

WUN DATA SCIENCE THEMATIC WORKSHOP: WELLNESS DATA FOR HEALTHY SOCIETIES

Dates: 1-2 May 2017

Venue & Location: Institute for International Education

809 UN Plaza, New York, NY 10017

Please note venue has been updated from initial agenda

Registration: WUN AGM Registration Website

Interested attendees should email Jane Gatewood for further registration details

More info: The workshop is walking distance to the <u>WUN conference hotel</u> the <u>One UN</u>

New York.

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.









1 May 2017

8.15	Registration		
8.45	Welcome & introductions		
9.00	Session I – Comparative Analytics of Patient Pathways Data 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. Chair – Robyn Owens, University of Western Australia Martin Zand, University of Rochester Randy Goebel, University of Alberta Lydia Drumright, University of Cambridge		
	Owen Johnson, University of Leeds & Eric Rojas, Pontifical Catholic University of Chile		
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. Panelists will address topics related to linked data and health analytics to support human development as well as policy and planning. Chair: Peter Lennie, University of Rochester David Preen, University of Western Australia Jane Ford, University of Sydney Xinjie Cui, University of Alberta		
12.30	Lunch Keynote: Rebecca Keiser, Head of NSF Office of International Science & Engineering		
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. Chair: David Hogg, University of Leeds Wendy Hall, University of Southampton Kelvin Tsoi, Chinese University of Hong Kong Ramine Tinati, University of Southampton Thanassis Tiropanis, University of Southampton		









1 May (continued)

15.30	Break
15.50	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. Facilitator: Jane Gatewood, University of Rochester
17.00	Meeting adjourns
18.00	Reception and Dinner (all participants and speakers) The Smith Midtown 956 Second Avenue (at 51st Street)

2 May 2017

8.45	Arrival & Check-in Concurrent Sessions		
9.00			
	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 funding in the analysis of data acquired from health and wellness devices. Facilitator: Ruth Levenkron, University of Rochester Bid Development: Patient Pathways Data & Data Linkage Participants will evaluate specific funding sources and develop bids and plans for bids accordingly. Facilitator: Jane Gatewood, University of Rochester	
10.30	Break		









2 May (continued)

11.00	Concurrent Sessions		
	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. Facilitator: Ruth Levenkron, University of Rochester		
	B. Bid Development: Patient Pathways Data & Data Linkage Participants will develop bids and plans for bids for specific, previously identified funding sources. Facilitator: Jane Gatewood, University of Rochester		
12.30	Lunch		
14.00	Concurrent Sessions (TBC)		
	 A. Data Sharing & the Web Observatory Wendy Hall, University of Southampton Ramine Tinati, University of Southampton Thanassis Tiraponis, University of Southampton B. Bid Development: Patient Pathways Data & Data Linkage Participants will develop bids and plans for bids for specific, previously identified funding sources. Facilitator: Jane Gatewood, University of Rochester 		
16.00	Meeting Adjourns		





