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## univie: summer school 2017 Scientific World Conceptions USS-SWC

### Call for Application

Application deadline: January 31, 2017

# Genomics: Philosophy, Ethics and Policy

Vienna, July 3–14, 2017

organized by

Institute Vienna Circle



Faculty of Philosophy and Education

Over the last two decades, genomics has emerged as a powerful site for not just re-configuring understandings and enactments of life, but also for understanding how these conceptions and enactments form in tandem with modes of ordering and governing lives. The two-week course explores conceptual innovations that draw these co-productive processes into view, as well as the histories and philosophies that deepen our understandings of not just genomics, but also our ever elusive efforts to make sense of life.

Main Lecturers:

**Robert Cook-Deegan** (*Arizona State University*)

**Paul E. Griffiths** (*University of Sydney*)

**Jenny Reardon** (*University of California, Santa Cruz*)

#### International Program Committee

John Beatty (*University of British Columbia*), Maria Carla Galavotti (*University of Bologna*), Malachi Hachon (*Duke University*), Michael Heidelberger (*University of Tübingen*), Martin Kusch (*University of Vienna*), Paolo Mancosu (*University of California, Berkeley*), Elisabeth Nemeth (*University of Vienna*), Miklós Rédei (*London School of Economics*), Michael Stöltzner (*University of South Carolina*), Roger Stuewer (*University of Minnesota*), Thomas Uebel (*University of Manchester*).

Friedrich Stadler (*Local Organizer, University of Vienna*),

Robert Kaller (*Secretary of USS-SWC, Institute Vienna Circle*).

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[www.univie.ac.at/ivc/SWC](http://www.univie.ac.at/ivc/SWC)

# Genomics: Philosophy, Ethics and Policy

July 3–14, 2017 in Vienna

## Main Lecturers:

**Robert Cook-Deegan** (*Arizona State University*)

**Paul E. Griffiths** (*University of Sydney*)

**Jenny Reardon** (*University of California, Santa Cruz*)

Genomics emerged as a term, and then as a field, in the late 1980s, tightly tethered to conceptions of the Human Genome Project. But its genealogical roots tap into molecular biology and genetics. This class addresses questions raised by this nascent field, ranging from the theoretical to the practical and political. While we will begin with questions of epistemology and ontology – e.g., reductionism; the status of genomics' theoretical entities (e.g., genes); the status and interpretation of genomic models – history and analysis of social issues will be fundamental from the start. In this sense, we will be guided by one of the genomics' main innovations: the field's powerful demonstration that practices for knowing and governing the world come into being together. The class explores cases where these co-productive processes can be seen and analyzed: debates over how and whether genomic analyses should be used to determine ancestry and race; the ascendancy of genomics in parallel to commercial biotechnology; patenting and ownership of DNA molecules,

methods, and data; and efforts to truly engage people in scientific and policy decisions about what is done with their data. It also will examine notions of 'the public understanding' of genetic causation, and how these notions fundamentally shape the constitution of genomic research. We end with questions about what direction we are going, and where we might instead like to go. We take our charge from Lao Tzu, who said: "If you don't change direction, you may end up where you're headed."

## The course will address these topics:

- Identities of "the gene"
- What is genetic information (a metaphor in search of a referent)?
- What is genomics? A story of co-production
- Race, difference, and genomics
- Patents and ownership
- Genomics amidst globalization and nation states
- Beyond bioethics
- Genomics and its public
- The post-genomic world
- Where are we headed?

## The Main Lecturers

### Robert Cook-Deegan

Robert Cook-Deegan is a professor in the School for the Future of Innovation in Society at Arizona State University, and a researcher in ASU's Consortium for Science, Policy & Outcomes. He was previously the founding director of the Center for Genome Ethics, Law & Policy in Duke's Institute for Genome Sciences & Policy, 2002–2012, and remained at Duke through June 2016. He previously worked for eleven years at the National Academies of Science, Engineering and Medicine, a year at the National Center for Human Genome Research at the National Institutes of Health and six years at the Office of Technology Assessment, US Congress. He got his MD from the University of Colorado in 1979 and his BA in chemistry (*magna cum laude*) from Harvard in 1975. He is the author of *The Gene Wars: Science, Politics, and the Human Genome* and an author of over 250 other publications.  
<https://globalhealth.duke.edu/people/faculty/cook-deegan-robert>

