

# Big Data and the Future of Research in the Digital Age

A Collaborative Symposium of The Israel Young Academy  
and The German Young Academy | Jerusalem, February 17-19, 2015



## TUESDAY, FEBRUARY 17

### 10:30–11:15 Greetings & Opening remarks

**Co-Chairs:** Sharon Aronson-Lehavi, Comparative Literature, Bar-Ilan University  
Sibylle Baumbach, English Studies, University of Mainz

### 11:15–13:00 Defining Big Data: Transformations in the Natural Sciences, Humanities, and Social Sciences

**Co-Chairs:** Tamar Herzig, History, Tel Aviv University  
Silja Klepp, Social Anthropology, University of Bremen

#### Big Data in Political Science: Transformations in Theory, Methods, and Empirics

Carina Schmitt, Political Science, University of Bremen

#### Is there Big Data in the Humanities?

Sinai Rusinek, Digital Humanities, Polonsky Fellow

#### Automated Discourse Analysis

Stefanie Hieß, Sociology, University of Jena

Martin Wunderlich, Natural Language Processing, University of Munich (LMU)

### 13:00–14:00 Light lunch & coffee

### 14:00–15:30 Conducting Big Data Research and Research Projects: Methods, Challenges, and Limits (Part I)

**Co-Chairs:** Roded Sharan, Computer Science, Tel Aviv University  
Carina Schmitt, Political Science, University of Bremen

#### Measuring Cultural Persistence of Antisemitism: Medieval Data and their Limits

Rebekka Voss, Jewish Studies, University of Frankfurt

Moritz Schularick, Economics, University of Bonn

#### Jewish and Arab Judges – Jewish and Arab Defendants: The Effect of Ethnicity in the Courtroom

Oren Gazal-Ayal, Law, University of Haifa

#### A Re-edition of Cryptic Scrolls from Qumran: Enhanced Algorithmic Methods to the Aid of Textual Studies

Jonathan Ben-Dov, Biblical Studies, University of Haifa

### 15:45–17:15 Conducting Big Data Research and Research Projects: Methods, Challenges, and Limits (Part II)

**Co-Chairs:** Dan Peer, Immunology, Tel Aviv University  
Wolfram Pernice, Nanotechnology, Karlsruhe Institute of Technology

#### In Search of the Magic Metric: Quantifying Scientific Excellence Using a Single Number

Dan Oron, Physics, Weizmann Institute of Science

#### Combining Airborne, Ground-Based and Satellite Data to Investigate Aerosol Interactions with the Atmosphere and Climate

Bernadette Weinzierl, Atmospheric Physics, University of Munich (LMU)

#### Beyond Data Storage, Analyses, and Distribution: Do We Have the Technology to Make the Web Capable of Sensing?

Yael Hanein, Engineering, Tel Aviv University

### 17:15–17:45 Coffee Break

### 18:00 Keynote Address

#### Big Data vs. 'Slow Data': The Medici and the Future of Early Modern Archives

Alessio Assonitis, Director, The Medici Archive Project, Italy

**Chair:** Jonathan Ben-Dov

**Introduction of the Speaker:** Tamar Herzig

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## WEDNESDAY, FEBRUARY 18

### 09:30–11:15 Visual Media, Visualizing Big Data, and Virtual Realities

**Co-Chairs:** Orit Kedar, Political Science, The Hebrew University of Jerusalem  
Evelyn Runge, Media Studies/Journalism, University of Hildesheim

#### BioNumbers and Proteomaps:

##### Making Cell Biology by the Numbers Accessible and Visual

Ron Milo, Plant and Environmental Sciences, Weizmann Institute of Science

#### Photo/Journalism

Evelyn Runge, Media Studies/Journalism, University of Hildesheim

#### Do Digital Media Require Digital Methods?

##### Thoughts on Researching Digital Photography

Paul Frosh, Communication and Journalism, The Hebrew University of Jerusalem

### 11:15–11:45 Coffee Break

### 11:45–13:30 Everything is Possible: Creativity in the Digital Age

**Co-Chairs:** Sharon Aronson-Lehavi, Comparative Literature, Bar-Ilan University  
Sibylle Baumbach, English Studies, University of Mainz

#### Composing with YouTube

Gordon Kampe, Musicology/Composing, Folkwang University of the Arts, Essen

#### Artists' Material and the Museum in the Digital Age

Rita Kersting, The Israel Museum

#### Speculative Bionic Designs

Ido Bachelet, Nanotechnology, Bar-Ilan University

### 13:30–14:30 Lunch

### 14:30–16:15 Ethical Challenges, Privacy, and Data Security in the Digital Age

**Co-Chairs:** Oren Gazal-Ayal, Law, University of Haifa  
Angelika Riemer, Immunology, German Cancer Research Center (DKFZ), Heidelberg

#### The Second Genome Revolution: A Sequenced Genome for Every Person

Rotem Sorek, Molecular Genetics, Weizmann Institute of Science

#### Project EURAT: Ethical and Legal Aspects of Whole Human Genome Sequencing

Angelika Riemer, Immunology, German Cancer Research Center (DKFZ), Heidelberg

#### S-M-L-XL: Privacy Implication of Big Data

Michael Birnhack, Law, Tel Aviv University

### 16:15–16:30 Coffee Break

### 16:30–17:30 Keynote Address

#### Genetic Media: The Convergence of Internet and Genetic Information

Yaniv Erlich, Columbia University, New York, and the New York Genome Center

**Chair & Introduction of the Speaker:** Roded Sharan

### 17:30 Final Discussion

## THURSDAY, FEBRUARY 19

### 09:00–13:00 Excursion and Strategy Meeting

of The Israel Young Academy and The German Young Academy (closed event)