda Ministry of Water and Environment, Center for Global Safe WaSH, Emory University, WaterAid; Tanga Water, Ghana Ministry of Local Government, PACE, Kampala Capital City Authority, Awutu Senya Municipal Assembly, icddr,b, Senegal Ministry of Sanitation, TREND, Makerere University School of Public Health, Korley Klottey Metropolitan Authority, UNC, University of Zambia, Zambia Institute for Environmental Health; Accra Metropolitan Authority, APHRC, Weiga Gdawe Municipal Assembly, UDSM, Accra School of Hygiene, CSIR
WINDFLOWER	Local Solutions for Global Impact: Strengthening Menstrual Health through Local Access Models – UNICEF, WaterAid, Days for Girls International (DfGI), Menstrual Health Action for Impact (MHAi) , iDE
BELLFLOWER	From Inception to Exit: How WaSH Operation and Maintenance Systems Evolve and Strengthen – Stanford University, Splash International, Boston University, Sanitation and Health Rights in India (SHRI)
AZALEA	Engaging local faith actors to accelerate progress to meet SDG6 – multi-country study and case stories – Tearfund, Living Water International, Water Mission, World Vision
3:00 – 3:15 PM – NETWORKING BREAK	
3:15 – 4:30 PM – VERBAL PRESENTATIONS	
DOGWOOD <i>Sanitation</i>	- Automated Classification of Sewage Infrastructure Vulnerabilities in Urban Salvador, Brazil – Christine Stauber, Georgia State University - Breaking the hog lagoon cycle: Biochar as an effective and low-cost intervention for per- and polyfluoroalkyl substances (PFAS), antibiotics, and antimicrobial resistant genes (AMR) pollution – Ellen Marie, The University of North Carolina at Chapel Hill, Gillings School of Global Public Health - Enhancing black soldier fly larvae density for scalable swine waste treatment and environmental health protection – Zhihan Sun, The University of North Carolina at Chapel Hill, Gillings School of Global Public Health - A Simple, Rapid Field Culture Test to Enumerate Pathogenic Vibrio cholerae Bacteria in Drinking Water – Mark Sobsey, University of North Carolina
REDBUD <i>East & Southern African WaSH</i>	- Evaluating drinking water quality in the rural areas of East Africa within the WHO water safety framework – Adrienne Lane, Water For Good - Assessing Household Water Insecurity Among Pastoralist Communities in Northern Kenya – Emmanuel Olela, Millenium Water Alliance - What’s in your network? A systematic supply chain mapping of LMIC drinking water infrastructure – Timothy Purvis, The Water Institute at UNC - Measuring the role of WaSH in healthcare workers’ well-being: Survey pilot and validation study – Lucy Tantum, The Water Institute at UNC

CONFERENCE INFO
MONDAY 10/27
TUESDAY 10/28
WEDNESDAY 10/29
THURSDAY 10/30
FRIDAY 10/31
AWARDS & HONORS
SPONSORS



TECH & INNOVATION SHOWCASE

Advancing WaSH through innovation

- **DATE:** OCTOBER 28-30, 2025
- **TIME:** 12:15-1:15 PM
- **LOCATION:** GRUMMAN AUDITORIUM

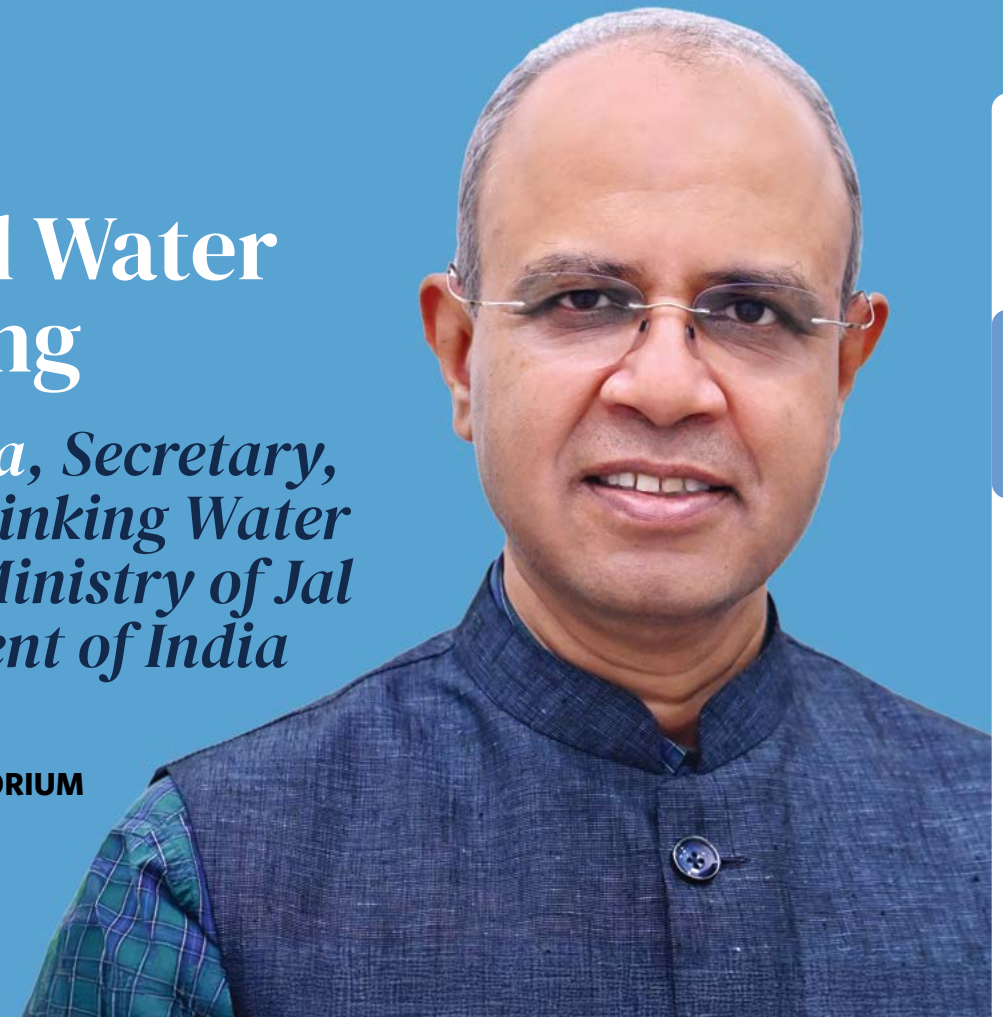
Returning to the UNC Water and Health Conference this year, this Showcase of WaSH-related technologies and innovations is a quickly expanding and exciting aspect of the Conference.

SPOTLIGHT SPEAKER SERIES

India's Rural Water Programming

Ashok K. K. Meena, Secretary, Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India

- **DATE:** MONDAY, OCT. 27, 2025
- **LOCATION:** GRUMMAN AUDITORIUM
- **TIME:** 1:30-3:00 PM



Showcase Awards will be presented during Thursday's Plenary. Stay tuned for more info.

This special multi-day event, is dedicated to highlighting the WaSH-related technologies and innovations in the sector. This event will feature a panel of judges from the Water Institute at UNC, RTI, and Business Connect. Awards will be announced on Thurs., Oct., 30, 2025.

SPONSORED BY:



At Business Connect, we believe business can be a sustainable engine for creating hope. As a social enterprise, our mission is to provide life-enhancing solutions like water filters and hygiene products to communities worldwide. We achieve this by partnering with innovative manufacturers, NGOs, and local distributors, building resilient, market-driven supply chains across more than 80 countries. This model not only meets urgent needs but also empowers entrepreneurship, strengthens communities, and fosters long-term impact.

Shri Ashok K.K. Meena is an accomplished Indian Civil Servant with over 32 years of experience in public service and administration. He currently serves as Secretary, Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India, where he leads transformative national flagship programmes like the Swachh Bharat Mission Grameen (Clean India Mission) and the Jal Jeevan Mission (Water for All), aimed at ensuring universal access to safe drinking water and improved sanitation for rural India.

Over the course of his distinguished career, Shri Meena has held several key leadership positions, including Chairman of the Food Corporation of India, where he managed one of the world's largest public food distribution systems, overseeing logistics and distribution of over 60 million tonnes of food grains annually.

He has served in various departments of the Government of India, including Defence, Personnel and Training, Commerce, Water Resources, and Secondary and Higher Education, where he played pivotal roles in policy formulation, programme implementation, and institutional strengthening at the national level.

He started his career as an Indian Civil Servant in the State of Odisha in India, where he served in various roles, including

District Magistrate of Keonjhar district, and in senior roles such as Finance Secretary and Principal Secretary of Odisha State. His leadership also extends to senior positions like Chairman and Managing Director in government-run public sector undertakings in Odisha, focusing on iron ore, sponge iron, industrial promotion, investment, and infrastructure development.

Shri Meena has a strong academic background with a bachelor's degree in Computer Science and Engineering from IIT Kanpur, a Master's in Economics from Annamalai University, and a Master's in International Development, Policy, and Public Finance from Duke University.

- DATE: MONDAY, OCT. 27, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 10:30 AM – 12:30 PM

Oh Sh!t!, Now What?

Global aid is in retreat, with widespread implications for WaSH. Uncertainty and fewer resources are the new normal, even as climate change and its effects raise the stakes for infrastructure and health. This session will feature a “fireside chat” with Raj Kumar, President and Editor-In-Chief of Devex, examining the tectonic shifts in global development. We’ll follow with a panel of prominent WaSH thought leaders on what it all means for WaSH policy and practice, and how to prepare for a new emerging reality.



Raj Kumar

President & Editor-in-Chief, DEVEX

Raj Kumar is a Washington, D.C.-based social impact leader, journalist, and author specialized in global development. Raj is President & Editor-in-Chief of Devex, the independent news organization he co-founded as a graduate student at the Harvard Kennedy School. A social enterprise, Devex has over one million members, and he leads a global staff of over 150 Devexers. Raj is also the author of The Business of Changing the World, an influential book about the future of global aid and philanthropy that was reviewed by Bloomberg, NPR, PBS, Vox, and others.

Raj is a member of the Council on Foreign Relations, an independent trustee of Save the Children, and a media leader of the World Economic Forum. He is an independent advisor for numerous organizations and initiatives, including the United



IN CONVERSATION WITH
Joe Brown
Interim Director of the
Water Insitute at UNC

Nations Capital Development Fund (UNCDF) and Harvard Public Health magazine. As a social entrepreneur himself, Raj is an active investor and advisor across social enterprises and startups, including as a board member of biometric nonprofit Simprints and marketing software company Zoomforth, where he chairs the board. Prior to Devex, Raj co-founded a financial media company that was sold to TheStreet.com. He also had a career in politics, including as political director at PSB Associates and a member of the press advance team for the Clinton White House. Raj graduated from Georgetown’s School of Foreign Service.

Oh Sh!t!, Now What?

- DATE: MONDAY, OCT. 27, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 10:30 AM – 12:30 PM



Jeff Goldberg
Senior Water Stewardship
Manager, Amazon

Jeff Goldberg serves as Senior Water Stewardship Advisor at Amazon, where he leads international efforts to return more water to the environment and communities than the company uses in its direct operations. Previously, Jeff spent over 12 years at USAID, where he served as Director of the Center for Water Security, Sanitation and Hygiene, and frequently as Acting Deputy Assistant Administrator for the Bureau for Resilience, Environment and Food Security. Jeff led the development of the U.S. Global Water Strategy twice and managed a \$475 million annual portfolio of water and sanitation investments across 40 USAID missions worldwide. He is also a creative and effective partnership broker, collaborating with a broad range of stakeholders—including host-country governments, implementing partners, the private sector, Congress, civil society, and donor organizations—to maximize policy and programmatic impact.



Jane Nabunnya
IRC Country Director, Uganda

Jane Nabunnya is the IRC Country Director in Uganda. She first entered the water sector in 2006, when she worked for the Nile Basin Initiative in Uganda, promoting communication and information sharing and exchange and stakeholder involvement with various stakeholders. Before that, she worked for 10 years with DENIVA, a National NGO Network in Uganda and supported civil society organisations and district NGO networks in different regions of Uganda through capacity building in information management, documentation of evidence and effective participation in local governance. Jane became Country Coordinator of the IRC Triple-S initiative in Uganda in 2009, and was appointed Country Director in 2013. In 2015 the Uganda Water and Sanitation NGO Network (UWASNET) named her as one of the women influencing change in Uganda. Jane holds Masters’ degrees in Communication and Public Policy Management.

WITH OTHER EXPERT VOICES ...