### Paul E. Griffiths

Paul E. Griffiths is a philosopher of science with a focus on genetics and development. Paul Griffiths is Professor in the Department of Philosophy, University of Sydney and a Domain Leader at the Charles Perkins Centre, a major research institute of the university devoted to interdisciplinary approaches to lifestyle-related disease. He is a Fellow of the American Association for the Advancement of Science, and of the Australian Academy of the Humanities. From 2011–13 he was President of the Inter-

national Society for History, Philosophy and Social Studies of Biology. His publications include:

*What Emotions Really Are: The problem of psychological categories*. Chicago, University of Chicago Press (1997); *Sex and Death: An Introduction to the Philosophy of Biology*. Chicago: University of Chicago Press 1999 (with Kim Sterelny); *Genetics and Philosophy: An introduction*. New York: Cambridge University Press 2013 (with Karola Stotz).  
<http://griffithslab.org/>

### Jenny Reardon

Jenny Reardon is Professor of Sociology and Director of the Science and Justice Research Center at University of California, Santa Cruz. She is also a Visiting Professor in the Department of Global Health and Social Medicine at King's College in London. Her research draws into focus questions about identity, justice and democracy that are often silently embedded in scientific ideas and practices, particularly in modern genomic research. Her training spans molecular biology, the history of biology, science studies, feminist and critical race studies, and the sociology of science. She is the author of *Race to the Finish: Identity and Governance in an Age of Genomics* (Princeton University Press, 2005) and *The Postgenomic Condition: Ethics, Justice, Knowledge After the Genome* (forthcoming with Chicago University Press).  
[http://sociology.ucsc.edu/faculty/singleton.php?&singleton=true&cruz\\_id=reardon1](http://sociology.ucsc.edu/faculty/singleton.php?&singleton=true&cruz_id=reardon1)

## Costs and Information

**Cost of the program:** € 880

**Lodging** in student dormitories is available at approximately € 400–€ 450 for the whole duration of the course. For further information, see: [www.univie.ac.at/ivc/SWC](http://www.univie.ac.at/ivc/SWC)

## Application form

Please print or type / mark choice

To apply for admission **please send by mail** this application form together with

1. A short educational curriculum vitae
2. A list of most recent courses and grades or a copy of your diplomas
3. A one-page statement (in English), briefly outlining your previous work and your reason for attending USS-SWC
4. A (sealed) letter of recommendation from your professor, including some comment on your previous work. This letter may also be sent directly by your professor.
5. A passport photo

Please make sure that all documents arrive in time because we can process only complete applications.

**Application form** (also available on our Web site: [www.univie.ac.at/ivc/swc](http://www.univie.ac.at/ivc/swc)) may be sent in advance.

**Application deadline:** January 31, 2017 (Later applications may be considered if space is still available.)



Prof. Friedrich Stadler, Institut Wiener Kreis  
Campus der Universität Wien, Spitalgasse 2-4, Eingang 1.13, A-1090 Wien, Austria

Last name .....	First name .....	<input type="checkbox"/> f <input type="checkbox"/> m
Date of birth .....	day .....	month .....
Home address .....	year .....	
Telephone .....		
e-mail .....		
Postal address if other than home address .....		
Telephone .....		
Citizenship .....		
Profession or program currently enrolled in .....		
University .....		
<input type="checkbox"/> Bachelor of .....	<input type="checkbox"/> Master of .....	
Last completed academic grade .....	<input type="checkbox"/> PhD in .....	
Accommodation requested in students dormitories <input type="checkbox"/> yes <input type="checkbox"/> no		
Date .....	Signature .....	

A letter of admission together with a detailed syllabus will reach successful applicants by mid-February, 2017. To participate mastering English on a high level is required. For non English native speakers with certificate. The administration of **USS-SWC** at the University of Vienna can assist the candidates admitted in applying for funds and in the accreditation of the course, but unfortunately, cannot offer financial assistance. However, for a few gifted applicants who can demonstrate that, despite serious documented efforts, they have not been able to obtain any financial support, in particular due to economic difficulties in their own country, a tuition waiver grant, awarded by the Institute Vienna Circle and the University of Vienna, will be provided.

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## USS · univie: summer school

## SWC · Scientific World Conceptions

Since 2001 the University of Vienna and the **Institute Vienna Circle\*** have been holding an annual two-week summer program dedicated to major current issues in the natural and social sciences, their history and philosophy. The title of the program reflects the heritage of the **Vienna Circle\*\*** which promoted interdisciplinary and philosophical investigations based on solid disciplinary knowledge.

