

## **Sabina Leonelli**

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**Professor of Philosophy and History of Science and Technology** (W3), Department of Science, Technology and Society, Technical University of Munich; Research Director of Ethical Data Initiative; Co-Director of the TUM Public Science Lab; Fellow Academia Europaea, AcademiaNet, Académie Internationale de Philosophie de la Science, Asia-Pacific Artificial Intelligence Association & Royal Society of Biology.

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Staff Exeter <https://socialsciences.exeter.ac.uk/sociology/research/sts/egenis/staff/leonelli>

Data Studies <https://datastudies.eu> Open Science Studies <https://opensciencestudies.eu>

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Google Scholar: <https://bit.ly/2xFNzPa> Orcid # <https://orcid.org/0000-0002-7815-6609>

I am Chair of Philosophy and History of Science and Technology at the Technical University of Munich, where I direct the [Ethical Data Initiative](#) and co-direct the TUM Public Science Lab. Until 2024 I was Professor of Philosophy and History of Science, Director of the Centre for the Study of the Life Sciences ([Egenis, 2013-2024](#)) and lead of research on "Data Governance, Openness and Ethics" for the Institute for Data Science and Artificial Intelligence ([IDSAI](#)) at the University of Exeter, where I hold a Honorary Professorship. I serve as President-Elect of the International Society for History, Philosophy and Social Studies of Biology; Council member for the Division of Logic, Methodology and Philosophy of Science and Technology of International Union of History and Philosophy of Science and Technology; Associate Editor for the [Harvard Data Science Review](#); and Subject Editor for [Stanford Encyclopaedia of Philosophy](#). I have been awarded many competitive grants including two European Research Council awards, "The Philosophy of Data-Intensive Science" (2014-2019) and "A Philosophy of Open Science for Diverse Research Environments" (2021-2026). I regularly engage in science policy and governance of data infrastructures, advising bodies including European Commission, Royal Society, FAIR-IMPACT and Italian National Centre for Big Data, High Performance and Quantum Computing. I have served as Vice-President of the European Association for the Philosophy of Science (2019-2023), Editor-in-Chief of *History and Philosophy of the Life Sciences* (2019-2023), Open Science lead for the Global Young Academy (2014-2017). I am the recipient of a University of Tilburg Honorary Doctorate (2023), 2021-2022 Wissenschaftskolleg zu Berlin Fellowship and 2024 Kluge Chair in Technology and Society from the Library of Congress. My 2016 book *Data-Centric Biology* won the Lakatos Award (2018) and Patrick Suppes Prize for Philosophy of Science (2022).

### *Education*

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- 2009–2010 Postgraduate Certificate of Academic Practice, University of Exeter: **Fellow of the Higher Education Academy.**
- 2002–2007 Department of Philosophy, Vrije Universiteit Amsterdam: **PhD in Philosophy of Science.**
- 2002–2006 Netherlands Graduate Research School in Science, Technology and Modern Culture (WTMC).
- 2000–2001 Department of Philosophy, Logic and Scientific Method, London School of Economics and Political Science (LSE): **MSc Philosophy and History of Science.**
- 1997–2000 Department of Science and Technology Studies, University College London: **BSc History, Philosophy and Social Studies of Science** (Hons).

### *Previous Appointments*

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- 2017-2024 **Professor of Philosophy and History of Science**, University of Exeter.
- 2014-2017 **Associate Professor.** Department of Sociology, Philosophy and Anthropology, Exeter.
- 2011-2014 **Senior Lecturer.** Department of Sociology, Philosophy and Anthropology, Exeter.
- 2008-2011 **Research Fellow.** ESRC Centre for Genomics in Society, University of Exeter.
- 2006–2008 **Research Officer.** Leverhulme/ESRC Project 'How Well Do 'Facts' Travel?', Department of Economic History, London School of Economics and Political Science (LSE).

2002–2006 **Research Assistant.** Project 'Understanding Scientific Understanding', VU Amsterdam.  
2000–2002 **Research Assistant.** Centre for the Philosophy of the Natural and Social Sciences, LSE.

### Current Professional Service

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**President-Elect** of the International Society for the History, Philosophy and Social Studies of Biology (ISHPSSB). 2023-2025, to be followed by President (2025-2027) and Past-President (2027-2029).

