

Connection and Flows: Water, Energy and Digital Technology in the Global South
Brown International Advanced Research Institute (BIARI)
June 7-21, 2014

Co-Conveners: Geri Augusto (geri_augusto@brown.edu) and Christopher Bull
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Locations:

During week one, morning and afternoon sessions will take place in Studio 1 of the Granoff Center for the Creative Arts, located on the fourth floor at 154 Angel Street.

During week two, all¹ sessions will take place in the Barus and Holley Engineering building at 184 Hope Street. Sessions in the morning will be held in room 190 on the first floor and sessions in the afternoon will occur in the Design Workshop of Prince Laboratory.

Meals:

Breakfast is at Verney Woolley Dining Hall (135 Cushing Street in Emery-Woolley Hall) from 7:30-8:45 AM

**Monday-Friday Lunch is at the Faculty Club (One Magee Street) from 12:45-2:00 PM
Saturday-Sunday Lunch is at Verney Woolley Dining Hall 11:00 AM–2:45PM**

Coffee breaks will take place every day, once in the morning and once in the afternoon.

Dinner is at a selection of local restaurants and Verney Woolley Dining Hall. Please refer to your *Dine Around* Booklet for more information.

Saturday, June 7

Arrival Day - Participants will arrive at 111 Thayer Street, Brown University, Providence, Rhode Island.

Lunch provided at Watson Institute or Verney Woolley, Dinner at local restaurants.

Sunday, June 8

4-5pm & 5-6pm: Tours of Brown University, departing from the Watson Institute Lobby

6pm: Barbeque and Field Day, come eat dinner and meet your fellow BIARI participants at Pembroke Field (at the intersection of Brook St and Hope St)

¹ Wednesday the June 18th is an exception. Morning sessions will be held at the Save the Bay Center in Cranston, RI and Afternoon sessions will occur at NBC's Fields Point Facility

BIARI 2014, Connections and Flows Timetable & Syllabus

Day 1 (June 9): C&F: Introduction to the Engineering BIARI

7:30-8:45 am: Breakfast, *Verney-Woolley Dining Hall*

9-10:30 am: **“Welcome to Connections and Flows”**

Gerri Augusto, ED, Visiting Associate Professor, African Studies, Faculty Affiliate, Science & Society and Portuguese & Brazilian Studies, Brown University;

Christopher Bull, PhD, Senior Research Engineer, Senior Lecturer, School of Engineering, Brown University
Studio 1, Granoff

10:30-11am: Coffee Break, *Watson Institute Lobby*

11-12:30 pm: **“Thinking Broadly about Techno-Social Problems,”** Keith Brown, PhD, Professor, Watson Institute for International Studies, Director, Brown International Advanced Research Institutes, Brown University
Studio 1, Granoff

12:45-1:45 pm: Lunch, *Faculty Club*

2:00-3:00 pm: **Participant Introductions Part I**
Studio 1, Granoff

3-3:30 pm: Coffee Break, *Watson Institute Lobby*

3:30-4:00 pm: **Participant Introductions Part II**
Studio 1, Granoff

Day 2 (June 10): Waterplexity

7:30-8:45 am: Breakfast, *Verney-Woolley Dining Hall*

9-10:00 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
Studio 1, Granoff

10:10-11:10am: **“Water and Sanitation as Human Rights,”** Sharmila Murthy, JD, Assistant Professor, School of Law, Suffolk University
Studio 1, Granoff

11:10-11:30am: Coffee Break, *Watson Institute Lobby*

11-12:30 pm: **Interactive Session** – Shafiqul Islam, Sharmila Murthy
Studio 1, Granoff

- 12:45-1:45 pm: **Lunch – Keyword Tables**, *Faculty Club*: At lunch today please sit at a table with a keyword most relevant to your work.
- 2-3:15 pm: **Dilemma Discussion #1 (Groups A-E)**
Granoff
- 3:15-3:45 pm: Coffee Break, *Watson Institute Lobby*
- 3:45-5 pm: **Dilemma Discussion #1 (Groups A-E)**
Granoff
- 5-6pm **Introduction to Brown University Library Resources**, Ian Straughn
Carmichael Auditorium, BERT, 89 Waterman St.