Bruce Gordon
Unit Head, WaSH and Health
World Health Organization



Barbara Evans
Chairman, Public Health Engineering, School
of Civil Engineering, University of Leeds



Joel Kolker
Global Lead, Water and
Finance, World Bank



MODERATOR
Clarissa Brocklehurst
Plenary Advisory Committee Chair; Affiliated
Faculty Member, Water Institute at UNC

3:15 – 4:30 PM – VERBAL PRESENTATIONS (CONTINUED)	
SUNFLOWER <i>Urban WaSH</i>	▪ Incentivizing Small Local Water Providers to Improve Water Quality in Low-Income Areas of Nairobi, Kenya – Haleemah Qureshi, Aquaya ▪ A Cross-Sectional Study on Water and Sanitation Resilience of Urban Slum in Dhaka City, Bangladesh – MD Toriqul Islam, NGO Forum for Public Health ▪ Targeted pathogen and AMR analyses reveal microbial hazards in a maternal and child hospital in urban La Paz, Bolivia – Lindsay Saber, University of North Carolina at Chapel Hill ▪ Compact BioSand Filter Prototype Performance in Cambodia: Field Comparison with a Full-Sized Plastic BSF – Ellen Brisley, University of British Columbia & Clear Cambodia
WINDFLOWER <i>Behavior Change</i>	▪ Better Knowledge, Better Facilities, Same Behavior: Findings from a Cluster-Randomized Trial of WaSH-in-Schools Interventions – Gracie Hornsby, Stanford University ▪ Long-Term Evaluation of a Backyard Poultry Management and Hygiene Intervention in Rural Bangladesh – Elizabeth Thomas, Johns Hopkins Bloomberg School of Public Health ▪ Cleaning Drinking Water Storage Containers – A Systematic Review of Practices and Water Quality – Mastura Morshed Nawmi, Lehigh University ▪ Moving Beyond Rhetoric: Effectively Engaging Governments in WaSH Co-Financing – Evidence from a Positive Deviance Study – Fiker Abebe, Splash
BELL FLOWER <i>Economics, Finance & Policy</i>	▪ Predictors of Latrine Subsidy Uptake: Gender, Poverty, and Household Dynamics in Rural Ethiopia – Crystal Huang, IDinsight ▪ Rethinking how national drinking water safety is evaluated in the United States – Katherine Alfredo, University of South Florida ▪ Willingness to Invest in Hand Hygiene Enabling Technologies: A Purchasing Experiment in Lusaka, Zambia – Katherine Davies, London School of Hygiene & Tropical Medicine ▪ Electoral Incentives and Trust in Water Utilities as Drivers of Local Government Participation in Performance-Based Financing Program: Evidence from Indonesia – Silvia Landa, University of North Carolina at Chapel Hill
AZALEA <i>Rural WaSH</i>	▪ Associations between animal exposure and child health outcomes in rural Bangladeshi households – Sumaiya Tazin, NC State University ▪ Positive and Negative Resilience Strategies for Energy, Water, and Nutrition amid Kenyan Droughts and Floods – Emily Ogutu, Emory University ▪ Drinking Water Sources, Contaminants, and Salivary Antibody Responses: A Prospective Cohort Study in Central Appalachia – Alasdair Cohen, Virginia Tech ▪ Insights from Rural Practitioners: A Thematic Analysis of Implementation Challenges in Solar Powered Water Systems – Tess Brodie, Global Water Center

4:30 – 5:30 PM – POSTER PRESENTATIONS & HAPPY HOURS (ATRIUM)

1. **Meta-Analysis of Holistic WaSH Programs on Access, Behavior, and Diarrhea in East Africa** – Adrienne Lane, Water for Good

2. **Transforming Schools Through WaSH: Integrating Hygiene, Sustainability, and Climate Action** – Priya Kothari, Centre for Youth Development & Activities (CYDA)

3. **A tale of two services: Why India’s school lunch program succeeds where WaSH services fail** – Anvesh Badamikar, Stanford University

4. **The Hidden Importance of Waterpans: Mitigation of Human Health Risks using a One Health Approach** – Claire Furlong, IHE Delft Institute for Water Education

5. **Impacts of Rainfall and Chlorination on Contamination at Groundwater Sources in Kenya, Sierra Leone, and Uganda** – Catherine McManus, The Water Project

6. **Trachoma in rural Ethiopia: water scarcity and poor hygiene harm health in Yokass Village** – Dr. Daniel Gelan Arsed, UNICEF

7. **A One Health Examination of Backyard Poultry Operations** – Emily Bailey, Campbell University

8. **Assessing Multidimensional WaSH Inequalities in Uganda: Impacts, Drivers, and Pathways to Equity** – Comfort Hajra Mukasa, WaterAid Uganda

9. **Invisible Hands, Illegal Dumps: Sanitation Work, Informality, and the Legal Paradox in Alleppey town and its peri-urban areas** – Hariprasad V M, Indian Institute of Technology Bombay (IIT Bombay)
10. **Our records show you have access to safe water, but do you?** – Katherine Alfredo, University of South Florida

11. **Contextual approaches for hard-to-reach areas communities in Ethiopia** – Kelly Alexander, CARE

12. **Toward Thriving Communities: What Safe Water Alone Can’t Achieve** – Kimberly Gerken, Water Mission International

13. **Evaluating new and cost-effective wastewater-surveillance sampling methods to address pathogen signal loss in rural sewersheds** – Marianne Beaulieu, Virginia Tech

14. **Cholera Trends and Environmental Risks: Insights from Lake Kivu Bordering Areas in Western Rwanda** – Uwimana Uwimana Martha WaterAid Rwanda

15. **How Risky Are Domestic Shallow Wells to Public Users? The Evidence from Peri-Urban Communities of Tanzania** – Tula Ngasala, Michigan State University

16. **Applications of an in situ E. coli contamination sensor for drinking waters in east Africa** – Whitney Knopp, University of Colorado Boulder

17. **Interaction between Environmental and Human Health in North Jordan Valley** – Ziad Al-Ghazawi, Jordan University of Science and Technology

18. **A Systematic Analysis of Toxic Metals in Ghana’s Drinking Water Systems** – Sarah Hwang, The Water Institute at UNC

19. **Rapid Market Formation in Urban Madagascar: Evidence from the USAID Dio Sera Sanitation Project** – Elise Mann, iDE Global

CONFERENCE INFO

MONDAY 10/27

TUESDAY 10/28

WEDNESDAY 10/29

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AGENDA FOR CHANGE

SPOTLIGHT SPEAKER SERIES

Water Investment & Financing

*Gary White, CEO &
Co-founder Water.org,
WaterEquity &
WaterConnect*

- **DATE:** TUESDAY, OCT. 28, 2025
- **LOCATION:** GRUMMAN
- **TIME:** 1:30-3:00 PM



Gary White is CEO and Co-founder of Water.org, WaterEquity, and WaterConnect. He developed WaterCredit, Water.org's core solution that enables people in poverty to access affordable financing for water and sanitation. He went on to launch WaterEquity, an impact investment manager mobilizing private capital across Asia, Africa, and Latin America, and most recently founded WaterConnect to invest in climate-resilient water and sanitation infrastructure.

Gary was named one of TIME's 100 most influential people and has received the Fulbright Prize for International Understanding, Forbes 400 Lifetime Achievement Award for Social Entrepreneurship, and recognition from the Schwab and Skoll Foundations. He holds three degrees in Civil and Environmental Engineering from the University of North Carolina at Chapel Hill and the Missouri University of Science & Technology.

With over 30 years of experience, Gary advises global organizations including the IKEA Foundation, Inditex, Reckitt, AB InBev, Amazon Web Services, the Water Resilience Coalition, and Bank of America. He is a founding board member of the Millennium Water Alliance and Water Advocates.



MODERATOR

Don Lauria

'70 PhD and professor emeritus

UNC and ESE have been central to his Don's and career. In 1964, while working as a consulting engineer in Syracuse, N.Y., he was invited by then-department chair Dan Okun to join ESE as a faculty member, teaching mid-career engineers from developing countries about community water supply and sanitation planning.



Detailed schedule: Tuesday, October 28

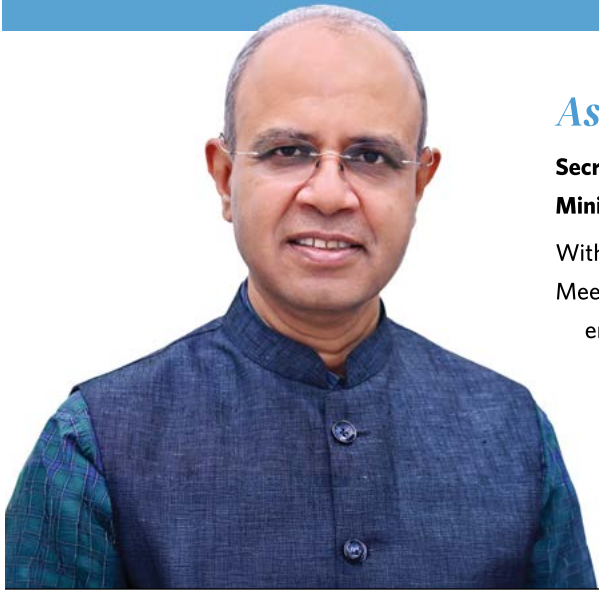
7:30 – 8:30 AM – REGISTRATION & BREAKFAST	
8:30 – 10:00 AM – SIDE EVENTS	
DOGWOOD	The ONE-WaSH Ethiopia Initiative: Advancing Universal Access to Water, Sanitation, and Hygiene – Ethiopian Ministries of Water, Health, Education, and Finance
REDBUD	Climate, hygiene, and health: developing a shared research agenda for future adaptations – London School of Hygiene and Tropical Medicine, Reckitt Global Hygiene Institute, Leeds University, UNICEF, WHO, WaterAID
SUNFLOWER	Global Progress on WaSH in Healthcare Facilities: Implementation of WaSH FIT and the Practical Steps – UNICEF, WHO, PATH, Swiss Water and Sanitation Consortium, Save the Children
WINDFLOWER	Strengthening Menstrual Health Monitoring: Lessons from Pilot Countries and Pathways to Global Alignment – Global MHH Monitoring Group, JMP, UNICEF, the Gates Foundation
AZALEA	Beyond the Postmortem: Blueprints for a Better Bureaucracy – Former USAID
10:00 – 10:30 AM – 30-MINUTE NETWORKING BREAK	
10:30 AM – 12:00 PM – PLENARY SESSION	
GRUMMAN AUDITORIUM	The Role of the State – Panelists: Secretary Ashok Meena, Tanvir Ahmed, Gustavo Saltiel, Mary Eyram Ashiyo, Sitali Muyatwa; Moderator: Yogita Mumssen
12:00 – 1:30 PM – LUNCH	
TRILLIUM DINING RM	Lunch for all participants is served. Please ensure that you are wearing your lanyard when checking in for lunch. <i>Alumni Lunch - In recognition and celebration of alumni of the UNC Environmental Science and Engineering Department, special seating for alumni will be available.</i>
12:15 – 1:15 PM – LUNCH SESSIONS	
SUNFLOWER	Technology & Innovation Showcase
MAGNOLIA	CV Pointers for WaSH Careers – Josh Newton, Josh’s Water Jobs
REDBUD	Beyond the Post-Mortem: From Toilet Talk to Tactical Influence – Former USAID
1:30 – 3:00 PM – SPOTLIGHT SERIES	
GRUMMAN AUDITORIUM	Water Investment and Financing. Spotlight Speaker: Gary White – CEO & Co-founder, Water.org, WaterEquity & WaterConnect
1:30–3:00 PM – SIDE EVENTS	

PLENARY DAY 2

- DATE: TUESDAY, OCT. 28, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 10:30 AM – 12:00 PM

The Role of the State

Governments have a mandate to coordinate, finance, build, provide, and monitor WaSH services and infrastructure – yet they often fail to deliver. Aid can sometimes fill gaps and strengthen capacity, but may also displace essential state investments in infrastructure; and when aid is used only for infrastructure, it does not create institutional strength. This session will examine the role of the State – and highlight its essential primacy in leading WaSH – in the context of a changing landscape in international aid.



Ashok Meena

Secretary, Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India

With over 32 years of distinguished career in public service and administration, Shri Meena has devoted his career to addressing one of India’s most critical priorities — ensuring universal access to safe drinking water and sanitation for all in rural India. As Secretary of the Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Shri Meena leads transformative national flagship programmes, including the Swachh Bharat Mission (Clean India Mission) and the Jal Jeevan Mission (Water for All), driving improvements in infrastructure, governance, and the quality of life for millions in rural India.

Tanvir Ahmed

Professor, Department of Civil Engineering Bangladesh University of Engineering and Technology (BUET)

Dr. Tanvir Ahmed is a WaSH specialist, academic, and researcher. He is a Professor in the Department of Civil Engineering at the Bangladesh University of Engineering and Technology (BUET), where he earned his Bachelor’s and Master’s degrees before completing a PhD in Environmental Engineering at the Massachusetts Institute of Technology. His research focuses on waste management, WaSH and public health, citywide sanitation planning, and environmental impact assessment. Tanvir served four and a half years as Director of ITN-BUET, leading the citywide inclusive sanitation (CWIS) program supported by the Gates Foundation and developing ITN-BUET into a regional capacity-building hub. He actively contributes to national WaSH policies, strategies, and regulatory frameworks in Bangladesh and currently serves as Regional Director of the Global Sanitation Graduate School (GSGS) South and South-East Asia Hub, promoting standardized sanitation education across the region.



CONFERENCE INFO
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The Role of the State

- DATE: TUESDAY, OCT. 28, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 10:30 AM – 12:00 PM



Dr. Mary Eyram Ashiyo

Member of Governing Board, Korle Bu Teaching Hospital, Ministry of Health, Ghana

Dr. Mary Eyram Ashinyo (nee Kporku) is a Physician Specialist in Public Health and Global Health Expert with emphasis on epidemiology, health policy, systems management and leadership. Currently a member of the Governing Board of the Korle-Bu Teaching Hospital, Ministry of Health, Ghana, Mary has held many leadership and managerial roles at all levels of Ghana’s Health System from community level to national level, including Head of Quality Assurance for the Ghana Health Service during which time she served as National Focal Point for the WaSH in Healthcare Facilities program. Mary does not only have an extensive experience working in the Government space, but also in non-profit and non-government organizations and professional associations including serving as former General Secretary of the Ghana Public Health Association.



