Connections and Flows: Water, Energy and Digital Technology in the Global South
June 8-22, 2013

Co-Conveners
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Week 1
Saturday June 8
All Day
Participant arrival at the Watson Institute, 111 Thayer Street, Providence, Rhode Island 02912

Sunday June 9
7:30-9:30 am
Breakfast
11:00-2:30 pm
Lunch
4:00-6:00 pm
Campus Tours (leaving from the Watson)
6:00 pm
Welcome Barbeque at Pembroke Field

Monday June 10 – Connections and Flows: Introduction to the Engineering BIARI
7:30-8:45 am
Breakfast
9:00-10:00 am
“Welcome to Connections and Flows” Mark S. Schlissel, MD, PhD, Provost, Brown University
10:00-10:15 am
Break
10:15-11:45 am
“Engineering as Design,” Elizabeth Dean Hermann, PhD, Professor, Department of Design and Social Justice, Division of Architecture and Design, Rhode Island School of Design
11:45-12:25 pm
Convener Introductions
12:25-12:50 pm
Participant Introductions Part I
12:50-2:00 pm
Lunch
2:00-3:15 pm
Participant Introductions Part II
3:30-3:45 pm  Break
3:45-5:15 pm  Studio Session 1
5:30 pm  Welcome Reception at Starr Plaza

Tuesday June 11 – Water and Energy as Social Facts
7:30-8:45 am  Breakfast
9:00-10:30 am  “Actionable Water Knowledge for Engineering,” Shafiqul Islam, ScD, Professor, Department of Civil and Environmental Engineering, and Professor, Water Diplomacy, Fletcher School of Law and Diplomacy, Tufts University
10:30-10:45 am  Break
10:45-12:15 pm  “Building a Research Project: A Conversation with Brown’s VP of Research,” Clyde Briant, PhD, Vice President of Research, Professor, School of Engineering, Brown University
12:30-2:00 pm  Lunch
2:00-3:15 pm  Studio Session 2
3:30-3:45 pm  Break
3:45-5:00 pm  Studio Session 3

Wednesday June 12 – Making Sure: Water, Energy, and Control
7:30-8:45 am  Breakfast
9:00-10:30 am  “A Framework for Classifying Innovation for Development,” Garrick E. Louis, PhD, Associate Professor, Department of Systems and Information Engineering, University of Virginia
10:30-10:45 am  Break
10:45-12:15 pm  “Technological and Humanistic Perspectives on Energy in Africa,” Clapperton Mavhunga, PhD, Assistant Professor, Program in Science, Technology, and Society, Massachusetts Institute of Technology
12:30-2:00 pm  Lunch
2:00-3:15 pm  SS 4
3:30-3:45 pm  Break
3:45-5:00 pm  SS 5

Thursday June 13 – Carried Away: Storm Water and Waste Water
7:30-8:45 am  Breakfast
9:00-10:30 am  “Storm-Driven Pollution in the Narragansett,” Jonathan Stone, CFA, Executive Director, Save the Bay, Inc.
10:30-10:45 am  Break
10:45-12:15 pm  Study Tour: Field’s Point Wastewater Treatment Facility, Thomas Uva, Director of Planning Policy, and Regulation, Narragansett Bay Commission
12:30-2:00 pm  Lunch
2:00-3:15 pm  SS 6
3:30-3:45 pm  Break
3:45-5:00 pm  SS 7
5:30 pm  Keynote Address, Christina Paxson, PhD, President, Brown University
Note: Sessions in the morning will occur off campus at the Save the Bay Center and Field’s Point Facility. Lunch will be served on the Rhode Island School of Design Campus

Friday June 14 – Fuel Mix: Fossil Fuels and Renewable Energy
7:30-8:45 am Breakfast
9:00-10:30 am “Engineering and the Energy Mix,” Nelson Narciso Filho, Director, National Agency of Petroleum, Natural Gas and Biofuels, Brazil
10:30-10:45 am Break
10:45-12:15 pm “The Future of Bio-Energy” Andrew Peterson, PhD, Assistant Professor, School Engineering, Brown University
12:30-2:00 pm Lunch
2:00-3:15 pm SS 8
3:30-3:45 pm SS 9
Evening Social Event

Saturday, Sunday June 15-16 – Open Weekend, See BIARI programming for local activities

Week 2
Monday June 17 – Tomorrow’s Engineers: Engineering Education in the Global South
8:00-8:45 am Breakfast
9:00-10:30 am “Engineering in the Ivy League,” Lawrence E. Larson, PhD, Dean, School of Engineering, Brown University
10:30-10:45 am Break
10:45-12:15 pm “Educating Engineers in Sub-Saharan Africa,” Stephen G. Agong, PhD, Principal, Bondo College
12:30-2:00 pm Lunch
2:00-3:15 pm “Studio South Zero: Looking at Urban Ecological Aesthetics,” Torkwase Dyson, Artist, Studio South Zero
3:30-3:45 pm Break
3:45-5:15 pm SS 10

Tuesday June 18 – Technologies of Hubris: Ethical, Legal, and Social Implications
7:30-8:45 am Breakfast
9:00-10:30 am Study Tour: “Ships of Bondage,” Carriage House Gallery, Center for Public Humanities, Brown University
10:30-10:45 am Break
10:45-12:15 pm “Tradition and Morality in the Nano-Age,” Rosalyn Berne, PhD, Associate Professor, Department of Science, Technology and Society, University of Virginia
12:30-2:00 pm Lunch: “Ethics of Defending the Environment,” Steve Hamburg, PhD, Chief Scientist, Environmental Defense Fund
2:00-3:15 pm SS 11
3:30-3:45 pm Break
3:45-5:00 pm SS 12

Wednesday June 19 – Critical Geographies: Digital Techniques & Ground-Truthing
Thursday June 20 – Future Water, Future Energy

7:30-8:45 am  Breakfast
9:00-10:30 am  “Engineering Sustainable Solutions to Disparate Water Needs,” Kellogg Schwab, PhD, Director, Global Water Program, Professor, Department of Environmental Health Sciences, Johns Hopkins University

10:30-10:45 am  Break
10:45-12:15 pm  “Anthropogenic Land-use Shifts and the Future Water Cycle,” Chris Neill, PhD, Associate Professor, Department of Ecology and Evolutionary Biology, Brown University

12:30-2:00 pm  Lunch
2:00-3:30 pm  SS 16
3:45-5:00 pm  Clambake (all evening)

Friday June 21 – Doing it Digitally: Engineering Sustainable Futures

7:30-8:45 am  Breakfast
9:00-10:30 am  “Creating Solutions through Crowdsourcing,” Angela Oduor, Developer, Ushahidi Inc.

10:30-10:45 am  Break
10:45-12:15 pm  TBD
12:30-2:00 pm  Lunch
2:30-3:15 pm  Farewell Address and Diplomas

Saturday June 22 - Departure

Locations

Morning – All sessions beginning before lunch will be held in the McKinney Conference Room in the Watson Institute for International Studies.
**Afternoon** – All session beginning after lunch will be held in the Patrick Ma Digital Scholarship Lab on the 1st floor of Brown University’s John D. Rockefeller, Jr. Library.

*Note:* On several days, sessions will be held in different locations. These exceptions are marked directly in the program.

**Meals**

**Breakfast** will be held in the Verney-Wooley dining hall everyday.

**Lunch** will be held in the Faculty Club Monday-Friday and in the Verney-Wooley dining hall on the weekends.

**Dinner** will be at a selection of local restaurants and the Verney-Wooley dining hall. Please refer to your Dine Around Booklet for more information.