As an international interdisciplinary program, **USS-SWC** will bring graduate students in close contact with world-renowned scholars. It will operate under the academic supervision of an International Program Committee of distinguished philosophers, historians, and scientists. The program is directed primarily to graduate students and junior researchers in fields related to the annual topic, but the organizers also encourage

applications from gifted undergraduates and from people in all stages of their career who wish to broaden their horizon through cross-disciplinary foundational issues in science.

The summer course consists of morning sessions, chaired by distinguished lecturers which focus on reading assigned to students in advance. Afternoon sessions are made up of smaller groups which offer senior students the opportunity to discuss their own papers with one of the main lecturers.

**USS-SWC** is part of the FWF Doctoral Program "The Sciences in Historical, Philosophical and Cultural Contexts."  
<http://dkplus-sciences-contexts.univie.ac.at/>

**\*The Institute Vienna Circle.** The international Institute Vienna Circle, a nonprofit society founded in Vienna in October 1991, set itself the following goals: first, to document and promote the contributions and development of the "Vienna Circle" in the areas of science and the public; and second, to cultivate and apply logical empiricism, critical rationalism and linguistic analysis in the sense of a scientific philosophy and coordinated with general sociocultural developments.

**\*\*The Vienna Circle,** a group of about three dozen scientists in Vienna who worked in the areas of philosophy, logic, mathematics, the natural and social sciences, pioneered in the development of analytic (linguistic) philosophy and philosophy of science and may be counted among the most important and most influential trends of thought in the twentieth century.

This modernist movement first became known to the public in 1929. Its core was the so-called "Schlick Circle" centered around Moritz Schlick, a professor of philosophy at the University of Vienna, who was murdered there in 1936 by a student. In particular Friedrich Waismann, Herbert Feigl, Rudolf Carnap, Hans Hahn, Philipp Frank, Otto Neurath, Viktor Kraft, Karl Menger, Kurt Gödel and Edgar Zilsel figured at the meetings in the Boltzmanngasse which Olga Taussky-Todd, Olga Hahn-Neurath, Felix Kaufmann, Rose Rand, Gustav Bergmann and Richard von Mises also attended. There were also occasional guests from abroad, some of them well-known today, such as Hans Reichenbach, Carl G. Hempel, Alfred Jules Ayer, Ernest Nagel, John von Neumann, Willard Van Orman Quine and Alfred Tarski. At the periphery of the Vienna Circle contacts flourished with Ludwig Wittgenstein, Karl R. Popper and Heinrich Gomperz.



# VISU 2001–2014 und USS-SWC 2015 –2016

## VISU 2001

### Unity and Plurality in Science

Main Lecturers: **Don Howard** (University of Notre Dame)  
**Elliott Sober** (University of Wisconsin)  
Guest Lecturer: **Brigitte Falkenburg** (University of Dortmund)  
Assis. Lecturer: **Christopher Hitchcock**  
(California Institute of Technology)  
**David J. Stump** (University of San Francisco)

## VISU 2002

### Mind and Computation

Main Lecturers: **Michael Hagner**  
(Max Planck Institute for the History of  
Science, Berlin)  
**Brian P. McLaughlin**  
(Rutgers University, New Brunswick)  
Guest Lecturer: **Anton Zeilinger** (University of Vienna)  
Assis. Lecturer: **Güven Güzeldere** (Duke University)  
**Paul Ziche**  
(Bayerische Akademie der Wissenschaften)

## VISU 2003

### Biological and Cosmological Evolution

Main Lecturers: **Karl Sigmund** (University of Vienna)  
**Robert M. Wald** (University of Chicago)  
**Eörs Szathmáry** (Eötvös Loránd University)  
Assis. Lecturer: **Daniel Holz**  
(University of California, Santa Barbara)

## VISU 2004

### The Quest for Objectivity

Lecturers: **John Beatty** (University of British Columbia)  
**Michael Friedman** (Stanford University)  
**Helen Longino** (University of Minnesota)

## VISU 2005

### Chance and Necessity

Main Lecturers: **Theodore M. Porter**  
(University of California, Los Angeles)  
**Wolfgang Spohn** (University of Konstanz)  
Assis. Lecturer: **Deborah Coen** (Harvard University)  
**Franz Huber** (University of Konstanz)