Gustavo Saltiel

Former Global Lead, Supply and Sanitation, World Bank

Until recently Mr. Saltiel served as the Global Lead for Water Supply and Sanitation at the World Bank, coordinating global work on water and sanitation utilities, policies, institutions, regulation, digitalization, circular economy, “new water,” and urban water security. He joined the World Bank in 2003 as a Senior Water Engineer in the Latin America Region. He held various positions, including Sector Leader for Sustainable Development in Mexico, Program Manager of International Waters in the Africa Region, and Lead Water Supply and Sanitation Specialist for Latin America based in Lima, Peru. Before joining the World Bank, Mr. Saltiel held senior-level positions in Argentina, including CEO of the public utility Aguas Bonaerenses, Senior Manager of Planning and Regulatory Affairs at the private concessionaire Azurix, Environmental Manager of the Reconquista River Basin Unit, and Manager of Quality of Service at the Buenos Aires Water and Wastewater Services Regulatory Agency (ETOSS).



Muyatwa Sitali

Head, Secretariat of the Sanitation and Water for All

Muyatwa Sitali is a development policy specialist who has worked for UNICEF, World Bank, Oxfam and the Jubilee-Zambia. He draws his experience from multiple sectors and countries including Liberia, Senegal, Sierra Leone, United States, Switzerland, and Zambia. Currently he is heading the Secretariat of the Sanitation and Water for All on an acting basis. Working in the SWA Secretariat for over 10 years has allowed Sitali to be involved in mobilizing political, policy and programmatic support for water, sanitation and hygiene across several countries in Africa, Asia, Europe and the Americas. Sitali has more than 15 years of experience in development policy, multi-stakeholder partnerships, peace and development, and the connections between humanitarian and development programming.



Yogita Mumssen

Water Global Solutions Manager, World Bank

Yogita Upadya Mumssen is the World Bank’s Water Global Solutions Manager where she leads the Global Solutions Unit and provides strategic direction in delivering cutting edge technical solutions, advice and global knowledge into implementation, with the aim of supporting operational teams based in the regional units that deliver programs to Bank clients. Yogita has managed infrastructure projects, with a focus on the water and sanitation and energy sectors, worldwide. She has worked extensively on regulation, institutional reform, competition policy, private sector participation, results-based financing and pro-poor and inclusive service delivery across the infrastructure sectors, and has several publications in these areas.

DOGWOOD	Connecting to serve: Understanding the opportunities and limitations of utilities: a case example from North Carolina – UNC School of Government Environmental Finance Center, NC Division of Water Infrastructure, NC Rural Water Association
REDBUD	Leveraging Data to Address Climate, Water, and Health Challenges Globally – Millennium Water Alliance, University of Colorado Boulder, Penn State University, mWater, Helvetas, PATH, The Aquaya Institute
SUNFLOWER	Unified for universal coverage: Faith-based organizations as allies for WaSH in healthcare facilities – Catholic Relief Services, African Christian Health Associations Platform, Doctors with Africa – CUAMM, The Vatican’s Dicastery for Promoting Integral Human Development, The Water Mission, World Vision International
WINDFLOWER	Unlocking Period Education: From Global Solutions to Tanzania’s MHH Journey – WaSH United, Splash, Water for People, Tanzania’s National Institute for Medical Research – Ministry of Health
BELLFLOWER	Tap In: Building sector capacity for implementing and sustaining inline chlorination programs globally – Mangrove Water, Givewell, Uduma, Self Help Africa, Cova, The World Bank, University of California, Berkeley
AZALEA	Data you can trust: Verified results in rural drinking water services – Uptime Global, WHO, Ugandan Water Project, Cova, University of Oxford

3:00 – 3:15 PM – 15-MINUTE NETWORKING BREAK
3:15 – 4:30 PM – VERBAL PRESENTATIONS

DOGWOOD <i>Sanitation</i>	▪ Graduating Latrine Entrepreneurs to Sustain Market-Based Sanitation: Insights from iDE Bangladesh’s SanMarkS II Project – Elise Mann, iDE Bangladesh ▪ Household and environmental factors associated with detecting cefotaxime-resistant Escherichia coli in soil in peri-urban Malawi – Emma Budden, North Carolina State University ▪ Association Between Sanitation Type and Soil Contamination with Culturable E. coli in a Rural Alabama Community – Olivia Harmon, The University of North Carolina at Chapel Hill ▪ Reducing in-home water use and loss to improve Onsite Sanitation System (OSS) function in low-income rural communities: Insights from a pilot program from the Blackbelt, Alabama – Andrea Stowell, LIXIL Corp
REDBUD <i>Rural WaSH</i>	▪ Financial sustainability of rural water points: is committee management sufficient? – Catherine McManus, The Water Project ▪ Household-Level Environmental Risk Factors for Animal and Human Fecal Contamination in Northwestern Coastal Ecuador – Viviana Alban, University of WaSHington ▪ Effect of two community-based interventions on sanitation and hygiene in Malawi: a controlled before-and-after trial – Robert Dreibelbis, London School of Hygiene and Tropical Medicine ▪ WaterStarters: A Novel Franchise Model for Sustainable Water Access in Resource-Poor Settings – Kennedy Omwaka, Amref Health Africa

SUNFLOWER <i>WaSH Intervention</i>	▪ Supportive supervision enables collaboration and enhances hygiene standards at public toilets—Nakuru, Kenya – Pallavi Kache, US Centers for Disease Control and Prevention ▪ Household coping costs and adaptive management of intermittent water systems: A scoping review – Lauren Broyles, The Pennsylvania State University ▪ Quantifying the Human Energy Cost of Water Fetching in Eastern Uganda – Camila Van Oost, Stanford University ▪ Estimating the effectiveness of a household water filter on household water and household food insecurity among Maasai pastoralists in Kenya – Lauren Broyles, The Pennsylvania State University
WINDFLOWER <i>Menstrual Hygiene and Women’s Health</i>	▪ Association Between Household WaSH Facilities and Menstrual Hygiene Management Among Filipino Women of Reproductive Age – Crystal Amiel Estrada, College of Public Health, University of the Philippines ▪ The Missing Link: Evaluating the Role of Mothers in Menstrual Health Interventions in Ethiopia – Emily Cruz, Splash International ▪ Effect of Participatory Design for Urban Informal Upgrading on Women’s Sanitation-Related Empowerment in Fiji – Allison Salinger, Emory University ▪ Women’s and Men’s Time Use in Rural Kenya: A Cross-Sectional Study – Sheela Sinharoy, Emory University
BELLFLOWER <i>Monitoring & Evaluation</i>	▪ Evaluation of a Fluorescence-Based Sensor for Simultaneous Measurement of E.coli and Turbidity in Water – Mahboobeh Kasraee, University of Illinois Chicago ▪ A Systematic Review of Toxic Metals Exposures through Drinking Water in East Africa – Clay Burgess, AECOM/The Water Institute at UNC ▪ Improving water quality data by optimizing CompactDry ECO plate use – Charlotte Smart, Fort Lewis College ▪ Balancing precision and sample size: Comparing low vs. high-precision methods for measuring E.coli in drinking water in low-resource settings – Andrea Sosa-Moreno, University of Michigan
AZALEA <i>Treatment Solutions</i>	▪ Environmental monitoring of community health in urban non-sewered catchments in Kampala – Clay Burgess, Swiss Federal Institute of Aquatic Science and Technology (Eawag) ▪ Evaluation of the WaSHmobile Chlorine mHealth and E-Voucher Program to Reduce Diarrhea Outbreaks in Congo – Christine Marie George, Johns Hopkins University ▪ Evaluating a Scalable, Community-Centered Subscription Model for Point-of-Use Water Treatment in Texas Colonias – Marcio Botto, Vida Water ▪ Functionality of Arsenic-Iron Removal Plants in Water-Challenged Rural Areas of Bangladesh – Tanvir Ahmed, Bangladesh University of Engineering and Technology

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BATTERY TOUR

DATE: TUESDAY, OCT. 28, 2025
LOCATION: CAROLINA UNION AUDITORIUM
TIME: 7:00 PM



4:30 – 5:30 PM – POSTER PRESENTATIONS & HAPPY HOURS (ATRIUM)

1. Toilets for All? Exploring the availability, accessibility, and characteristics of non-household sanitation in Atlanta, Georgia – April Ballard, Georgia State University

2. Rural Subwatershed Wastewater-based Surveillance for Multiple Pathogens and Wastewater-based Epidemiology for COVID-19, Norovirus, and Rotavirus – Amanda Darling, EPA (US Environmental Protection Agency) / Virginia Tech

3. Evaluating the adaptation benefits of smallholder solar irrigation systems in Kenya – Ferran Vega-Carol, Duke University

4. Citywide inclusive Sanitation for Equitable Urban Development in Pakistan – Aziz Ahmad, Integrated Regional Support Program

5. Investing in women members of WUSCs to empower in decision making role in WASH intervention – Chhabi Lal Goudel, Federation of Drinking Water and Sanitation (FEDWASAN) , Nepal

6. Improving Sanitation Subsidy Targeting: Comparing Methods for Identifying Vulnerable Households in Rural Ethiopia – Crystal Huang, IDinsight

7. Measuring Water Quality from an Innovative Rainwater Harvesting System in Santiago, Dominican Republic – Christine Stauber, Georgia State University

8. Assessing health and dignity challenges, and evaluating the financial scheme’s impact on sanitation workers’ healthcare in Bangladesh – Md Tahmidul Islam, WaterAid Bangladesh

9. Animal waste management with household biodigesters and exposures to antibiotic resistance and zoonotic pathogens in Nepal – Heather Amato, University of Maryland

10. Animal Exposure is Associated with Diarrhea and Growth in Democratic Republic of the Congo (PCHA7 – WaSHmobile) – Jean-Claude Bisimwa Rusanga, Université Catholique de Bukavu – Johns Hopkins University
11. It’s coming from inside the house: Does PFAS leach from drinking water infrastructure? – Kathleen Hohweiler, Virginia Tech

12. Breaking Barriers: How Market-Based Sanitation is Transforming WaSH Access in Northern Mozambique’s Forgotten Towns – Elise Mann, iDE Global

13. Situational analysis on urban water production through the Sustainable Cities Project in Northern Ghana – Daniel Sarpong, Accra Technical University

14. Circular Economy for Sustainable Fecal Sludge Management in Rural India – Samrat Gupta, Water For People

15. Impacts of a Novel Water Quality Assurance Fund Intervention in Rural Ghana: A Stepped-wedge Randomized Controlled Trial – Valerie Bauza, The Aquaya Institute

16. Tracking sexually transmitted infections in the Detroit area by molecular analysis of environmental sample – Liang Zhao, Michigan State University

17. Beyond Water User Committees: The Overlooked Role of Landowners in Spring Management in Western Kenya – Allison Gregory, The Water Project

18. Health Risks Assessment on the Binational Pacific Ocean Coastline – Alhelí Calderón, Villarreal, California State University San Marcos

19. Effects of school menstrual hygiene management, water, sanitation, and hygiene interventions on girls’ empowerment, health, and educational outcomes: Lasta District, Amhara Regional State, Ethiopia – Fisseha Andargie

20. Identifying Sources and Environmental Drivers of Fecal Contamination in an Urban Creek Using Digital PCR and Explainable AI – Jianyong Wu, The Ohio State University

7:00 – 8:00 PM – AY YOUNG PERFORMANCE

CAROLINA UNION AUDITORIUM	A dynamic musical performance by AY Young, a United Nations Young Leader for the SDGs, a renewable energy entrepreneur, and a Billboard-charting artist. AY’s Battery Tour is a global initiative using music to mobilize action on sustainability. Free, but ticket required. Register to reserve a ticket at Conference check-in.
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Detailed schedule: Wednesday, October 29

7:30 – 8:30 AM – REGISTRATION & BREAKFAST	
8:30 – 10:00 AM – SIDE EVENTS	
DOGWOOD	What now? Environmental justice and WaSH at the crossroads in high-income countries – The Water Institute at UNC, Auburn University, Louisiana State University, Indiana University, University of Alabama, University of Twente, Virginia Tech
REDBUD	Five years to go: latest JMP trend and inequalities data – WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP)
SUNFLOWER	What Works for WaSH in healthcare facilities? Exploring sustainable management models – UNC, World Bank, WaSH in Healthcare Facilities Community of Practice
WINDFLOWER	Driving onsite system affordability in rural settings through innovative right sizing approaches – LIXIL, IAPMO, WAI, University of Alabama
BELLFLOWER	Targeting WaSH Subsidies: “An honest dialogue about effectiveness, feasibility, and competing priorities” – Aquaya, Safe Water Network, Conrad N. Hilton Foundation, SOIL, Ghana Water Company
AZALEA	Beyond the Postmortem: Ripple Effects of USAID’s WaSH Learning Approach – Former USAID
10:00–10:30 AM – 30-MINUTE NETWORKING BREAK	
10:30 AM–12:00 PM – PLENARY SESSION	
GRUMMAN AUDITORIUM	The Emerging Global Public Health Emergency – Drivers, Diseases, and Diplomacy: What Role for WaSH? – Panelists: Ilesh Jani, Bruce Gordon, Richard Allen, Karin Gallandat, Yankho Mataya, Claire Chase, His Excellency Asfaw Dingamo Kame (State Minister for Water and Energy of Ethiopia); Moderator: Oliver Cumming
12:00 – 1:30 PM – LUNCH & LUNCH SESSIONS	
TRILLIUM DINING ROOM	Lunch for all participants is served. Please ensure that you are wearing your lanyard when checking in for lunch.
12:15 – 1:15 PM – LUNCH SESSIONS	
SUNFLOWER	Technology & Innovation Showcase
MAGNOLIA	Trends in WaSH Jobs – Insights from Josh’s Water Jobs’ Data – Josh Newton, Josh’s Water Jobs
WILLOW	Soft Power, Safe Water: How WaSH May Have Survived the Great Purge: This session will recap what advocates experienced following the suspension of all USAID programs. Join us for a snapshot of what happened the last eight months, and how WaSH has fared through it all (so far). We will address where we are now with Congress and the chaotic effort by the State Department to absorb foreign assistance this year. This session will complement the USAID series that preceded earlier on Tuesday and Wednesday morning – and will lead into our content and news for lunch on Wednesday! – Millennium Water Alliance, IAPMO, Egeria Strategies LLC