**Research Director of the Ethical Data Initiative** (2024-), TUM and University of Exeter  
<https://ethicaldatainitiative.org/>

**Co-Director of the TUM Public Science Lab** (2025 -).

**Associate Editor** (2019-) and **Co-Editor** of "Metadata: the Philosophy of Data Science" Column (2024-) of the *Harvard Data Science Review*.

**Subject Editor** (philosophy of science) for the *Stanford Encyclopaedia of Philosophy* (2023-).

**Elected Council Member** (assessor) for Division of Logic, Methodology and Philosophy of Science and Technology (DLMPT, 2024-2027), part of the International Science Council. <https://dlmps.org/>

**Editorial Board member** for the *PhilSci Archive*, the OA book series *BJPSOpen*, and journals *Philosophy of Science*; *Big Data & Society*; *Social Epistemology*; *Philosophy and Digitality*; *Technoscienza*; *Patterns: The Science of Data*; *Data*.

**Research Fellow** (2022-2024) of the **Stazione Zoologica di Napoli** (Naples Zoological Station), Italy.

**Lead Evaluator** of the Italian National Centre for High-Performance Computing, Big Data and Quantum Computing (2022-2026, 320 million euros investment).

**Plan S Ambassador** (2019-) <https://www.coalition-s.org/>.

**Membership of:**

- **Royal Society Expert Group** on the Impact of Disruptive Technologies on Research / Science in the Age of AI (2022-2024)
- **Executive Committee** of the PhilSci Archive, the Open Access archive for the philosophy of science community (2020-2024) <http://philsci-archive.pitt.edu/>
- **High Level Advisory Committee** of the FAIR-IMPACT project (2022-2025)
- **CODATA Data Ethics Working Group** (2022-2023) <https://codata.org/initiatives/working-groups/data-ethics>
- **Sociotechnical Advisory Panel** of the UK **Office for Statistics Regulation** (OSR, 2022-)
- **Open Access Committee** of the Philosophy of Science Association (2024-)
- **Research Data Alliance (RDA) Interest Group on Agricultural Data** (IGAD, 2016-) <https://www.rd-alliance.org/groups/agriculture-data-interest-group-igad.html>
- **Steering Committee of European Advanced Seminar in the Philosophy of Biology** (2011-)
- **Steering Committee** of the UK Network for Integrated History and Philosophy of Science (2010-)
- **UK Research and Innovation Future Leaders Fellowship Peer Review College** (2018-)
- **European Science Foundation** College of Expert Reviewers (2020-)
- **Collegio docenti [external faculty]** for PhD programme "Philosophy, Science, Cognition and Semiotics", Department of Philosophy, **University of Bologna**
- **Lakatos Award Selection Committee** (2020-).

**Scientific Advisor** for:

- **Konrad Lorenz Institute** for Evolution and Cognition Research, Klosterneuburg, Austria (2023-)
- **Asian Philosophy of Science Association** (2024-)
- **DATASPACE** Project (2024-2029) <https://dataspace.ku.dk/>
- **SCIROs** (EU-funded *Strategic Collaboration for Interdisciplinary Research on Open Science in the SSH*), Polish Academy of Sciences (2024-2026)
- **EPSRC AI Hub for Causality in Healthcare AI with Real Data (CHAI)**, 2024-2029
- **HumanTech**, MUR Department of Excellence, Politecnico di Milano (2023-2026)
- **TIER2** Horizon Europe project on reproducibility and its implementation (2023-2025)
- **Crop Ontology** (2022-; <https://cropontology.org>)
- **SAIL**, the Secure Anonymised Information Linkage Databank (2018-; <https://saildatabank.com/>) and SeRP, the Secure Research Platform (2024-; <https://popdatasci.swan.ac.uk/products-services/secure-e-research-platform/> )
- **Pianeta** Association (2022-) <https://www.pianeta.org/>
- **NASC**, the European Arabidopsis Stock Centre (2014-)