## VISU 2006

### Philosophy and Economics

Main Lecturers: **Geoffrey Brennan** (Duke University)  
**Hartmut Kliemt** (University of Duisburg)  
Guest Lecturer: **Rainer Hegselmann** (University of Bayreuth)  
Assis. Lecturer: **Bernd Lahno** (University of Duisburg)

## VISU 2007

### Consensus in Science

Main Lecturers: **Naomi Oreskes** (University of California, San Diego)  
**Miriam Solomon** (Temple University, Philadelphia)  
**Andrzej Wróblewski** (Warsaw University)  
Guest Lecturer: **Keith Lehrer** (University of Arizona, Tucson)

## VISU 2008

### History and Philosophy of the Biomedical Sciences

Main Lecturers: **Rachel A. Ankeny** (University of Adelaide)  
**Bernadino Fantini** (University of Geneva)  
**David Wootton** (University of York)  
Guest Lecturer: **Keith Wailoo** (Rutgers University)

## VISU 2009

### The Culture of Science and Its Philosophy

Main Lecturers: **Ronald Giere** (University of Minnesota)  
**Mary Jo Nye** (Oregon State University)  
**Alan Richardson** (University of British Columbia)  
Guest Lecturer: **Peter Galison** (Harvard University)

## VISU 2010

### The Science of the Conscious Mind

Main Lecturers: **Uljana Feest** (Technische Universität Berlin)  
**Owen Flanagan** (Duke University)  
**Michael Pauen** (Humboldt-Universität zu Berlin)  
Guest Lecturer: **J. Allan Hobson** (Harvard Medical School)

## VISU 2011

### The Nature of Scientific Evidence

Main Lecturers: **Hasok Chang** (University of Cambridge)  
**Tal Golan** (University of California, San Diego)  
**David Lagnado** (University College London)  
Guest Lecturer: **Philip Dawid** (University of Cambridge)

## VISU 2012

### Applied Science.

### Historical, Epistemological, and Institutional Characteristics

Main Lecturers: **Martin Carrier** (Bielefeld University)  
**Rose-Mary Sargent** (Merrimack College)  
**Peter Weingart** (Bielefeld University)  
Guest Lecturer: **William Butz** (IIASA, Laxenburg)

## VISU 2013

### Climate Studies

Main Lecturers: **Jim Fleming** (Colby College)  
**Roman Frigg** (London School of Economics)  
**Wendy Parker** (Ohio University)  
Guest Lecturer: **Angela Kallhoff** (University of Vienna)

## VISU 2014

### Humans/Animals. A Contested Boundary

Main Lecturers: **Richard Burkhardt** (University of Illinois)  
**Susan Jones** (University of Minnesota)  
**Georgina Montgomery** (Michigan State University)  
Guest Lecturers: **Mitchell Ash, Herwig Grimm** (University of Vienna)  
**Tom Tyler** (Oxford Brookes University)

## USS-SWC 2015

### The Computational Turn. Simulation in Science

Main Lecturers: **Richard Burkhardt** (University of Illinois)  
**Susan Jones** (University of Minnesota)  
**Georgina Montgomery** (Michigan State University)  
Guest Lecturers: **Mitchell Ash, Herwig Grimm** (University of Vienna)  
**Tom Tyler** (Oxford Brookes University)

## USS-SWC 2016

### Science, Democracy, and Values?

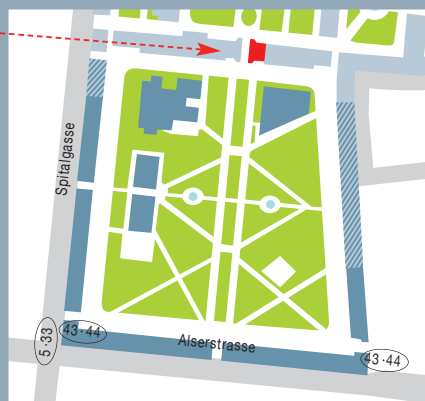
Main Lecturers: **Mark Brown** (California State University, Sacramento)  
**Heather Douglas** (University of Waterloo)  
**Andrew Jewett** (Harvard University)  
Guest lecturer: **Alexander Bogner**  
(Österreichische Akademie der Wissenschaften)



Site of USS-SWC  
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(Department of  
Contemporary History)  
<http://campus.univie.ac.at/>



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Publisher:  
Universität Wien,  
Universitätsring 1,  
A-1010 Wien  
Editor:  
Prof. Friedrich Stadler