1:30 – 3:00 PM – SPOTLIGHT SERIES	
GRUMMAN AUDITORIUM	Transformational WaSH Leadership in Frontline Communities in the U.S. Spotlight Speakers: Alabama Mayor Patrick Braxton, Susan Cockrell, Kristi Pullen Fedinick; Moderator: Tanvi Nagpal
1:30 – 3:00 PM – SIDE EVENTS	
DOGWOOD	Closing the Water Access Gap: How Policy Shapes WaSH Access in High-Income Countries – DigDeep, Vessel, IAPMO
REDBUD	Doing more with less: Digitalization and data-driven management of water services at scale – mWater, DINEPA, World Vision, UNICEF, Catholic Relief Services
SUNFLOWER	What’s next in WaSH in healthcare facilities? (And where do we go from here?) – UNICEF, UNC, WHO, WaSH in Healthcare Facilities Community of Practice
WINDFLOWER	Promoting Use of Personal Protective Equipment through Iterative Co-Design of Training with Sanitation Workers – Sanergy-Fresh Life, CDC, CAWST
BELLFLOWER	Beyond the Build: Operating and Financing Reliable Water & Sanitation Services – Saha Global, FreshLife, Uduma
AZALEA	Hygiene integration into various public health programmes and policies – WaterAid, UNICEF, SightSavers, IFRC, Government of Nepal, Ministry of Health, Government of Punjab, PRMSC
3:00 – 3:15 PM – 15-MINUTE NETWORKING BREAK	
3:15 – 4:30 PM – VERBAL PRESENTATIONS	
DOGWOOD <i>Healthcare Facilities</i>	• Formative Research for Adapting the CHOBI7 mHealth Program for Scalable Delivery in Rural Bangladesh (WaSHmobile program) – Fatema Zohura, Research, Training and Management (RTM) International • Integrating WaSH Interventions Across Schools, Healthcare Facilities, and Communities: Evidence from Northern Uganda – Hajra Mukasa Comfort, WaterAid Uganda • Health and non-health impacts of WaSH in healthcare facilities: Systematic scoping review – Lucy Tantum, The Water Institute at UNC, University of North Carolina-Chapel Hill • Modeling health risks from untreated hospital wastewater in Dhaka: A systems-based approach to sanitation planning – Nuhu Amin, University of Technology Sydney
REDBUD <i>Sanitation</i>	• Willingness-to-pay and demand for sanitation products in rural northern Ghana: Impacts of seasonality and methodology – Valerie Bauza, The Aquaya Institute • Optimizing swine waste bioconversion with black soldier fly to protect public health in North Carolina – Chimdi Muoghalu, UNC Chapel Hill • A Modified Compact Dry Assay as a Rapid Alternative for ESBL E. coli Quantification – Fatema Akter Mahua, Indiana University Bloomington • Enhanced Antibacterial Activity of Light-Activated Silver Nanoparticles Against Superbugs Through Sequential Light Exposure – Anjumana Jannati Nur, UNC Charlotte

CONFERENCE INFO

MONDAY 10/27

TUESDAY 10/28

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AWARDS & HONORS

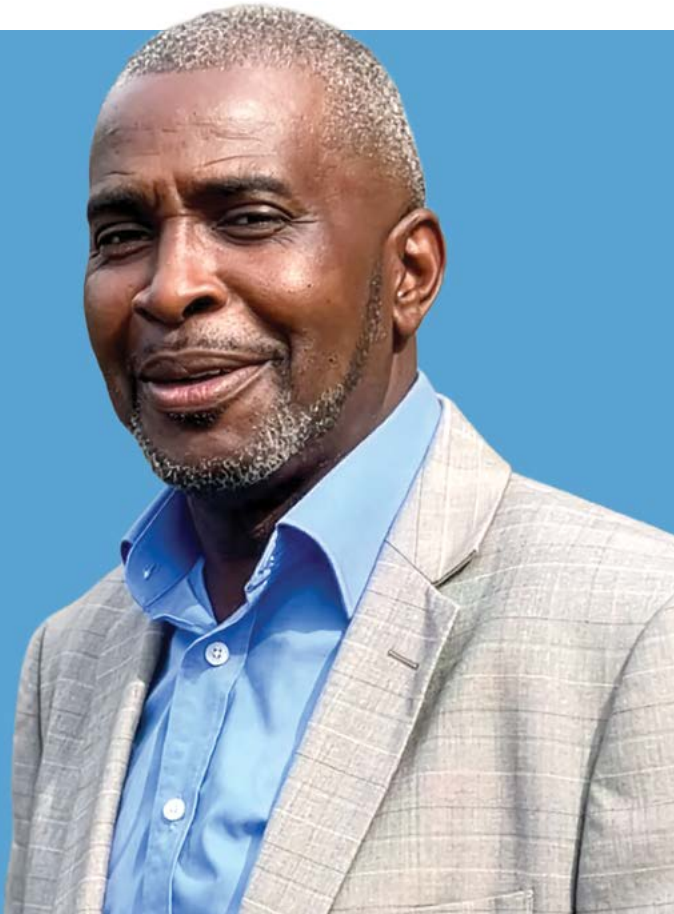
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Transformational WaSH Leadership
in Frontline U.S. Communities

- DATE: WEDNESDAY, OCT. 29, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 1:30-3:00 PM

Patrick Braxton
Mayor, Newbern, AL

Patrick Braxton serves as the first duly elected Mayo of Newbern, Alabama, after a landmark 2025 election. Originally declared mayor in 2020 when he ran unopposed, his ability to assume office was delayed until a 2024 federal settlement affirmed his rightful election and recognized him as the town's first duly elected Black mayor. A lifelong resident of Hale County, Mayor Braxton brings a deep understanding of the challenges and opportunities facing rural communities in Alabama's Black Belt. Under his leadership, Newbern has advanced major projects to expand wastewater infrastructure, improve public health, and ensure equitable access to essential services for residents both within townlimits and nearby areas. He is committed to transparency, community engagement, and building strong partnerships with local, state, and regional organizations. Beyond infrastructure, Mayor Braxton champions initiatives that foster economic development, support families, and preserve the unique character of the Newbern community.



Susan Cockrell
Town Manager & Director of Public Utilities, Kilmarnock, Virginia

Susan Cockrell is the Town Manager/Director of Public Utilities of Kilmarnock Virginia, a charming town of 1250, along the western shore of the Chesapeake Bay. Holding a BBA from the College of William and Mary and an MBA from Case Western Reserve, Susan brings a focus in marketing and general management to local government. Having amassed 25 years in the private sector in a variety of management roles, she entered the public sector as the Town's Community Development Strategist and has held the title of Deputy Town Manager prior to becoming Town Manager in 2019. "It's my personal goal to be a difference maker in my community-whether it's helping our residents or businesses or inviting visitors to explore all that the region offers."



Kristi Pullen Fedinick, Ph.D.
Dept. of Environmental & Occupational Health, GWU Milken Institute School of Public Health

Kristi Pullen Fedinick, Ph.D., is an interdisciplinary scientist and executive leader whose work bridges environmental health, data science, and public policy. She has held senior roles across government, academia, and nonprofits, advancing equity and justice through science and shaping national strategies on environmental health and environmental justice.



MODERATOR
Tanvi Nagpal
Senior Fellow, Foreign Policy Institute, Johns Hopkins University

Tanvi Nagpal is a leader in organizational learning, program design, and research with 25+ years of experience in shaping public service delivery research and programming. Tanvi has guided strategy, convened cross-sector coalitions, directed academic programs, and led initiatives to advance equitable access to water and sanitation. Tanvi currently serves as a senior fellow at CSIS and FPI in Washington DC.

- DATE: WEDNESDAY, OCT. 29, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 10:30 AM - 12:00 PM

The Emerging Global Public Health Emergency

Drivers, Diseases, and Diplomacy; What Role for WaSH?
Overlapping, interlinked crises of misinformation, political polarisation, climate change, environmental disaster, and shifting attitudes and practices in global health and international development exacerbate global health insecurity and have led to an upsurge in diseases such as cholera and dengue. This session will challenge panelists and attendees to consider actionable steps toward alignment between the WaSH and health sectors, and discuss new, adaptive approaches for the sector as we confront new global health realities and the renewed urgency to fight cholera.

H.E. Ambassador Asfaw Dingamo Kame, PhD

Government of Ethiopia, State Minister for Water Supply and Sanitation, Ministry of Water and Energy, FDRE

H.E. Ambassador Asfaw Dingamo is a seasoned statesman and diplomat with over four decades of public service. He has served as Minister of Water Resources, Ambassador to India and Cuba, Chief Adviser at the Ministry of Foreign Affairs, and CEO of major national enterprises. Appointed State Minister in 2021, he leads Ethiopia's water and sanitation agenda, advancing access, sustainability, and international cooperation. He holds advanced degrees in geology, mining engineering, and public policy, with extensive training in development and management.



Ilesh Jani

Scientist, National Institute of Health (INS) Mozambique

In the past 25 years, Dr. Ilesh Jani has lead efforts in research, public health and education with the purpose of strengthening the health system, promoting well-being and controlling disease in Mozambique. Dr. Jani served as Director-General of the INS for 13 years and as Vice-Minister of Health for two years, gaining unique insights into evidence generation and policy making. He currently chairs the Steering Committee of the Global Task Force on Cholera Control (GTFCC).

- DATE: WEDNESDAY, OCT. 29, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 10:30 AM - 12:00 PM

The Emerging Global Public Health Emergency

Drivers, Diseases, and Diplomacy; What Role for WaSH?



Claire Chase

Senior Water Economist, World Bank

Claire Chase is a Senior Water Economist in the Global Director's Office of the World Bank's Water Practice where she supports strategic engagement with high-level partners to set the global water agenda, internal advocacy efforts, and manages corporate knowledge flows and reporting. She has over 15 years of experience in the water and sanitation sector, supporting governments to design and finance investments, facilitate sector reforms, and strengthen capacity to reduce poverty and boost equity. Claire is also the World Bank focal point for Water and Health. Prior to joining the World Bank, she was a visiting researcher with the Barcelona Center for International Health Research in Mozambique. She holds a master's degree in Population and International Health Economics from Harvard University School of Public Health and has authored peer-reviewed publications on a range of health and development topics.



Karin Gallandat

Lead, Public Health, Infrastructure & Climate Research Group, Eawag

Trained as an environmental engineer, Dr. Karin Gallandat completed a PhD in environmental health at Tufts University and has worked across both academia and development practice. As an Assistant Professor at the London School of Hygiene & Tropical Medicine, she researched the public health impacts and implementation challenges of water supply improvements and hygiene interventions in complex emergencies. She later advised on water and climate policy, and managed infrastructure financing programs for the Swiss Economic Cooperation and Development.

The Emerging Global Public Health Emergency

Drivers, Diseases, and Diplomacy; What Role for WaSH?



Richard Allan
Director, the MENTOR Initiative

Richard is a vector borne disease control expert with 38 years’ experience in emergency public health and applied research. He has partnered with academic, NGO, UN and private sector partners to help develop case management tools and multiple tools for control of disease vectors from Lassa rats to mosquitoes, in urban, camps and rural settings affected by conflict or extreme weather events across Africa, SE Asia, Middle East and Latin America.

Richard’s career began in Zaire in 1988, going on to Oxford University to focus on malaria research, before returning to serve in eastern Zaire with OXFAM during the Rwanda genocide. Since then, he has led disease control efforts with several NGOs and also WHO, as RBM coordinator for complex emergencies from 2000. In Oct 2002, Richard founded The MENTOR Initiative, a purpose-built tropical disease control organisation, which he led as its CEO until October 2024, and now serves as its Chair of the Board of Directors.

WITH OTHER EXPERT VOICES ...



