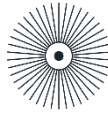




GLOBAL WATER  
ALLIANCE



Science History Institute  
*Telling the stories behind the science*

## Global Water Alliance 16<sup>th</sup> Annual Conference

### Advancing WaSH Goals in a Changing World Through Innovation and Resilience

*The challenges of climate change and resource shortages require innovative approaches to advance resiliency and mitigation in [WaSH](#) (water, sanitation, and hygiene).*

October 19, 2023

Science History Institute, Philadelphia

**Description:** This 1-day conference will address the urgent need for new technologies and new data analytics in water management throughout the world in order to adapt to the future realities of more extreme weather patterns and events, sea-level rising, glacier melting and drought. Innovative thinking is needed. Successful implementation of new and modern (water) management tools will be highlighted; innovative approaches for community involvement and commercial buy-in will be debated; and practical solutions as brokered by governing bodies, market suppliers, and adjusted legal frameworks will be highlighted. All stakeholder groups will be represented.

Conference participants will be actively involved in the discussions and are encouraged to network and interact with those whose work will be on display. Continuing education credits can be earned. Proceedings from the conference will be made available to all participants.

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### TENTATIVE PROGRAM AGENDA (as of September 8, 2023)

#### All Day:

- Selected student research e-posters
- Display of recently developed technology for WaSH, original and/or adapted
- Short interviews by WaSH students/activists
- Mini-job market for corporations, agencies, NGOs, academia

#### Conference Proceedings:

8:00 AM Registration & Breakfast

8:25 AM Call to order: **Melissa Stevens, PhD**, GWA Conference Manager

8:30 AM Welcome: A Word on Science Innovation: Building on a history of discoveries and exploration to planned research and institutionalization of collaboration. EG the Human Genome Project.

**David A. Cole, PhD**, President and CEO, Science History Institute

An invitation to collaborate interdisciplinary and interagency, to disseminate WaSH insights throughout the global landscape of communities.

**Christiaan Morssink, MPH, PhD**, President, Global Water Alliance

8:55 AM Shaping community science for wetland restoration and resilience: Lessons from East Kolkata Wetlands.

**Dhruba Das Gupta**, Indian Institute of Engineering Science and Technology, Shibpur

9:15 AM Panel discussion: On water literacy and data translation: Synthesizing scientific and local knowledges for community-based WaSH solutions.

Moderator: **Faith Sternlieb, PhD**, Associate Director of Engagement, Internet of Water Initiative, Center for Geospatial Solutions, Lincoln Institute of Land Policy

- **Jaime Cardenas Sanchez**, PhD candidate, Wake Forest University: On the need for socio-economic feasibility of practical innovations that can reach and empower the farmer and the woman.
- **Kim Nelson, MPA**, Chief Operating Officer, True Elements: A New Era in Water Intelligence Driving Collective Action.
- **Scott H. Ensign, PhD**, Assistant Director, Vice President and Research Scientist, Stroud Water Research Center: Topic to be confirmed (on water literacy, translating data, and community education)

10:30 AM MORNING BREAK – SHI Museum Collection Encounters

10:50 AM Panel Discussion: Managed Aquifer Recharge Applications.

Moderator: **Vince Uhl, PH, PG**, President, UHL & Associates, Inc.

Managed Aquifer Recharge – Resiliency Applications. With a focus on Structural and Non-Structural Methods (nature-based solutions). Spreading basins; ASR/Injection boreholes; Land use solutions/improvements, reforestation, deep tillage, terraced fields; Stream channel erosion repairs and flood plain restoration; Reforestation.

- **Faith Sternlieb, PhD**, Associate Director of Engagement, Internet of Water Initiative, Center for Geospatial Solutions, Lincoln Institute of Land Policy: Topic to be confirmed.
- **Ashish Daw, PG**, Senior Hydrogeologist, UHL & Associates, Inc.: Structural and nature-based solutions to enhance groundwater/aquifer recharge.
- **Casey Clapsaddle**, Senior Hydrologist, Princeton Hydro LLC: Stream channel erosion repairs, and flood plain restoration – Case Studies.

- 11:45 AM How can Big Data [and AI?] help with the attainment of SDG 6?  
**Dr. Clive Lipchin**, Director, Center for Transboundary Water Management, Arava Institute: On the need for “good and reliable” data to do water management well in the circulars of economy, seasons, and water.
- 12:00 PM Lunch and Keynote address: The Power of Possibility: Building a Clean Water Movement.  
**Marc Yaggi**, Executive Director, Waterkeeper Alliance
- 1:15 PM SHI-focused session or activity
- 1:50 PM Break Out Sessions:
- A. Innovations in sanitation and hygiene through a gendered lens: From technology to community education. Lead: **Jaime Cardenas Sanchez**, PhD candidate, Wake Forest University
  - B. “It ain’t all about technology and data” – Social, cultural, and economic considerations in achieving SDG #6. Lead: **Christiaan Morssink, MPH, PhD**, President, Global Water Alliance
  - C. Resiliency across the SDGs: Understanding the interconnectedness and multiplying effectiveness. Lead: **Saheed Yinusa**, WaSH Consultant, Universum Business Technology Consulting Limited
  - D. Virtual Attendees Breakout Session: topic TBD, to be held over Zoom
- 2:40 PM Break-Out Sessions Wrap Up
- 3:10 PM AFTERNOON BREAK – SHI Museum Collection Encounters
- 3:35 PM The voice of youth: An interactive, student dominated discussion on perspectives on WaSH and SDG generated innovations (what can future generations do now?)  
Moderator: **Angelita Fasnacht, PhD, MPH, PE**, Gerhard R. Andlinger Visiting Fellow, Andlinger Center for Energy and the Environment, Princeton University
- **Okezue Bell**, UN Association Youth Ambassador: On COP29, targeted programming around building agency and resiliency locally
  - **Imhotep High School Team**: Transferring new technologies and applying service-learning principles for building local capacities and resiliency. The case of filtration.
  - **Julia Stengel**, Public Health Beyond Borders Dominican Republic Project, Temple University: Studying abroad: networking and capacity building through a focus on human rights and dignity, the case of hygiene.
- 4:35PM “Bringing the message to Bali”: Invitational Address by **Loïc Fauchon**, President of the World Water Council
- 4:45 PM Closing remarks by **Debbie Heuckeroth, PE, ENV SP**, President-Elect, Global Water Alliance
- 5:00 PM Reception at SHI and Presentation of the Arun Deb Award

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