
WUN DATA SCIENCE THEMATIC WORKSHOP: WELLNESS DATA FOR HEALTHY SOCIETIES

Dates: 1-2 May 2017
Venue & Location: [SUNY Global Center, 116 E 55th Street, New York, NY](#)
Registration: TBA
More info: TBA
Steering Group: David Hogg, University of Leeds
Peter Lennie, University of Rochester
Robyn Owens, University of Western Australia
Contact persons: Jane Gatewood, University of Rochester jane.gatewood@rochester.edu
Ruth Levenkron, University of Rochester ruth.levenkron@rochester.edu

Drawing on unique longitudinal datasets, analytical techniques, research expertise and tools for data science at WUN partners, this workshop will address three related areas:

1. Develop a plan for a sustainable international project that will apply data analytics in a comparative study of patient pathways in health systems across several countries;
2. Explore the legal, ethical, and technical challenges of disseminating and linking data sets;
3. Launch a network of data scientists and users of data analytics across the WUN.

The impact of this workshop stands to be immense: transferring best practice between countries and medical systems, and leading to better outcomes for patients and more cost-effective service provision. It capitalizes on the geographic spread of WUN and the close association of many WUN partners with major hospitals and health systems. The workshop will also lead to the establishment of a data science network that will stimulate and coordinate the novel use of data within projects that address the Global Challenges, capitalising on the data assets of WUN partners and providing solutions to political, social, legal and ethical issues that arise in data sharing, particularly across national boundaries.

Draft Program – Subject to Change

1 May 2017

8.15	Registration
8.45	Welcome & introductions
9.00	<p>Session I – Comparative Analytics of Patient Pathways Data</p> <p>This session builds on recent research at Leeds and Rochester, developing analytical tools and methodologies for understanding patient pathways and clinical interactions. At Leeds, this work is providing new understanding on the timeline of patients undergoing diagnostics for cancer in the Leeds Teaching Hospitals Trust, one of the largest teaching hospitals in Europe, and drawing on a unique dataset extending over many years. At Rochester, the research is exploring the interaction between clinicians, using electronic patient records and graph-based analytical techniques. Panelists will discuss ways to combine this work to form the nucleus of a comparative analysis of diagnostic functions within several health systems worldwide.</p> <p><i>Chair – Robyn Owens, University of Western Australia</i></p>

	Geoff Hall, University of Leeds Owen Johnson, University of Leeds Martin Zand, University of Rochester
10.30	Break
11.00	Session II: Data Linkage, Part 1 – Linking Health Datasets Panellists will demonstrate the opportunities for methodological advances in healthcare using medical record linkage, while exploring challenges associated with linking large data sets. Key issues will include patient privacy, linking across different jurisdictions, linking with related datasets such as education and justice data, and dealing with longitudinal datasets. <i>Chair: Peter Lennie, University of Rochester</i> David Preen, University of Western Australia
12.30	Lunch <i>Keynote: Rebecca Keiser, Head of NSF Office of International Science & Engineering (confirmed)</i>
14.00	Session III: Data Linkage, Part 2– Web Observatory & Data Linkage Panellists will showcase Web Observatory’s capacity for enabling and managing the sharing of metadata, especially that related to health datasets. Developed at the University of Southampton, the Web Observatory has the capacity to make datasets identifiable, searchable, and allows for various access permissions. <i>Chair: David Hogg, University of Leeds</i> Wendy Hall, University of Southampton Kelvin Tsoi, Chinese University of Hong Kong
15.30	Break
16.00	Session IV: Discussion & Planning Breakouts Based in the day’s presentations, participants will develop plans for funding bids and map future projects related to data linkage and sharing. <i>Facilitator: Jane Gatewood, University of Rochester</i>
17.45	<i>Meeting adjourns</i>
18.00	Reception (TBC)

2 May 2017

8.45	Arrival & Check-in
9.00	Concurrent Sessions A. WUN Data Science Network Planning Participants will plan the establishment of a WUN data science network that will stimulate and coordinate the novel use of data within projects that address the WUN Global Challenges, capitalising on the data assets of WUN partners and providing solutions to political, social, legal and ethical issues that arise in data sharing, particularly across national boundaries. Future projects could include collaborative research and project

	<p>funding in the analysis of data acquired from health and wellness devices.</p> <p><i>Facilitator: Ruth Levenkron, University of Rochester</i></p> <p>B. Bid Development: Patient Pathways Data & Data Linkage Participants will evaluate specific funding sources and develop bids and plans for bids accordingly. <i>Facilitator: Jane Gatewood, University of Rochester</i></p>
10.30	Break
11.00	<p>Concurrent Sessions</p> <p>A. WUN Data Science Network Formation Participants will identify a network chair and a project plan for the WUN data science network that will stimulate and coordinate the novel use of data within projects that address the WUN Global Challenges, capitalising on the data assets of WUN partners and providing solutions to political, social, legal and ethical issues that arise in data sharing, particularly across national boundaries. <i>Facilitator: Ruth Levenkron, University of Rochester</i></p> <p>B. Bid Development: Patient Pathways Data & Data Linkage Participants will develop bids and plans for bids for specific, previously identified funding sources. <i>Facilitator: Jane Gatewood, University of Rochester</i></p>
12.30	<p>Lunch</p> <p><i>Keynote: Atafeh Riazi, Chief Technology Officer, United Nations (invited)</i></p>
14.00	<p>Concurrent Sessions (TBC)</p> <p>A. Data Sharing & the Web Observatory (TBC) <information from Soton></p> <p>B. Bid Development: Patient Pathways Data & Data Linkage Participants will develop bids and plans for bids for specific, previously identified funding sources. <i>Facilitator: Jane Gatewood, University of Rochester</i></p>
16.00	Meeting Adjourns