Yankho Mataya
Country Director,
WaterAid Zambia



MODERATOR
Oliver Cumming
Director, Environmental Health Group
London School of Hygiene & Tropical Medicine

- **DATE: WEDNESDAY, OCT. 29, 2025**
- **LOCATION: GRUMMAN AUDITORIUM**
- **TIME: 10:30 AM – 12:00 PM**

3:15 – 4:30 PM – VERBAL PRESENTATIONS (CONTINUED)

SUNFLOWER <i>Water-Micro</i>	• Validation and applications of an E. coli contamination risk sensor in US surface waters – Joshua Klaus, University of Colorado at Boulder • Assessing Septic Systems, Flooding, Season, and Socioeconomic Impacts on Food- and Waterborne Illnesses in Maryland – Cameron Smith, University of Maryland, School of Public Health, Department of Global, Environmental, and Occupational Health • Effect of WaSH interventions on Giardia infection in Bangladesh: heterogeneity by exposure to seasonal monsoons – Pearl Anne Ante-Testard, Francis I. Proctor Foundation and the Department of Ophthalmology, University of California • Effects of Extreme Weather Events on Cholera in the Democratic Republic of the Congo 2020-2024 (WaSHmobile Program) – Kelly Endres, Johns Hopkins Bloomberg School of Public Health
WINDFLOWER <i>Monitoring & Evaluating Tech</i>	• Improving the Semiquantitative Screening of Total Lead Concentrations in Drinking Water using Affordable Test Strips – Ethan Chou, the Water Institute at UNC • Developing Standardized Methods to Quantify Lead Composition of Drinking Water System Infrastructure using X-Ray Fluorescence – Kyle Rezek, the Water Institute at UNC • Wastewater surveillance reveals patterns of antibiotic resistance across the United States – Sooyeol Kim, University of California, Berkeley • Quantitative and Digital PCR-Based Detection of Antibiotic Resistance Genes in Rural Wastewater Systems – Nita Khanal, UNC Charlotte
BELLFLOWER <i>WaSH Intervention</i>	• Effectiveness of the PAASIM piped drinking water intervention for reducing children's enteric disease across different seasons and meteorological conditions – Viviana Albán, University of Washington • WaSH in Early Childhood Development Centres: Compliance, Practices, and Barriers in Malawi – Kondwani Chidziwisano, Centre for Water, Sanitation, Health and Technology Development • A global scoping review of Water, Sanitation and Hygiene (WaSH) interventions for adolescents – Rossanie Malolo, Malawi University of Business and Applied Sciences • Household water insecurity predicts household food insecurity in a water-rich environment in the Bolivian Amazon – Lauren Broyles, The Pennsylvania State University
AZALEA <i>Water Quality</i>	• Sustainable Solutions to Ensure Piped System Water Quality: Lessons from Inline Chlorination System in Ethiopia – Mussie Tezazu Asmare, Millennium Water Alliance • Groundwater at Risk: Applying DRASTIC-GIS Modeling to Guide WaSH Decision-Making in Ethiopia's Tana Sub-Basin – Kelly Alexander, CARE • Evaluation of Aluminum Electrocoagulation Performance Indicators for Decentralized Drinking Water Treatment – Monica Castro Carias, University of South Florida • Primary Prevention of Lead in Drinking Water through Substitution of Lead-Free Plumbing Components (Preliminary Results) – Michael Fisher, the Water Institute at UNC, UNC Chapel Hill

4:30 – 5:30 PM – POSTER PRESENTATIONS & HAPPY HOURS (ATRIUM)

1.

Assessing microbial cleanliness of high-touch surfaces in health facilities in Uganda: comparative study using locally-produced sodium hypochlorite and commercially available chlorine – Adam Drolet, PATH
2.

Monitoring Gender in Water, Sanitation, and Hygiene: Lessons from Testing Priority Indicator Measures in Bangladesh – Bethany Caruso, Rollins School of Public Health, Emory University
3.

Environmental and Sanitation Improvements with mHealth in Salvador, Brazil – Christine Stauber, Georgia State University
4.

Sanitation Work Without Safeguards: Institutionalising Occupational Health Protocols in Urban Tamil Nadu – Arka Sinha Roy, Indian Institute for Human Settlements
5.

Prevalence and factors associated with different MHM products using status among the low-income women in Bangladesh – Hasin Jahan, WaterAid Bangladesh
6.

Scaling Urban WaSH Systems in Low-Resource Settings: Integrating Infrastructure, Governance, and Community-Led Solutions in Mbale City, Uganda – Hajra Mukasa Comfort, WaterAid Uganda
7.

Reusable Sanitary Pads for Menstrual Hygiene Management: Breaking Barriers, Inspiring Change in Rwanda – Jean Baptiste Nsengiyumva, WaterAid Rwanda
8.

Evaluating Menstrual Health Pedagogical Interventions: Knowledge Acquisition, Attitudinal Shifts, and Confidence Development in Cambodian Teachers – Jess Strait, Days for Girls International
9.

Assessing the psychological and physical effects of distant water sources on Tanzanian rural women – Tula Ngasala, Michigan State University
10.

Where is My Right? Social Security Access for Sanitation Workers in Nepal – Seema Rajouria, WaterAid Nepal
11.

Estimating the Cost and Cost Savings of a WaSH/IPC Program in Health Facilities in Nigeria – Stephen Sara, Save the Children
12.

Assessment of Faecal Sludge Management System in Emergency Rohingya Refugees Response in Cox’s Bazar, Bangladesh – Md Toriqul Islam, NGO Forum for Public Health
13.

How Policy and Implementation Meet: A Regional Policy Map of Lead Monitoring and Intervention Strategies – Anna Gold, The Water Institute at UNC
14.

Gopad™: Pioneering Biotransformable Menstrual Products for Sustainable Health and Waste Solutions in Low-Infrastructure Settings – Trine Angeline Sig, Real Relief ApS
15.

Risk, Reliability, and Cooperation: A Study of Household Water Management Decisions in Delhi – Yugasha Bakshi, Virginia Tech
16.

Association of WaSH Practices and Diarrhea Amongst Children Under 5 Years in Badin and Jacobabad, Sindh – Ahmed Bux Dayo, HANDS Welfare Foundation
17.

Turning Home Water Storage from Risk into Reliability – Kevine Odira, University of Massachusetts Amherst
18.

Assessing WaSH infrastructure in urban hospitals in Dhaka: Risks, gaps, and policy directions – Nuhu Amin, International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b)
19.

Detection of Hemagglutinin H5 influenza A virus RNA and model of potential inputs in an urban California sewershed – Abby Paulos, Emory University

5:30PM – 7:30 PM CONFERENCE DINNER

TRILLIUM
DINING ROOM

A fun evening of networking and feasting, featuring a special performance by AY Young, ZimZoom Photo Booth, treats by Maple View Farm, and awards. Purchase a ticket at registration. Drinks reception sponsored by Business Connect.

Sanitation Workers Research Awards

Sanitation workers are critical to the delivery of safely managed sanitation services.

But in many contexts, they lack job security, operate with limited equipment and training and suffer all too frequent accidents and deaths, while low pay and social stigma compound their situation. The neglect of their working conditions undermines not only their well-being but also the resilience of the services they offer and ultimately the resilience of the broader sanitation system. This neglect is also manifested in the very limited scientific evidence on this issue. The many existing knowledge gaps are a barrier to supporting the development of policies and initiatives that help improve the situation for sanitation workers and protect their rights.

To encourage research on this subject, the UNC Water Institute and the Initiative for Sanitation Workers (a global alliance driving action on sanitation workers) created the Sanitation Workers Research Awards, which recognize studies that show excellence, relevance, and impact. The awardees of the fifth edition of the Sanitation Workers Research Awards will be announced at the Wednesday plenary of the UNC Water and Health Conference.

Auwalu Rabi’u, (34) the head of the sanitation group and the driver for the job, pulling out of the Manual Sanitation Workers base in Kofar Dawanau, Dala local government area of Kano state. Nigeria. September 2021. Credit: WaterAid/Nelson Owoicho



View the winners for the
2025 Sanitation Workers
Research Awards in “Best
Original Research Abstract”

SEE AWARDS FROM PREVIOUS YEARS:



2024



2023



2022



2021

To learn more about the situation of sanitation workers, visit the Sanitation Workers Knowledge and Learning Hub at: sanitationworkers.susana.org

After the Storm: Ensuring Safe Drinking Water Post-Hurricane Helene

- DATE: THURSDAY, OCT. 30, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 1:30-3:00 PM

Larry D. Michael

Director, State Environmental Health; Chief, NC Division of Public Health, NC NCDHHS

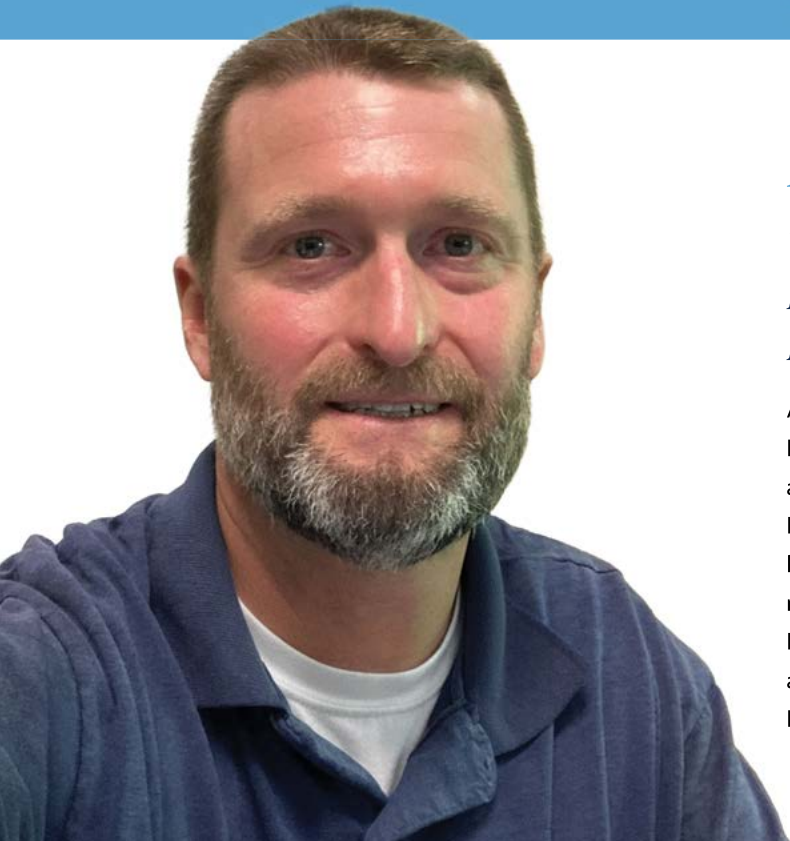
Larry Michael is the State Environmental Health Director and Chief of the State Division of Public Health's Environmental Health Section. Prior to that, he served as the Food Protection and Facilities Branch Head and has held several positions within the Division since joining the State in 1999. He has also been appointed to the State Board of Registered Environmental Health Specialist Examiners, Local Health Department Accreditation Board, and the Governor's Food Safety and Defense Task Force. Larry's public health career began at the local level where he was employed as an Environmental Health Specialist in Lee County. Michael earned a Bachelor of Science in Environmental Health from East Carolina University and a Master of Public Health from the University of NC at Chapel Hill.



Wilson Mize

On-Site Water Protection Branch Head, Division of Public Health, NCDHHS

Wilson Mize is the On-Site Water Protection Branch Head for the Division of Public Health at the North Carolina Department of Health and Human Services (NCDHHS). A graduate of the University of North Carolina at Chapel Hill, Wilson has been involved with the State of North Carolina's private well program since its inception in 2008, playing a key role in statewide implementation. His earlier experience includes serving as an inspector for the NC Division of Environmental Quality, overseeing wastewater and water treatment plants inspections, single-family spray systems, and managing the ambient monitoring program. He currently chairs the NC Environmental Health State of Practice and serves as the Vice-Chair and board member of the NC State Board of Environmental Health Specialist Examiners.



Andrew Blethen

Team Lead, Specialty Wastewater Improvement & Field Training, NC Division of Public Health, NCDHHS

Andrew Blethen leads the new Specialty Wastewater Improvement & Field Training Team (SWIFT) in the On-site Water Protection Branch at NCDHHS. He began his career in 1993 with the Appalachian District Health Department as an Environmental Health Specialist, later serving as Supervisor and then Director before retiring with nearly 31 years of service. He is vice-chair of the NC Environmental Health State of Practice and has taught as an adjunct instructor at Appalachian State University since 2007. He holds a BS in Health Promotions and an MPA from Appalachian State.

- DATE: THURSDAY, OCT. 30, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 10:30 AM -12:00 PM



Measuring Climate Resilience in WaSH

From Indicators to Impact

Climate change and its impacts — extreme weather events, altered hydrological cycles, and rising sea levels — amplify existing vulnerabilities and introduce new challenges to WaSH infrastructure, service delivery, and management. But while the WaSH sector acknowledges the imperative for action, a critical gap remains in translating this awareness into impactful changes in practice. In this plenary, leading researchers, policymakers, and practitioners seek to move the discourse beyond conventional monitoring frameworks toward a deeper understanding of how WaSH systems can adapt and transform in the face of climate change by exploring cutting-edge developments in defining and measuring climate resilience in WaSH.

Styvers Kathuni

Country Director, Millenium Water Alliance Kenya

Mr. Styvers Kathuni is the Country Director of the Millennium Water Alliance (MWA) in Kenya, where he oversees water security programs. Over the last 16 years, Styvers has led the implementation of complex, high-value programs across Africa, including serving as Chief of Party on a USAID-funded project and leading resilience programs funded by the Swiss and Dutch governments. Before joining MWA, he worked as the Africa Regional Director for Virridy. He has also served as a technical advisor and WaSH team leader at Catholic Relief Services and as a program manager at Save the Children.

He holds an MSc in Water Supply and Sanitation from Kenyatta University and a BSc in Water and Environmental Engineering from Egerton University. Styvers is a Mortenson Fellow at the Mortenson Centre for Global Engineering and Resilience at the University of Colorado Boulder, where he supports research activities and is pursuing a PhD in Civil Engineering.