- **PomBase**, the database for fission yeast biology (2019-)
- **Centre for Policy, Science and Philosophy**, University of Marche (2023-)  
<https://cosp.univpm.it/profile/members/external-members/>
- ERC Starting Grant "**Digital DNA**" (2021-2026)
- ERC Consolidator Grant "**Smart Forests**" (2020-2025, smartforests.net)
- Wellcome Trust Project "**From Collection to Cultivation: Historical Perspectives on Crop Diversity and Food Security**", University of Cambridge (2020-2025)
- NOW project "**Gold Rush in the Data Mine**" (2023-2027)
- NWO Project "**Replication in Action**" (2021-2025)

**Research Associate** of the Info-Metrics Institute (<http://www.american.edu/cas/economics/info-metrics/>).

**Service within the Technical University of Munich: TBA.**

**Reviewer** for *Studies in History and Philosophy of Science*, *International Studies in Philosophy of Science*, *British Journal for Philosophy of Science*, *Historical Studies in Natural Sciences*, *Synthese*, *Philosophy of Science*, *Erkenntnis*, *Social Studies of Science*, *Biology & Philosophy*, *Science, Technology & Human Values*, *Science in Culture*, *BioSocieties*, *Poetics*, *European Journal for Philosophy of Science*, *Bulletin of Science, Technology and Society*, *Perspectives on Science*, *Public Culture*, *Isis*, *HOPQS*, *Journal of History of Biology*, *Journal of Theoretical Biology*, *Global Policy*, *Bioscience*, *Latu Sensu*, *Data*, *Research Integrity*, *Data Science*, *History & Technology*, *Big Data & Society*, *Social Epistemology*, MIT Press, Springer, Oxford University Press, Cambridge University Press, SAGE, Routledge, Palgrave-MacMillan, and others.

**Referee** for ERC (European Research Council), UKRI, BBSRC, ESRC, AHRC, MRC, NSF (National Science Foundation), FWO (Flemish Fund for Scientific Research), Fonds de la Recherche Scientifique (French-Belgian Fund for Scientific Research), NWO (Netherlands Organisation for Scientific Research), Social Science and Humanities Research Council (Canada), CIFAR, Genome Canada, ANVUR (Italian Research and University Evaluation Agency), ANR (Agence Nationale de la Recherche, France), NIAS (Netherlands Institute for Advanced Studies), Swedish Research Council, Putendorf Institute, and many others.

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#### *Past Professional Service*

**Adjunct Professor** (2019-2024) within the School of Humanities at the University of Adelaide.

**Turing Fellow** (2019-2023), Alan Turing Institute, London. Turing staff page:

<https://www.turing.ac.uk/people/researchers/sabina-leonelli>

**Editor-in-Chief** of the journal *History and Philosophy of the Life Sciences* (w G. Boniolo; 2019-2023).

**Vice-President** of the European Philosophy of Science Association (2019-2023).

**Open Science Expert** for the **Mutual Learning Exercise** "Open Science – Altmetrics and Rewards" of **European Commission** (01/2017–03/2018, DG Research & Innovation), involving 13 member states: <https://rio.jrc.ec.europa.eu/en/policy-support-facility/mle-open-science>

**Lead Thinker** in Thinkers Programme 2022 "Reproducibility and Replicability in Science" of the Royal Flemish Academy of Science. <https://www.kvab.be/en/thinkersprogram/reproducibility-and-replicability-science>

**Member of commissions and expert panels:**

- **Council of Canadian Academies (CCA) Expert Panel** charged with identifying legal/regulatory, ethical, social and policy (LESP) challenges associated with deploying Artificial Intelligence (AI) technologies to enable research design and discovery in Canada (2021-22)
- the **Open Science Policy Platform** of the European Commission (2016-2019), Working Groups on **FAIR Data**, **OS Skills and Education**, **Future of Publishing (chair)**, **OSPP-REC (rapporteur)** and **Indicators**;
- **Review Panel** of **Volkswagen Foundation** funding scheme "**Researching Research**" (2023)
- the **Global Young Academy** (2012-2017), leading the **Working Group on Open Science** (2014-2017) <http://www.globalyoungacademy.org/members/s.leonelli>
- Coalition S steering group overseeing study of collaborative, non-commercial ('diamond') publishing models (2020-2021)
- President of Commission for Research Fellow at Stazione Zoologica, Naples (2021)
- Secretary of Commission for Professor at Ca Foscari, Venezia (2021)

