

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

#### **Co-Conveners**

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#### Coordinator

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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 pmCampus Tours (leaving from the Watson)6:00 pmWelcome 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, 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
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 3:30-3:45 pm
 Break

 3:45-5:00 pm
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#### 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
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 3:30-3:45 pm
 Break

 3:45-5:00 pm
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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
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 3:30-3:45 pm
 Break

 3:45-5:00 pm
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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 lvy 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

Wednesday June 19 - Critical Geographies: Digital Techniques & Ground-Truthing

7:30-8:45 am Breakfast

9:00-10:30 am "Sense and Sustainability: Taming the Modern," Virginia Nazarea,

PhD, Director, Ethnoecology and Biodiversity Lab, Professor,

Department of Anthropology, University of Georgia

*10:30-10:45 am* Break

10:45-12:15 pm "Remote Sensing of Water Resources in Arid Lands," Magaly Koch,

PhD, Research Associate Professor, Center for Remote Sensing,

**Boston University** 

 12:30-2:00 pm
 Lunch

 2:00-3:15 pm
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 3:30-3:45 pm
 Break

 3:45-5:00 pm
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Note: All sessions this day will be held in the Environmental and Remote

Technologies Lab, Brown University's GIS facility. Special tours of

the lab will be held in the evening

### 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 1<sup>st</sup> 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.