- DATE: THURSDAY, OCT. 30, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 10:30 AM -12:00 PM

Measuring Climate Resilience in WaSH

From Indicators to Impact



Rick Johnston

Technical Officer, Water, Sanitation and Hygiene
World Health Organization

Dr. Rick Johnston is a Technical Officer in the unit of WaSH and Health at the WHO. He co-leads the WHO/UNICEF Joint Monitoring Programme on Water Supply, Sanitation and Hygiene (JMP), which maintains global databases about WaSH services in households, schools, and health care facilities. He also leads WHO's work on monitoring wastewater generation and treatment, in collaboration with UN-Habitat. He is active in programmes that make use of these data, such as estimating the burden of disease related to inadequate WaSH. He co-leads or contributes substantially to monitoring of multiple SDG indicators. Prior to joining WHO in 2013, he was team lead for water supply and treatment at the Swiss Federal Institute of Aquatic Science and Technology (Eawag), working primarily on water quality research in Africa and Asia. Between 1996 and 2009 he was in Bangladesh, working with UNICEF on arsenic mitigation. Rick holds degrees in environmental engineering from the University of North Carolina at Chapel Hill (PhD) and the Johns Hopkins University (MSc). His technical background is in drinking water treatment, with a specialization in arsenic chemistry.



Sasha Kramer

Co-founder & Executive Director, SOIL

Dr. Kramer is an ecologist and human rights advocate who has been working in Haiti since 2004. She received her Ph.D. in Ecology from Stanford University in 2006 and co-founded SOIL, a container-based sanitation service provider in Haiti, that same year. While Sasha spends the majority of her time living and working in the Caribbean, she is also a global advocate for equitable sanitation access and circular economy approaches to waste management. Sasha is an Ashoka Fellow, a National Geographic Emerging Explorer, a Schwab Foundation Social Entrepreneur of the Year, and the recipient of the Sarpharti Sanitation Award for Lifetime Achievement.

Measuring Climate Resilience in WaSH

From Indicators to Impact



Leonie Hyde-Smith

Water and Sanitation Specialist, Germany

- DATE: THURSDAY, OCT. 30, 2025
- LOCATION: GRUMMAN AUDITORIUM
- TIME: 10:30 AM -12:00 PM

Leonie Hyde-Smith is a water and sanitation specialist with extensive experience in international consultancy, contributing to water and wastewater projects across Sub-Saharan Africa and beyond. Leonie holds a PhD from the University of Leeds, where her research focused on climate adaptation in urban sanitation with an emphasis on financing and equity. In 2025, she joined HAMBURG WASSER, the municipal water service provider in Hamburg, Germany, where she coordinates the Water Operator Partnership within the NEU-Water project, a collaboration with Stellenbosch Municipality to build capacity and foster peer exchange to promote water-sensitive urban design for improved stormwater and greywater management and reuse.



CO-MODERATOR
Darren Saywell
Chief Business Officer
Millennium Water Alliance



CO-MODERATOR
Barbara Evans
Chairman, Public Health Engineering,
School of Civil Engineering, University of Leeds



Detailed schedule: Thursday, October 30

7:30-8:30 AM - REGISTRATION & BREAKFAST	
8:30-10:00 AM - SIDE EVENTS	
DOGWOOD	Beyond the Tap: Confronting Drinking Water Threats in High-Income Countries - IAPMO, DigDeep, LIXIL, US Chamber of Commerce
REDBUD	Towards Global and National Indicators for Monitoring Climate Resilient WaSH - Continuing the Conversation - World Health Organisation, UNICEF, University of Leeds, University of Technology Sydney, University of Oxford, University of Bristol
SUNFLOWER	Shared Sanitation: A Pathway to Inclusive and Sustainable Sanitation in Urban Informal Settlements - Habitat For Humanitarian International, London School of Hygiene & Tropical Medicine, Mozambican National Institute of Health, Makerere University School of Public Health, University of North Carolina at Chapel Hill, Kampala Capital City Authority Ministry of Water and Environment Uganda, Water & Sanitation for Urban Populations, Osprey Foundation, Fresh-Life
WINDFLOWER	From Pipe Dream to Filter Reality: How \$4 Billion Can Provide Safe Water for Africa - MetaMeta SMART Centre Group, Business Connect, Water By Women
BELLFLOWER	Centering children and adolescents in WaSH research and practice: Current insights and agenda setting - University at Buffalo, Northwestern University, Helvetas, Swiss Water and Sanitation Consortium, Charity: water, University of Colorado Boulder, Virridy, Needs4Water, Ohio State University, London School of Hygiene & Tropical Medicine, UNICEF, WHO
AZALEA	Improving hand hygiene for community settings : What we know and remaining evidence gaps - WHO, UNICEF, Emory University, London School of Hygiene & Tropical Medicine
10:00-10:30 AM - 30 MINUTE NETWORKING BREAK	
10:30 AM-12:00 PM - PLENARY SESSION	
GRUMMAN AUDITORIUM	Measuring Climate Resilience in WaSH: From Indicators to Impact - Panelists: Styvers Kathuni, Sasha Kramer, Rick Johnston, Leonie Hyde Smith; Moderators: Darren Saywell, Barbara Evans
12:00 - 1:30 PM - LUNCH	
TRILLIUM DINING RM	Lunch for all participants is served. Please ensure that you are wearing your lanyard when checking in for lunch.
12:15 - 1:15 PM - LUNCH SESSIONS	
SUNFLOWER	Technology & Innovation Showcase
MAGNOLIA	Job Search Tips for Young WaSH Professionals - Josh Newton, Josh's Water Jobs

CONFERENCE INFO
MONDAY 10/27
TUESDAY 10/28
WEDNESDAY 10/29
THURSDAY 10/30
FRIDAY 10/31
AWARDS & HONORS
SPONSORS

WILLOW	Soft Power, Safe Water: Mobilizing a New WaSH Advocacy in a Radical Foreign Policy Landscape: This is a <i>presentation and workshop</i> following the previous session, as we will carry forward the work you heard about there, and share practical answers to “what happens next.” Now, vastly different institutions in the US are struggling to “re-engineer” themselves to adapt in the wake of the destruction of agencies, programs, and even norms and expectations. Does adaptation to this environment mean turning foreign assistance into a purely transactional strategy for the benefit of a few? Does it mean only identifying paths that serve economic self-interest? Some say it does, but we do not. Join us for our presentation, some test polling (of you!), and short breakout groups where we look at how advocacy for <i>continuing</i> the US government’s commitment to WaSH <i>can succeed</i> , and your part in it. – Millennium Water Alliance, IAPMO
1:30 – 3:00 PM – SPOTLIGHT SERIES	
GRUMMAN AUDITORIUM	After the Storm: Ensuring Safe Drinking Water Post-Hurricane Helene. Spotlight Speakers – Division of Public Health, Environmental Health Section, NCDHHS: Larry D. Michael, Andy Blethen, Wilson Mize
1:30–3:00 PM – SIDE EVENTS	
DOGWOOD	How Laws and Policies Help Communities Anticipate and Manage Climate Change Impacts on WaSH Infrastructure in High-Income Countries – Center for Water Security and Cooperation (CWSC) and Pacific Institute
REDBUD	Community Leadership for Inclusive, Climate-Resilient Rural WaSH: South to South Learning Exchange – Yayasan Plan International Indonesia, Sumbawa University of Technology, Indonesia Ministry of Health, Outreach Philippines, Outreach International, University of North Carolina at Chapel Hill, Uganda Ministry of Water and Environment, Uganda Habitat for Humanity International
SUNFLOWER	Accelerating Progress: Global Efforts to Eliminate Lead in Drinking Water – The Water Institute at UNC, IAPMO, RTI International , World Vision, The Aquaya Institute, Rutgers University, UNICEF, WHO, Design Outreach
WINDFLOWER	Technical Working Group, Sensor-Based Monitoring – PATH, Cova, Mangrove Water, Ugandan Water Project, Global Water Center, Virridy, Aquaya
BELLFLOWER	Measuring Experiences with Hygiene: Lessons from Scale Development in Mexico and Bangladesh – Northwestern University; Research Center for Equitable Development EQUIDE, Universidad Iberoamericana Mexico City; Dahdaleh Institute for Global Health Research, York University, Canada; Tufts University; London School of Hygiene & Tropical Medicine; University at Buffalo; Environmental Health and WaSH Unit, icddr,b, Bangladesh; Johns Hopkins Bloomberg School of Public Health; University of South Carolina; Hygiene Experiences Scale Technical Advisory Group; and Reckitt Global Hygiene Institute
AZALEA	Improving hand hygiene in community settings (Session 2): Acting on the new global normative guidelines – UNICEF, WHO, Emory University, World Bank, WaterAid
3:00 – 3:15 PM – 15 MINUTE NETWORKING BREAK	
3:15 – 4:30 PM – VERBAL PRESENTATIONS	
DOGWOOD <i>Emergency & Scarcity</i>	• Water Sharing Network Position, Self-reported Stress, and Chronic Stress Cortisol by Season Among Daasanach Pastoralists in Northern, Kenya – Leslie Ford, Pennsylvania State University • Considerations for implementing sustainable fecal sludge services in humanitarian contexts – Gabrielle String, Lehigh University • “Stressed Up”: Water, sanitation, and hygiene insecurity and psychological distress in South Sudan – Rochelle Frounfelker, Lehigh University • What do we know about mental health and WaSH Insecurity? Hearing from WaSH experts – Gabrielle String, Lehigh University

REDBUD <i>Climate</i>	• Household Energy and Water Resource Disruptions and Coping Strategies During Floods and Droughts in Kenya – Hemali Oza, Emory University • Seasonal impact on water infrastructure: Availability, quality and source selection in Ethiopia, Ghana and Uganda – Anna Murray, The Aquaya Institute • Advancing Monitoring for Carbon-Financed Water Security: Methodological Innovation and Insights from East African Projects – John Ecklu, University of Colorado Boulder • Sustainability of Water, Sanitation, and Hygiene (WaSH) Systems in Nepal: An Analysis of People’s Perceptions on Climate Change and Management Perspective of WaSH Systems – Resham Jung Singh
SUNFLOWER <i>Water Quality</i>	• Lead-Free Learning: The Clean Classrooms for Carolina Kids™ Approach – Laura Allen Gates, RTI International • A systematic review of global toxic metal occurrence in LMIC drinking water – Michael Fisher, The Water Institute at UNC, UNC Chapel Hill • Health Outcomes and Environmental Injustice: The Effects of Industrial Water Pollution in Cancer Alley – Shalina Shahin, Xavier University of Louisiana • Surface water quality impacts from poultry operations in the Cape Fear River watershed – Ayse Ercumen, North Carolina State University
WINDFLOWER <i>Sanitation</i>	• Impact Assessment of the Greater Accra Sustainable Sanitation and Livelihoods Improvement Project on Urban Health and Education – Daniel Sarpong, Greater Accra Sustainable Sanitation And Livelihoods Improvement Project (GASSLIP) • Understanding pathogen dynamics in onsite sanitation systems for safer sanitation strategies in low-and middle-income countries – Musa Manga, The University of North Carolina • Willingness-to-pay for container-based sanitation services among vulnerable communities in northern Haiti – Maya Lubeck-Schricker, SOIL • Assessing the Environmental Contamination Risk of Pathogens Released by Locally Constructed Septic Tanks in Kampala – Edwin Paul Kyabaggu, Makerere University
BELLFLOWER <i>Eastern & Southern African WaSH</i>	• Sanitation Circular Economy: Co-Compost Impacts on Soil, Crop productivity, and Farmer Livelihoods in Fort Portal-Uganda – Kabasinguzi Pamela, Caritas Fort Portal-HEWASA • Timing and Volume of Water Collection at Handpumps and Piped Water Systems in Three Rural Zambian Communities – Samantha Levalley, University of Toronto • Evaluation of the WaSHmobile Chlorine mHealth and E-Voucher Program to Reduce Diarrhea Outbreaks in Congo – Christine Marie George, Johns Hopkins University • Monetary valuation of sanitation-related quality of life gains in rural Malawi - willingness to pay study – Mindy Panulo, University of Strathclyde
AZALEA <i>Water Scarcity</i>	• Domestic Water Consumption and Hygiene Behaviours in Zambian Communities – Sarah Bick, London School of Hygiene & Tropical Medicine • Measuring Water Insecurity on the Navajo Nation Using a Representative Household Survey – Natalie Exum, Johns Hopkins University • Associations between water supply intermittencies and drinking water quality, child health outcomes, and caregiver emotional stress in peri-urban Malawi – Caitlin Niven, North Carolina State University • Using GPT Personas in the Classroom to Develop Holistic Solutions to Complex Water Resources Challenges – Caroline Sear, Virginia Tech

1. **High-resolution Analysis of Demographic and Socioeconomic Characteristics of Households with Private Wells in the USA** – Caroline Sear, Virginia Tech
2. **Greywater reuse reimaged: Engineered alginate-polyethyleneimine and sludge-aluminosilicate biochar composites and models for system design** – Herbert Kaboggoza, UNC Chapel Hill
3. **Scaling financially sustainable WaSH services through circuit rider supported chlorination in Central America** – Wesley Meier, Cova
4. **Alternatives to traditional membrane filtration for microbial water quality testing: technical performance, usability, and cost** – Meseret Zerefa, The Aquaya Institute
5. **Understanding pathogen dynamics in onsite sanitation systems for safer sanitation strategies in low-and middle-income countries** – Musa Manga, UNC Chapel Hill
6. **A Simple, Rapid Field Culture Test to Enumerate Pathogenic *Vibrio cholerae* Bacteria in Drinking Water** – Mark Sobsey, University of North Carolina
7. **Assessment of Doroudzan Storage Dam in Regulating Kor River Salinity from Saline Tributaries, Southern Iran** – Maryam Tavallali, Rutgers University
8. **Physiological and Psychological Health Outcomes of Multidimensional WaSH Insecurity: Evidence from the 2022 Bangladesh Demographic and Health Survey** – Noor Kutubul Alam Siddiquee, Arizona State University
9. **Socioeconomic and attitudinal predictors of bottled water use among lower-income households in rural Southwest Virginia** – Bethesda O’Connell, East Tennessee State University
10. **Exploring “Cleanliness” in Rural Bangladesh as Part of a Poultry Intervention to Improve Household Hygiene** – Ridwan Mostofa Shihab, International Centre for Diarrheal Disease Research, Bangladesh (icddr,b)
11. **Weighted Philippine Groundwater Health Index for Integrated Assessment of Groundwater Quality in Agricultural Areas** – Romeo Quizon, College of Public Health, University of the Philippines Manila
12. **How the Cost Recovery Planning tool can contribute to sustainable WaSH facilities in institutions** – Om Prasad, Simavi
13. **Assessment of Environmental and Social Safeguards and Climate Vulnerability, Teknaf Upazila, Bangladesh** – Md Toriqul Islam, NGO Forum for Public Health
14. **Integrating container cleaning practices into a Zambian Community Health Club program** – Tracy Zhang, Lehigh University
15. **Rain, Soil, and Infrastructure: Unraveling the Key Drivers of Groundwater Contamination in Coastal Georgia** – Victor Obi, Institute for Water and Health, Georgia Southern University
16. **Drinking water quality in the schools of the Gambia and health implications for school children** – Lamin Fadera, Atlantic University
17. **Localizing vulnerability assessments: A stakeholder-driven approach to identify the most vulnerable households in Northern Haiti** – Maya Lubeck-Schricker, SOIL

It is with deep sadness and sorrow that we share the passing of **Catarina de Albuquerque**, CEO of *Sanitation and Water for All*, on October 7, 2025.