- **Alliance against Cancer Commission (ACC) of the Italian Ministry of Health**, aimed at elaborating GDPR guidelines for cancer-related data in Italy (2018-2019);
- **Standing Committee for Publisher Search of the Philosophy of Science Association (PSA)**, 2019-2020)
- Philosophy of Science Association ad hoc Committee for **Open Access Monograph Publishing** (2018-2020);
- CODATA/Research Data Alliance Task Group **"Summer Schools on Data Science and Cloud Computing in the Developing World"** (2015-2017) <https://rd-alliance.org/groups/rdacodata-summer-schools-data-science-and-cloud-computing-developing-world.html>
- The **Global Outreach committee** of the Joint Caucus for Socially Engaged Philosophers and Historians of Science (2014-2019)
- **Scientific Committee** of the **UNIL-EPFL Center for Digital Humanities** in Lausanne, Switzerland (DhCentre, 2020-2023) <https://dhcenter-unil-epfl.com/>
- **Advisory board** of Wellcome Collaborative Grant "The Animal Research Nexus" (2017-22), <https://animalresearchnexus.org>

**Consultant** for the **U.S. Department of State** on The Future of Biotechnology (January 2024).

**Scientific Advisor** for **Ammagamma** srl (2019-2023).

**Editorial board of** *Science, Technology & Human Values* (2018-2022) and *The Reasoner* (2014-2020).

**Liason** for the **World Data System** of the International Council of Science, on behalf of the International Union for History and Philosophy of Science and Technology (IUHPST) (2019-2022).

**Visiting Researcher** at Department III, MPIWG, Berlin (2021-2022).

**Senior Co-Chair** of the Women's Caucus of the European Philosophy of Science Association (2015-2019).

**Chair** of the Nomination Committee of the Philosophy of Science Association (2020-2021).

**Chair** of the Grene and Callebaut Prize Committee of the International Society for the History, Philosophy and Social Studies of Biology (2019-2021)

**Steering Board member of**

- the **Society for the Philosophy of Science in Practice** (SPSP; 2011-2022);
- the **European Philosophy of Science Association** (EPSA; 2013-2017);
- **GARNet**, the Genomic Arabidopsis Resources Network dedicated to coordinating training and events for UK plant science (2010-2020, <http://www.garnetcommunity.org.uk/advisers/sabina-leonelli>)
- the **Translational Research Exchange Exeter** (2017-2022; [www.exeter.ac.uk/tree](http://www.exeter.ac.uk/tree))
- **Newton Fund Project** "Kidnapping and Crime-Apping in Mexico and its Borders" (2019-21)

**Associate Editor** for *History and Philosophy of the Life Sciences* (HPLS; 2013-2018).

**Honorary Associate Professor** at the School of History of the University of Adelaide (2016-2019).

**Scientific Advisor** for the European Open Science Cloud pilot project (2017-2019)

**Chair** of the EU Open Science Policy Platform (OSPP) Working Group on **Open Access Scientific Publishing** (2016-2017). **Rapporteur** for the OSPP Working Group on Integrated Advice (2018), which produced the OSPP-REC.

Commissioned Expert for **Swiss Research Council** Report "The Future of Big Data in Healthcare" (2017).

**Theme Leader** for the Research Environment area of the Global Young Academy (2015-2016).

**Core member** of the Knowledge/Value research network (2009-2014, [www.knowledge-value.org](http://www.knowledge-value.org)).

**Founder** of UK Network for History, Philosophy and Sociology of Plant Science (2013-2016; [www.plantsciencesstudies.org](http://www.plantsciencesstudies.org)).

**IUHPST Ambassador** (International Union for History & Philosophy of Science and Technology) for International Council of Science project "Digital Representation of Units of Measure" (**DRUM**).

**Advisory Board Member** to the BBSRC Network for Biological Visualisation (2014-2016; <http://bivi.co/page/resources-biological-visualisation-history-philosophy-and-social-studies-biology>) and the Exeter Initiative for Statistics and its Applications (ExISa; 2011-2016).