Day 3 (June 11): Energy Rivals

- 7:30-8:45 am: Breakfast, *Verney-Woolley Dining Hall*
- 9-10:30 am: **“Fossil Fuels and the Energy Mix in the Global South,”** Nelson Narciso Filho, President and Founding Partner, NNF Energy Consultancy, former Director, National Agency of Petroleum, Natural Gas and Biofuels, Brazil
Studio 1, Granoff
- 10:30-11 am: Coffee Break, *Watson Institute Lobby*
- 11-12:30 pm: **“Off-Grid Production and Household Energy Security,”** Chris Bull, PhD, Senior Research Engineer and Senior Lecturer, School of Engineering, Brown University *C&F Convener*
Studio 1, Granoff
- 12:45-1:45 pm: Lunch, *Faculty Club*
- 2-3:15 pm: **Dilemma Discussion #2**
Granoff
- 3:15-3:45 pm: Coffee Break, *Watson Institute Lobby*
- 3:45-5 pm: **Dilemma Discussion #2**
Granoff
- 5:30-7:30 pm: Keynote Address, Ambassador Nirupama Rao
Granoff Auditorium, 154 Angell Street
Reception to follow

Day 4 (June 12): Ethical Engineering

- 7:30-8:45 am: Breakfast, *Verney-Woolley Dining Hall*
- 9-10:30 am: **“Tradition and Morality in the Age of Biotechnology”** Rosalyn Berne, PhD, Associate Professor, Department of Science, Technology and Society, University of Virginia

Studio 1, Granoff

10:30-11 am: Coffee Break, *Watson Institute Lobby*

11-12:30 pm: **Interactive Session** – Rosalyn Berne

12:45-1:45 pm: **Lunch – Cross Institute**, *Faculty Club*: Please sit next to someone who is not from your institute, with the exception of any guest faculty presenter.

2-3:15 pm: **Dilemma Discussion #3**
Granoff

3:15-3:45 pm: Coffee Break, *Watson Institute Lobby*

3:45-5 pm: **Dilemma Discussion #3**
Granoff

5:00-7:00 pm: **BIARI Beyond Brown: Grants, Films and New Initiatives**
Carmichael Auditorium, BERT, 85 Waterman Street

Day 5 (June 13): Doing it Digitally: Engineering Sustainable Futures

7:30-8:45 am: Breakfast, *Verney-Woolley Dining Hall*

9-10:30 am: **“Creating Solutions through Crowdsourcing,”** Angela Oduor, Developer,
Ushahidi Inc.
Studio 1, Granoff

10:30-11 am: Coffee Break, *Watson Institute Lobby*

11-12 pm: Continued Discussions
Studio 1, Granoff

12-12:30 pm: **BIARI Central:** Exploring Google
Studio 1, Granoff

12:45-1:45 pm: Lunch, *Faculty Club*

2-3:15 pm: **Group Dilemma Presentations: 1-3**
Studio 1, Granoff

3:15-3:45 pm: Coffee Break, *Watson Institute Lobby*

3:45-5 pm: **Group Dilemma Presentations: 1-3**
Studio 1, Granoff

Day 7 and 8 (June 14 and 15): Open weekend, see BIARI Programming for Information on Activities and Suggestions

Day 6 (June 16): Which Goals? Whose Development?