On October 7, 2025 we lost a very special person from our community.

Caterina gave voice to the millions of people without access to safe drinking water and sanitation. While she did not stand alone, she was critical to our collective efforts to establish the human right to water and sanitation and provide safe, affordable, and accessible drinking water and sanitation services to all. And when that was done, she worked tirelessly to put in place the support that governments and communities would need to provide these essential services. We will miss her brilliance, charm, and – perhaps most of all – her dogged determination to ensure that no one was left behind.

To Catarina and all the other champions that we lost this year: Thank you for inspiring us all.





Detailed schedule: Friday, October 31

7:30 – 8:30 AM – REGISTRATION & BREAKFAST	
8:30 – 10:00 AM – WORKING GROUP MEETINGS & WORKSHOPS	
DOGWOOD	Current and future directions in <i>Naegleria fowleri</i> research – UNC Water Institute and Amazing Aven’s Quest for Amoeba Awareness
REDBUD	Working Group Session: 3rd annual session: International Working Group on Toxic Metals – Water Institute at UNC, IAPMO, RTI, Aquaya, Rutgers University
BOARD ROOM	Community of Women in Water (CWIW) Networking Event – Business Connect
9:30 – 10:00 AM – 30 MINUTE NETWORKING BREAK	
10:30 AM – 12:00 PM – WORKING GROUP MEETINGS & WORKSHOPS	
DOGWOOD	Current and future directions in <i>Naegleria fowleri</i> research – UNC Water Institute and Amazing Aven’s Quest for Amoeba Awareness
REDBUD	Working Group Session: 3rd annual session: International Working Group on Toxic Metals – Water Institute at UNC, IAPMO, RTI, Aquaya, Rutgers University
BOARD ROOM	Community of Women in Water (CWIW) Networking Event – Business Connect
10:00 AM – 12: 00 PM – FALLS LAKE FIELD TRIP	
10:30 AM -12:00 PM – OWASA FIELD TRIPS	
12:00 – 1:30 PM – LUNCH	
TRILLIUM DINING RM	Lunch for all participants is served. Please ensure that you are wearing your lanyard when checking in for lunch.

FRIDAY FIELD TRIPS



Interested in a Friday Field Trip?

THE WATER INSTITUTE AT UNC OFFERS FIELD TRIPS TO THREE LOCATIONS:

- *OWASA Jones Ferry Water Treatment Plant* (top photo)
- *OWASA Mason Farm Wastewater Treatment Plant* (middle photo)
- *Falls Lake Dam* (bottom photo)

Those who registered and paid for the field trips when they registered for the Conference will receive first priority to these field trips. If you registered for a field trip, but do not plan on attending, please visit the Reservation table to cancel your reservation and receive a \$10 refund.

Other Conference attendees can sign up for the field trip Waitlists by visiting the Information Board. If any attendees cancel their field trip reservations, those on the Waitlist will receive an email asking to confirm field trip attendance and to visit the Reservation table to pay for their respective field trip.

LOCATIONS

- Falls Lake Dam: 10:00a
- OWASA treatment plants: 10:30a

Buses will depart from the entrance of the Friday Center.

A Global Pledge to Protect Drinking Water from Lead

Nothing is more fundamental to human health and well-being than access to safe drinking water. In 2016, world leaders adopted the Sustainable Development Goals (SDGs) including SDG 6 — a universal call to action to provide access to safe and affordable drinking water to every person, everywhere, by 2030. As part of our global commitment to provide water that is free from microbial hazards and priority chemical contaminants that impact human health, we launch this global initiative to work towards lead-free drinking water by 2040.

Lead is an invisible, odorless and tasteless chemical contaminant present in water supply systems worldwide. The primary source of lead in many systems is lead-containing pipes and parts that leach lead into the water.

No safe level of lead exposure has been identified. Lead is a toxin that irreversibly impacts neurological and cognitive development. Acute or chronic childhood exposure to lead causes lifelong harm. Exposure of pregnant women to high levels of lead can cause fetal deaths and developmental abnormalities. Yet today environmental exposures to lead remains a significant global challenge. Globally, 800 million, or roughly 1 in 3, children have elevated levels of lead in their blood.

There is an urgent need to reduce human exposure to lead in the environment, including to lead in drinking water – a source of exposure that is wholly preventable. Children, in particular, must be able to grow in a lead-free environment. The Global Pledge to Protect Drinking Water from Lead aims to build momentum around local and global initiatives to progressively reduce lead exposure from drinking water and protect public health. Our goal is to work collectively towards preventing lead-leaching from new drinking water systems by 2030 and to make all drinking water lead free by 2040.



The Lead Pledge

We, the Participants in the Global Pledge to Protect Drinking Water from Lead:

Remain committed to achieving SDG 6 and providing safely managed drinking water services to everyone, everywhere.

Recognize that environmental exposures to lead threaten the healthy development of children worldwide, and that controlling these exposures is essential to achieving safely managed water services.

Acknowledge that all unsafe lead-leaching materials in water supply systems are a major factor in childhood exposures to lead through drinking water.

Further recognize that while additional work can enhance our understanding of the sources and health impacts of lead in water, the evidence around lead exposure from lead-leaching materials in water systems is clear and that these risks can be wholly prevented through dedicated action.

Agree to work collectively to protect drinking water from lead through the following actions:

- We will ensure that all new water systems are constructed with products and materials that meet international standards for lead-leaching, material safety, and performance.¹
- For existing water systems that may contain lead-leaching materials, we will develop and implement plans for periodic water lead monitoring and data sharing, including the communication of monitoring results.
- We will investigate water systems reporting lead levels at 10 ppb (the WHO guideline value) or above to identify contamination sources and implement necessary interim or long-term remedial measures to reduce human exposure.
- Support communities to reduce or eliminate exposure to lead through education and action such as designating safe taps for drinking and cooking.

To implement these commitments, we will:

- Support the adoption of national policies and regulations based on international standards and testing/certification requirements for products and materials used in drinking water systems that address lead-leaching, material safety, and performance.¹

GlobalLeadFreeWater.org

Updated March 15, 2023

- Support manufacturing of products and materials used in drinking water systems that meet international standards or national requirements for lead-leaching, material safety, and performance.
- Support affordable access to fittings, fixtures and filters that meet international standards for lead in drinking water.
- Support the development of low-cost technologies to enable widespread testing for lead in drinking water and materials to better understand the sources, impacts, and mitigation/remediation of lead contamination in drinking water.
- Support the training and certification of professionals to oversee the design and construction of safe drinking water systems.
- Support and develop national and local laboratory and monitoring capacity to assess and monitor lead in drinking water and materials to support implementation of these commitments.
- Support high-quality research to better understand and identify sources, impacts, and effective prevention and remediation methods and approaches to minimize harm from lead in drinking water.

We welcome and encourage the announcement of parallel actions taken by the private sector, manufacturers, suppliers, development banks, financial institutions and philanthropy to support global efforts to provide drinking water that is lead-free.¹

We resolve to review progress towards our goals to prevent lead exposure from new drinking water systems by 2030 and to make all drinking water lead free by 2040 through national reporting processes and Voluntary National Reviews at the United Nations High-Level Political Forum.

Finally, we call on other states and organizations to join the Global Pledge to Protect Drinking Water from Lead.

Founding Partners

Government and Intergovernmental Organizations



Non-Governmental Organizations



Become a Partner:



See EPA's revised Lead & Copper Rule:



¹International standards, national technical regulations, and guidelines as well as other resources for reducing lead exposure can be found at: "Lead in drinking-water: Health risks, monitoring and corrective action" (WHO) and at globalleadfreewater.org. Examples include NSF/ANSI (e.g., NSF ANSI 372 (Lead Content), NSF/ANSI 61 (Lead Leaching Performance)). ² Within the context of the World Health Organization's work on water quality and safety, the WHO is committed to supporting Member States in achieving the commitments in this pledge.

2025 UNC Water and Health Conference Collection in PLOS

We are pleased to announce that PLOS and The Water Institute at UNC are again partnering to publish a special collection of articles in *PLOS Water* and *PLOS Sustainability and Transformation* from the 2025 UNC Water and Health Conference.

The collection will feature original research, review, and commentary-style narrative papers from the work being presented at the conference, across the breadth of WaSH research, to highlight challenges, share insights, and develop solutions for a more water-secure world.



Please view the webpage for more details and information on submission.

<https://latitude.plos.org/2025/09/plos-unc-water-and-health-2025-special-collection-partnership>

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Plenary Advisory Committee



Dr. Joe Brown, *Interim Director of The Water Institute at UNC; Professor, Department of Environmental Sciences and Engineering, UNC Chapel Hill*

Joe Brown PhD PE is an environmental engineer and researcher primarily interested in helping expand access to safe water and effective sanitation. During his 20-year research career, he has built longstanding collaborations with US and international partners to advance critical research on new technologies and approaches to providing safe drinking water, cost-effective sanitation, and improved environmental health for all. During his years of working in Cambodia, Bolivia, Mozambique, his native Alabama, and in many other countries, he has led the development and evaluation of sustainable water treatment methods, novel approaches to water and sanitation infrastructure, scalable methods for water quality testing, and health impact trials of water and sanitation improvements to support the investment case for public infrastructure.

Joe is currently Professor of Environmental Sciences and Engineering in the Gillings School of Global Public Health at the University of North Carolina – Chapel Hill, where he also serves as Director of Engineering Programs and Interim Director of the Water Institute. He is passionate about educating and training students at the intersection of engineering and global public health, where interdisciplinary innovation and translational research are critically needed to improve lives.



Kaida Liang, *Director of Programs, The Water Institute at UNC and Water & Health Conference*

Kaida Liang is a seasoned WaSH professional with over 20 years of global experience in over 40 countries. She started as a CIDA intern in the Amazon and later joined disaster relief efforts in Central America, Asia, Middle East regions Post-MPH from UNC, she led research on water treatment and health impacts. She served as Program Manager at WaterSHED and is currently overseeing Programs for the WI focused on field research, water quality analysis, monitoring, evaluation and learning, training and capacity building.

Post UNC, she led RCTs and health impact studies and served as the Program Manager for WaterSHED. Upon returning to Chapel Hill from Southeast Asia, she led the largest comprehensive global WaSH Evaluation across 14 countries, and currently leads the global elimination of lead in drinking water initiative. Kaida has directed the annual UNC Water and Health Conference since 2018 and continues to focus on evidence-based WaSH programs, scaling solutions and acts as a conduit between science, policy and practice.



Clarissa Brocklehurst, *Plenary Advisory Committee Chair; Affiliated Faculty Member, The Water Institute at UNC*

Clarissa Brocklehurst is an affiliated faculty member of the Water Institute at UNC. Clarissa started her career working on the water and sanitation needs of indigenous communities in Canada and the US. She managed water and sanitation projects in Togo and Sri Lanka before becoming the Country Representative for WaterAid in Bangladesh, and a Regional Urban Specialist for the World Bank Water and Sanitation Program (WSP) in South Asia. Between 2007 and 2011 she was the Chief of UNICEF's Water, Sanitation and Hygiene Section, overseeing UNICEF's water and sanitation programming in 100 countries and playing a role in development of strategy and advocacy for the global water supply and sanitation sector. Clarissa is a member of the Supervisory Board of IRC and the Strategic Advisory Group of the WHO-UNICEF Joint Monitoring Program that tracks global progress on water and sanitation.



Dr. Barbara Evans, *Chairman, Public Health Engineering in the School of Civil Engineering at the University of Leeds*

A chartered engineer with a second degree in Development Economics, Professor Barbara Evans holds the chair in Public Health Engineering in the School of Civil Engineering at the University of Leeds. She works on sanitation, and water services with a particular focus on urban sanitation in cities and towns. Prior to becoming an academic, she worked for over 20 years both as a consulting engineer and at the World Bank with several periods of secondment to government. Since 2009 Professor Evans has led a multi-disciplinary team at Leeds working on global development and public health. Recent work has focused on climate resilience and developing stronger empirics and models for estimating greenhouse gas emissions from sanitation. Professor Evans also leads the CACTUS project which is aiming to establish a global standard for cost accounting in the sanitation sector.