**Founder** and **Editor-in-Chief** of Open Access journal *Graduate Journal of Social Science* (2003–2007).

**Service within the University of Exeter:**

- Director of Exeter Centre for the Study of the Life Sciences (2022-2024)
- Deputy Director of Exeter Centre for the Study of the Life Sciences (2013-2022)
- Member of Leadership Group for the department of Social and Political Sciences, Philosophy and Anthropology (2022-2024)
- Theme Lead on "Data Ethics, Governance and Openness" for the Institute for Data Science and Artificial Intelligence (IDSAI) (2019-2024)

- Chair of the University Research Data Management Task Force (2019-2022)
- Academic Lead and Coordination Group for Sociology, Philosophy and Anthropology (2013-2022)
- Impact Case Study lead (2016-2021)
- Inclusion and Diversity Officer for the department (2017-2021)
- Equality and Inclusivity college board (2017-2018, 2020-2021)
- Strategy Group for Global Research Council Funding (2017-2020)
- Open Research Board (2016-2018)
- Director of Postgraduate Training (2011-2014)

**Chair** of the Foundation for Interdisciplinary Research Methodology (2005–2008).

### *Grants*

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- PI** of **ERC Consolidator Grant** "A Philosophy of Open Science for Diverse Research Environments" (PHIL\_OS), September 2021-August 2026 (1.999.964 euros, grant award 101001145).
- PI** of **GESDA research project** "Science Lens on the Future of Research", October 2024 – July 2025 (xxx euros).
- Co-PI** of **Bertelsmann Stiftung Research Award** "Data Requirements for Responsible Foundational Models", October 2024 – February 2025 (59.000 euros).
- Recipient of the **Kluge Chair for Technology and Society** in the John W. Kluge Center of the **Library of Congress**, Washington DC. Project on "Openness, Democracy and Technologies of Evidence", May-July 2024.
- PI** of **MiniSpoke on Data Governance** of **UKRI PhenomUK Research Infrastructure** (with Hugh Williamson), July-August 2024 (£25,000). <https://phenomuk.org/>
- PI** of **AHRC Creative Invention Impact Accelerator Award "Pilot Film: Data Shadows"**, May-August 2024 (£19,420).
- Co-I** of **EPSRC AI Hub for Causality in Healthcare AI with Real Data (CHAI), 2024-2029** (£9,599,993; of which 700,000 to the Exeter spoke) – successfully acquired but then delegated to someone else due to move to Germany.
- Co-I** of **UKRI Centre for Doctoral Training in Environmental Intelligence: Data Science & AI for Sustainable Futures**, 2019-2024 (£7,422,441) [www.eicdt.ac.uk](http://www.eicdt.ac.uk)
- PI** of **Turing Project** "From Field Data to Global Indicators: Towards a Framework for Intelligent Plant Data Linkage", May 2019-October 2022 (£405,000) <https://www.turing.ac.uk/research/research-projects/field-data-global-indicators>
- Recipient of **Fellowship** "Excellence and Diversity in Global Scientific Practice", **Wissenschaftskolleg zu Berlin**, September 2021-June 2022 (59,434 euros).
- Co-I** of **Wellcome Trust Institutional Strategic Support Fund** ISSF3 (supporting the Exeter Translational Knowledge Exchange), Nov 2016 – March 2023.
- Co-I** of **ESRC Research Grant** "Understanding the Use of Digital Forensics in Policing in England and Wales: An Ethnographic Analysis of Current Practices and Professional Dynamics", Sept 2018 – August 2021 (£437,912; PI: Dana Wilson-Kovacs) <https://digital-forensics-in-policing.net/>
- Co-I** of **Australian Research Council Discovery Grant** "Organism and Us: How Living Things Help Us to Understand Our World", Jan 2016 – Dec 2020 (AUS 313,000; PI: R. Ankeny, and with M. Dietrich) <https://arts.adelaide.edu.au/organisms-and-us/>
- PI** of **ERC Starting Grant** 'The Epistemology of Data-Intensive Science' (DATA\_SCIENCE), March 2014 – November 2019 (1.046.000 euros, grant award 335925).
- Co-I** of **British Academy Knowledge Frontiers** 2017 Award "Co-producing knowledge across disciplines and borders: The case of gene drive mosquitoes in the UK and Mali", Jan 2018 – Jan 2019 (£46,603; PI: Sarah Hartley).
- Co-I** of **ESRC Research Grant** "Social sensing of health and wellbeing impacts from pollen and air pollution", April 2017-June 2018, ES/P011489/1 (£243,948; PI: Hywel Williams).
- VIAF Award by the Global Engagement and Development Fund of the University of Exeter, to support a research collaboration with Professor William Bechtel in May 2017 (£2308).
- Open Innovation Application to University of Exeter Impact Fund, to support travel to Annual General Meeting of the Global Young Academy in May 2017 (£1000).