7:30-8:45 am: Breakfast, *Verney-Woolley Dining Hall*

9-10:30 am: **“A Framework for Classifying Innovation for Development,”** Garrick E. Louis, PhD, Associate Professor, Department of Systems and Information Engineering, University of Virginia
Rm 190, Barus & Holley

10:30-11 am: Coffee Break, *Watson Institute Lobby*

11-12:30 pm: **Interactive Session** – Garrick Louis

12:45-1:45 pm: Lunch, *Faculty Club*

2-3:15 pm: **Dilemma Discussion #4**
Prince Labs

3:15-3:45 pm: Coffee Break, *Watson Institute Lobby*

3:45-5 pm: **Dilemma Discussion #4**
Prince Labs

Day 7 (June 17): Uses of Energy: Looking Back, Looking Forward

7:30-8:45 am: Breakfast, *Verney-Woolley Dining Hall*

9-10:30 am: **“Energy and Water in Agriculture,”** Stephen G. Agong, PhD, Principal, Jaramogi Oginga Ondiga University of Science and Technology
Rm 190, Barus & Holley

10:30-11 am: Coffee Break, *Watson Institute Lobby*

11-12:30 pm: **“Developing the Grid,”** Philip Schewe, PhD, Author, *The Grid* (2007), Director of Communication, Joint Quantum Institute
Rm 190, Barus & Holley

12:45-1:45 pm: Lunch, *Faculty Club*

2-3:30 pm: **BIARI Beyond Brown: Tools and Techniques for Collaboration**
Location TBD

3:15-3:45 pm: Coffee Break, *Watson Institute Lobby*

3:45-6:15 pm: **Dilemma Discussion #5**
Prince Labs

Note: Session this day will run 75 minutes later than usual

Day 8 (June 18): Cleaning Up the Waters

7:30-8:45 am: Breakfast, *Verney-Woolley Dining Hall*

9:00 am: Bus Departs from the Watson Institute for the Save the Bay Center

9:30-10:30 am: **“Building Political Support for Investments in Clean Water,”** Jonathan Stone, CFA, Executive Director, Save the Bay, Inc.
Save the Bay Center

10:30-11 am: Coffee Break

11-12:30 pm: **“Groundwater: Contamination and Filtration,”** Tom Boving, PhD, Professor, Department of Civil and Environmental Engineering, University of Rhode Island
Save the Bay Center

12:45-1:30 pm: Lunch

1:45 pm: Bus Departs from the Save the Bay Center for the Field’s Point Wastewater Facility

2-3:30 pm: **“Upper Narragansett Bay Water Quality – Sins of the Past, Present Day Efforts & Future Opportunities,”** Thomas Uva, Director of Planning, Policy, and Regulation, Narragansett Bay Commission
Fields Point Wastewater Facility

3:30-3:45 pm: Break

3:45-5 pm: **Study Tour: Field’s Point Wastewater Treatment Facility**

Note: Sessions all day will occur off campus. Long pants and close-toed shoes must be worn for the Study Tour

Day 9 (June 19): Coordinates

7:30-8:45 am: Breakfast, *Verney-Woolley Dining Hall*

9-10:30 am: **“GIS and Unique Solutions”** Rachel Franklin, PhD, Assistant Professor, Population Studies and Training Center, Brown University
Rm 190, Barus & Holley

10:30-11 am: Coffee Break, *Watson Institute Lobby*

11-12:30 pm: **“Studio South Zero: Looking at Urban Ecological Aesthetics,”** Torkwase Dyson, MFA, Artist, Studio South Zero
Rm 190, Barus & Holley

12:45-1:45 pm: Lunch, *Faculty Club*

2-3:45 pm: **Group Dilemma Presentations: 4-5**
Rm 190, Barus & Holley

4:00 pm: Depart on buses for **New England Clambake**
East Greenwich, Rhode Island

Day 10 (June 20): Final Conversations

7:30-8:45 am: Breakfast, *Verney-Woolley Dining Hall*

9-10:30 am: **TBD**

10:30-11 am: Coffee Break, *Watson Institute Lobby*

11-12:30 pm: **TBD**

12:45-2 pm: Lunch, *Faculty Club*

2:30-3:15 pm: Farewell Address and Presentation of Certificates

Saturday, June 21: Departure Day

Breakfast and lunch will be served at Verney-Woolley. We will post the Departure day shuttle schedules for both Providence TF Green Airport and Boston Logan Airports on Monday, June 16th.