Yankho Mataya, *Country Director, WaterAid Zambia*

Yankho Mataya is a seasoned leader in global health and development with over a decade of experience advancing water, sanitation, and hygiene (WaSH) initiatives across Africa. She currently serves as Country Director for WaterAid Zambia, where she drives strategic planning, program delivery, and partnerships while contributing to regional and global leadership. Previously, Yankho held senior roles at WaterAid’s Southern Africa Regional Office and Plan International, strengthening funding pipelines, compliance, and multi-country program strategies. Yankho holds an MSc in Global Health from Maastricht University and a BSc in Environmental Health from Solusi University.



Dr. Darren Saywell, *Chief Business Officer, Millennium Water Alliance*

Dr. Darren Saywell is a seasoned social scientist and a leading expert in sanitation service provision with over 30 years of experience in international development. As the Chief Business Officer at the Millennium Water Alliance (MWA), he oversees program implementation, learning, business development, and knowledge management for the Alliance. In his prior career roles in the for-profit, not for profit, UN, and industry, he has provided senior technical advisory inputs, mentoring project teams in crucial areas such as on-site and systems-level water security provision, fecal sludge management, utility reform, behavior change, and institutional development. Throughout his career, Dr. Saywell has managed or advised on more than 20 donor-funded water security contracts and agreements across ten countries, leading teams of up to 75 staff and managing projects valued at up to \$89 million. He holds a Ph.D. in Sanitary Engineering from Loughborough University and a B.A. (Hons) in Geography from Oxford University.



Bruce Gordon, *Unit Head, Water, Sanitation, Hygiene and Health, WHO; Vice Chair, UN-Water*

Mr. Bruce Gordon is the Unit Head of Water, Sanitation, Hygiene (WaSH) and Health at the World Health Organization and the Vice Chair of UN-Water. He oversees a portfolio of work that broadly falls under two pillars: the development of global guidelines on drinking-water, sanitation, and hand hygiene; and WHO’s global monitoring of the WaSH systems through the UN-Water GLAAS, together with monitoring of access to WaSH through the WHO/UNICEF JMP, and WaSH-related burden of disease. Current priority interests include strengthening WaSH in health care facilities and in health programmes, such as maternal health, infection prevention and control, antimicrobial resistance, neglected tropical diseases and quality of care. Within UN-Water, he is focused on working with advancing the Collaborative Implementation Plan of the UN System-wide Strategy for Water and Sanitation. Prior to joining the WaSH unit at WHO in 2004, he contributed to the Organization’s work on sustainable development with a focus on children’s health and environment. He has an academic background in biochemistry and environmental management. Bruce is married, has three daughters and is an avid climber who enjoys being outside in nature.



Dr. Oliver Cumming, *Director, Environmental Health Group, London School of Hygiene & Tropical Medicine*

Dr Oliver Cumming is the Director of the Environmental Health Group at the London School of Hygiene & Tropical Medicine – an inter-disciplinary group of researchers focused on the public health aspects of water, sanitation and hygiene. His current research includes epidemiological studies to assess the impact of environmental health interventions on childhood enteric infection, undernutrition, and oral vaccine failure in different regions of the world. He has published extensively, has advised various governments and international agencies on related policy and currently serves as co-Chair for the Lancet Commission on WaSH and Health.



Jan Willem Rosenboom, *Senior Water, Sanitation and Hygiene Consultant*

Jan Willem Rosenboom is a WaSH specialist with over thirty years of experience working with a variety of international organizations. Recently, Jan Willem left the Bill & Melinda Gates foundation where he worked for 13 years shaping the foundation’s work on rural sanitation delivery and Citywide Inclusive Sanitation. Jan Willem started his career in Kenya, working with local women’s groups on improving drinking water and sanitation in rural communities. Later he managed projects with WaterAid in Sierra Leone, Oxfam in Cambodia and UNICEF in Bangladesh. Before joining the Gates foundation, he worked with the World Bank in Cambodia for seven years, establishing the Water and Sanitation Program (WSP) office in Phnom Penh. Jan Willem serves on the board of a number of organizations and works in a consulting capacity with several sector agencies.



Joel Kolker, *Senior Advisor*

Joel Kolker is the Global Lead for Water and Finance. Prior to this role, he was the Program Manager of the Global Water Security and Sanitation Partnership (GWSP) and brings over 35 years of experience in dealing with a host of issues related to infrastructure finance, including water. He has lived, worked, and led projects in over 30 countries (primarily in Africa and Asia). As the Global Lead for Water and Finance, Joel leads the World Bank Water Practice’s global effort to blend donor and concessional finance with domestic commercial finance to support water and sanitation infrastructure investments. Before joining the Water Practice, he worked with the World Bank Institute and the Public Private Infrastructure Advisory Facility. He holds Master’s degrees from the University of Pennsylvania in the USA.

Congratulations to the Top 20 Abstracts!

The presentations below are the **Top 20 ranked abstracts** submitted to the 2025 Water and Health Conference, based on the double-blind peer review process we used to score the submissions:

#1 “Better Knowledge, Better Facilities, Same Behavior: Findings from a Cluster-Randomized Trial of WaSH-in-Schools Interventions” – Gracie Hornsby, Stanford University

#2 “Associations between animal exposure and child health outcomes in rural Bangladeshi households”

– Sumaiya Tazin, NC State University

#3 “Effects of Extreme Weather Events on Cholera in the Democratic Republic of the Congo 2020-2024 (WaSHmobile Program)” – Kelly Endres, Johns Hopkins University

#4 “Wastewater surveillance reveals patterns of antibiotic resistance across the United States” – Sooyeol Kim, University of California Berkeley

#5 “Use of benefit-cost analysis in multilateral development bank water supply and sanitation projects: A critical review of practice across three banks” - Omran Musa, London School of Hygiene & Tropical Medicine

#6 “Automated Classification of Sewage Infrastructure Vulnerabilities in Urban Salvador, Brazil” – Christine Stauber, Georgia State University

#7 “Long-Term Evaluation of a Backyard Poultry Management and Hygiene Intervention in Rural Bangladesh” – Elizabeth Thomas, Johns Hopkins University

#8 “Household Energy and Water Resource Disruptions and Coping Strategies During Floods and Droughts in Kenya” – Hemali Oza, Emory University

#9 *“Willingness-to-pay and demand for sanitation products in rural northern Ghana: Impacts of seasonality and methodology”* - Valeria Bauza, The Aquaya Institute

#10 “Household-Level Environmental Risk Factors for Animal and Human Fecal Contamination in Northwestern Coastal Ecuador” - Viviana Alban, University of Washington

#11 “Evaluating a Scalable, Community-Centered Subscription Model for Point-of-Use Water Treatment in Texas Colonias” – Marcio Botto, Vida Water

#12 “Seasonal impact on water infrastructure: Availability, quality and source selection in Ethiopia, Ghana and Uganda” – Anna Murray, The Aquaya Institute

#13 “Targeted pathogen and AMR analyses reveal microbial hazards in a maternal and child hospital in urban La Paz, Bolivia” – Lindsay Saber, UNC Chapel Hill

#14 “Sustainable Solutions to Ensure Piped System Water Quality: Lessons from Inline Chlorination System in Ethiopia” - Mussie Tezazu Asmare, Millenium Water Alliance

#15 *“Breaking the hog lagoon cycle: Biochar as an effective and low-cost intervention for per- and polyfluoroalkyl substances (PFAS), antibiotics, and antimicrobial resistant genes (AMR) pollution”* – Ellen Marie, UNC Chapel Hill

#16 “Validation and applications of an *E. coli* contamination risk sensor in US surface waters”
– Joshua Klaus, University of Colorado Boulder

#17 *“Primary prevention of lead in drinking water through substitution of lead-free plumbing components – preliminary results” – Michael Fisher, The Water Institute at UNC*

#18 *“Predictors of Latrine Subsidy Uptake: Gender, Poverty, and Household Dynamics in Rural Ethiopia”* – Crystal Huang, IDinsight

#19 “Evaluating WaSH Indicators in Schools in Low- and Middle- Income Countries: A Systematic Review” – Tsion Syoum, University of Oxford

#20 “Association Between Household WaSH Facilities and Menstrual Hygiene Management Among Filipino Women of Reproductive Age” - Crystal Amiel Estrada, College of Public Health, University of the Philippines Manila

Congratulations to the Travel Scholarship Award Winners !

- | | | |
|--|---|--|
| ▪ Rossanie Malolo , Malawi | ▪ Nazmun Naher , Bangladesh | ▪ Crystal Amiel Estrada , Philippines |
| ▪ MD Toriqul Islam , Bangladesh | ▪ Hajra Mukasa Comfort , Uganda | ▪ Romeo Quizon , Philippines |
| ▪ Daniel Sarpong , Ghana | ▪ Noor Kutubul Alam Siddiquee , Bangladesh | ▪ Resham Jung Singh , Nepal |
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The **Osprey Foundation** strives to empower individuals and communities through education, health, economic opportunity and human rights in a sustainable way. Osprey's water, sanitation and hygiene (WaSH) program has four main elements: 1) Supporting systems change that provides sustainable access to WaSH services at scale; 2) Seeding innovative and scalable models for delivering WaSH services to the poor; 3) Catalyzing innovative and scalable financing; and 4) Advocating for change within the sector through collaboration and a focus on leveraged impact. Osprey supports select WaSH initiatives, NGOs and social ventures with grants, impact investments and expert advice on strategy, funding and operations. Its WaSH program is focused in sub-Saharan Africa and Latin America.



The **Conrad N. Hilton Foundation Safe Water Initiative** focuses on supporting communities, governments, and non-government actors with system-strengthening and sustainable service delivery to achieve safe drinking water in rural communities in Ethiopia, Ghana, and Uganda. By sustaining infrastructure and building local capacity in operation and maintenance, our partners' activities enhance the health and socioeconomic benefits of communities. We invest in reliable, sustainable, and affordable water services, with a focus on hard-to-reach communities. Through long-term investments and flexible financing mechanisms, our partners are implementing sustainable safe water service delivery models in remote communities. Our work aims to narrow gaps between those living in disadvantage and others, creating a locally driven, replicable model that catalyzes equitable access to safe and affordable drinking water.

For more information, visit hiltonfoundation.org/work/our-initiatives/safe-water

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Aqua Research provides reliable, economical chlorination solutions for safe drinking water in low- to middle-income countries. Their technologies, from handheld to commercial-scale systems, include GPS and communications for data collection.

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Freshwater Project International delivers sustainable WaSH solutions in Malawi through partnerships with communities, schools, and health centers. Their work includes solar-powered water systems, gender-friendly toilets, and hygiene education. With a district-wide model proven in Zomba, they also offer technical services like water source development, system design, and maintenance training.

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Thank you

On behalf of Kaida, Joe, and the entire Water Institute team, we would like to extend our deepest thanks to those who made the Conference possible!

- Our Sponsors : AquaResearch, Business Connect, Freshwater, Hilton Foundation, IAPMO, Lixil, Osprey Foundation, Qiagen, RTI, Snow Hill Water (Silivhere).
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- Lunch session leaders: John Sparks (MWA), Christopher Lindsay (IAPMO), Zachary Burt, Nikki Behnke, Lisa Schetman, Katherine McElhinny (Former USAID), Josh Newton (Josh's Water Jobs)
- Island Innovation – Christian Zacchino, Jerome Deiparine, James Ellsmoor
- AdrialDesigns.com – Adrial Dale
- The Friday Center Staff led by Austin Gold, Jess Black, Toney Gaines, Bart Smith, and Andy Wells, and including: Paul Gibilisco, Jené Ward, Amelia Davis, Jazmine Reaves, Morgan Harris, Nick Guarna, Matthew Duncan, Robbie Gray, Drew Yarborough, Moe Oo, Elizabeth Rodan, Julio Alba, Luis Martinez, as well as the amazing catering and housekeeping teams!
- Abstract Reviewers
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- WaterAid for the Sanitation Workers Award – Prerana Somani and Andres Hueso
- AlphaGraphics Downtown Raleigh
- OWASA – Water and Wastewater Treatment Facilities and David Schwartz, US Army Corps of Engineers – Falls Lake
- The Department of Environmental Sciences and Engineering staff, students and faculty, the UNC Gillings School of Global Public Health Team – Tiffany Farina, Robert Smith III, Ryan McGuirt, Doris Dworschak, Dr. Rebecca Fry, and Dean Nancy Messonnier
- Water Institute Staff, Faculty, Students, and Volunteers – Mary Frances Wilhelm, Surafele Sintayehu, Julie Myers, Catherine Rierson, Timothy Purvis, Ryan Cronk, Darcy Anderson, Mike Fisher, Sarah Lebu, Herbert Kabogozza, Olivia Harmon

And last but not least, ALL OF YOU who came from near and far or joined us online. Our best wishes for safe and healthy travels and we look forward to seeing you for the 2026 Conference!

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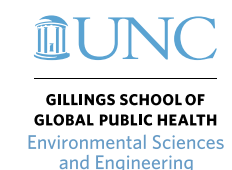
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... and we'll see you October 26-30 for our 2026 Conference!

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The Water Institute at UNC is part of the Department of Environmental Engineering (ESE) in the Gillings School of Global Public Health at UNC. Founded in 1920, ESE is the nation's first engineering department in a school of public health. It has a long history of training engineers and scientists at the intersection of water and health, with over 2000 active alumni around the globe. Find out more about ESE's research, degree program, and impact at sph.unc.edu/envr