PI of **Medical Research Council MEDMI Pilot Project** "Tracing Data Journeys Across Climate, Environment and Human Health: A Qualitative Study of the Medical & Environmental Data Mash-Up Infrastructure Project," March 2016 – November 2016 (£4820 with N. Tempini).

Co-I of **British Pharmacological Society** Project "The Future of the In Vivo Skills Landscape Within the UK", October 2015 – July 2016 (£90,000 with G. Davies).

Co-I of **Leverhulme Trust Research Grant** 'Beyond the Digital Divide: Sharing Research Data Across Developing and Developed Countries', January 2014 - June 2016 (£123,228 with B. Rappert and A. Kelly, grant award RPG-2013-153).

GARNet Conference Support for "Integrating Large Data into Plant Science", April 2016 (5,000£).

PI of **Global Young Academy Award** "Uses of Open Software in Developing Countries", November 2015 – March 2016 (£5,000).

PI of HASS Strategy Project Development Fund, Project "Knowledge/Value and Dark Data: Absences, Interventions and Digital Worlds", May 2014 – February 2015 (£5,030 with G. Davies, B. Rappert).

Partner in **BBSRC Visualisation Network**, March 2014-February 2015 (PI: Jessie Kennedy).

PI of **Wellcome Trust** Medical Humanities Conference Grant for "Third European Advanced Seminar in Philosophy of Life Sciences" (May - October 2014, £2,825).

**Visiting Scholar Award**, Project 'Sciences of the Archive', Max Plank Institute for the History of Science, Berlin (January-April 2014, 19.500 euros).

Co-I of **ESRC Cross Investment Linking Grant** 'Trajectories of Emerging Life Science and Open Innovation', April 2013 - March 2014 (£199,000 with D. Castle and J. Dupre, award ES/F028180/1).

Co-I of **EPSRC Grant** 'Evolving Controllers and Controlling Evolution', 2012-2014 (£416,929 with OS Soyer and D Bates).

Co-I of Bridging the Gap Grant (Exeter Research Knowledge Transfer) 'Respecting Complexity: New Methods and Concepts for Robust Synthetic Biology', 2012 (£10,000, with K Haynes and J Dupré).

Company of Biology Conference Support 'Making Data Accessible to All', July 2012 (£1000, with R Bastow).

GARNet Conference Support for 'Making Data Accessible to All', July 2012 (£2500, with R. Bastow).

Konrad Lorenz Institute Conference Grant for 'Making Sense of Data', June 2011 (£6000).

EGN Forum Conference Grant for the organisation of 'Making It Big' conference, March 2011 (£5000, with E. Frow and G. Davies).

Conference grants from the British Society for the Philosophy of Science, the British Society for the History of Science and the Mind Association to fund conference 'What is HPS for?', June 2010 (total £1550).

**British Academy Small Grant** for project 'Data-Driven Research in the Biological and Biomedical Sciences', September 2009–June 2010 (£4700).

#### *Awards and Scholarships*

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**Kluge Chair in Technology and Society 2024**, awarded by the Kluge Centre of the USA Library of Congress. Project "Openness, Democracy and the Evolution of Technologies of Evidence", May to July 2024.

**Fellow** of the **Asia-Pacific Artificial Intelligence Association** (from 2024).

**Honorary Doctorate** for exceptional contributions to digital research awarded by the **University of Tilburg**, September 2023.

**Member** of **AcademiaNet**, January 2023.

**Patrick Suppes Prize for the Philosophy of Science 2022**, awarded by the American Philosophical Society for the book *Data-Centric Biology*.

Winner of the **Science Breakthroughs of the Year 2021** for "Breaking the Wall of Understanding Data", Section of Social Sciences and Humanities, **Falling Walls Foundation**: <https://falling-walls.com/breakthroughyear/finalists-2021/> ; <https://falling-walls.com/discover/videos/data-ethics-a-relational-approach-to-data/>

Elected Ordinary **Member** of the **Academia Europaea**, Section of Philosophy, Theology and Religious Studies, 2021. [https://www.ae-info.org/ae/Member/Leonelli\\_Sabina](https://www.ae-info.org/ae/Member/Leonelli_Sabina)

Selected as one of **100 Brilliant Women in AI Ethics (WAIE) list 2020** <http://lighthouse3.com/wp-content/uploads/2019/12/Diversity-and-Ethics-in-AI-2020.pdf>

**Fellow** of the **Royal Society of Biology**, from 2019.

**Full Member** of the **Académie Internationale de Philosophie de la Science** (AIPS, the international academy for the philosophy of science, with 70 members worldwide elected on the basis of research excellence), 2021. Elected member since 2019.

**Lakatos Award 2018** for outstanding contribution to the philosophy of science for the book *Data-Centric Biology: A Philosophical Study*.

The book "La Ricerca Scientifica Nell'Era dei Big Data" was nominated on top 20 shortlists for Premio Galileo 2019 (top prize for scientific communication literature in Italy).

**"Talented Young Italians" Award for Research and Innovation 2017** (awarded by the Italian Chamber of Commerce in the UK to an Italian researcher under 40 working in the UK).

Gold Award for Research Impact, University of Exeter, August 2015.

Nominated for University of Exeter Teaching Awards 2013 in the category of 'Innovative Teaching' (one of five nominees university-wide).

Elected **Member** of the **Global Young Academy** (2012-2017) <https://globalyoungacademy.net/sabina/>

**Marjorie Grene Prize 2007** (awarded by the International Society for the History, Philosophy and Social Studies of Biology to the best paper in the field written and presented as a PhD student).

VISU Wiener Kreis Scholarship to attend the International Summer School, July 2004.

Konrad Lorentz Institute Visiting Scholarship, Vienna, July 2004.

LSE Award supporting my research studies in London for 2001–2002.

AHRC Competition A grant funding my Masters degree for 2000–2001.

Dean's list (UCL graduation class 2000).

Jackson Lewis Scholarship for best results of Mathematical and Physical Sciences Faculty, UCL 1999.

UCL Departmental Award as best STS student for academic year 1998–1999.

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#### *Career Breaks for Maternity Leave*

[1] September – December 2010; [2] June – October 2014

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#### *Publications*

##### **Monographs and Edited Books**

Leonelli, S. (2023) *Philosophy of Open Science*. Elements series. Cambridge, UK: Cambridge University Press. Open Access. <https://www.cambridge.org/core/elements/philosophy-of-open-science/0D049ECF635F3B676C03C6868873E406>

• Reviewed by:

- Mark Rubin (2023) "Sabina Leonelli's Philosophy of Open Science". *Critical Metascience Blog*. [https://open.substack.com/pub/markrubin/p/sabina-leonellis-philosophy-of-open-science?r=2ce4qx&utm\\_campaign=post&utm\\_medium=web](https://open.substack.com/pub/markrubin/p/sabina-leonellis-philosophy-of-open-science?r=2ce4qx&utm_campaign=post&utm_medium=web)
- Paul Boselie (2023), "Book Review", Utrecht University Open Science Team, *LinkedIn* [https://www.linkedin.com/posts/paul-boselie-60a97159\\_philosophy-of-open-science-activity-7105071945582325760-PRvz](https://www.linkedin.com/posts/paul-boselie-60a97159_philosophy-of-open-science-activity-7105071945582325760-PRvz)
- Erik Stattin (2023), "Den öppna vetenskapens filosofi", *Kronica* <https://www.tidningencurie.se/kronikor/den-oppna-vetenskapens-filosofi>
- Carl J. Sciglitano (2023) "Beyond data sharing in open science" *Metascience* <https://doi.org/10.1007/s11016-023-00922-0>

Williamson, H. and Leonelli, S. (eds.) (2022) *Towards Responsible Plant Data Linkage: Data Challenges for Agricultural Research and Development*. Cham: Springer Open Access. <https://link.springer.com/book/10.1007/978-3-031-13276-6>

Beaulieu, A. and Leonelli, S. (2021) *Data and Society: A Critical Introduction*. London, UK: SAGE. <https://uk.sagepub.com/en-gb/eur/data-and-society/book269709>

Leonelli, S. and Tempini, N. (eds) (2020) *Data Journeys in the Sciences*. Springer. Open Access. <https://www.springer.com/qp/book/9783030371760>

Ankeny, R.A. and Leonelli, S. (2020) *Model Organisms*. Elements Series, Cambridge University Press. Open Access. <https://www.cambridge.org/core/elements/model-organisms/F895B26EAC0373BCA5A138835AC73AEA>

Leonelli, S. (2018) *La Ricerca Scientifica Nell'Era Dei Big Data*. Meltemi Editore. ("Scientific Research in the Age of Big Data"). ISBN 9788883539015.

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[page/1](#) (see also our 2nd collection on COVID: [https://link.springer.com/journal/40656/topicalCollection/AC\\_af37b22a2bd2a600bb6606bfe53dd415/page/1](https://link.springer.com/journal/40656/topicalCollection/AC_af37b22a2bd2a600bb6606bfe53dd415/page/1) )

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#### **Data Resources**

Plant DB Map [data visualisation tool tracking the history and current geography of plant data linkage initiatives globally] launched December 2019: <https://datastudies.eu/plant-db-map/>

#### **Consultations and Reports**

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Royal Society (2024) *Science in the Age of AI: How Artificial Intelligence Is Changing the Nature and Method of Scientific Research*. Report. <https://royalsociety.org/news-resources/projects/science-in-the-age-of-ai/> [I was one of the lead experts co-authoring the report]

SAPEA (2024) European Commission's Scientific Advice Mechanism Scientific advice on the topic: *Successful and timely uptake of Artificial Intelligence in science in the EU*. Policy Design Workshop Report, 10 January 2024, Online and in Brussels. [I was one of the lead experts informing the report] <https://scientificadvice.eu/scientific-outputs/ai-in-science-evidence-review-report/>

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Co-author of Alan Turing Institute Response to the UK National Data Strategy (2021).

DATA TOGETHER (2020) Open Science for a Global Transformation. Data Together Response to UNESCO Consultation on Open Science. 29 pages. [I co-authored the response, which went on to strongly influence the 2023 UNESCO Recommendation on Open Science] DOI: <https://doi.org/10.5281/zenodo.3935461>

Participant in evidence gathering on Royal Society Report "Digital Technology and the Planet", July 2020.

Consulting role on the "The Future of Citizen Data Systems" Report of the UK Government Office for Science, July 2020 (report released September 2020): <https://www.gov.uk/government/publications/the-future-of-citizen-data-systems> ).

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*Together with Rebecca Lawrence and Catriona MacCallum, I was responsible for drafting and finalising the document in consultation with the OSPP as a whole.*
- European Commission (2018) *Open Science: Altmetrics and Rewards*. Final Report for the Mutual Learning Exercise Open Science: Altmetrics and Rewards of the European Commission (Sabina Leonelli is one of four co-authors). URL: <https://rio.jrc.ec.europa.eu/en/policy-support/facility/mle-open-science-altmetrics-and-rewards>
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- European Commission (2017) *Incentives and Rewards to Engage in Open Science Activities*. Thematic Report No 3 for the Mutual Learning Exercise Open Science: Altmetrics and Rewards of the European Commission. <https://rio.jrc.ec.europa.eu/en/library/mutual-learning-exercise-open-science-%E2%80%93-altmetrics-and-rewards-incentives-and-rewards-engage> *Sabina Leonelli is the reports' sole author.*
- Leonelli, S. (2017) *Biomedical Knowledge Production in the Age of Big Data*. Report for the Swiss Science and Innovation Council, published online November 2017: [http://www.swir.ch/images/stories/pdf/en/Exploratory\\_study\\_2\\_2017\\_Big\\_Data\\_SSIC\\_EN.pdf](http://www.swir.ch/images/stories/pdf/en/Exploratory_study_2_2017_Big_Data_SSIC_EN.pdf) (reported in *Research Professional*, December 2017 and *Research Europe*, February 2018 – key document informing Swiss policy on big and open data in biomedicine) ISBN 978-3-906113-52-4
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- Chair and co-author of the *Position Statement on Open Science Publishing* by the Open Science Policy Platform of the European Commission, published online May 2017: [https://ec.europa.eu/research/openscience/pdf/ospp\\_open\\_access\\_publishing\\_report.pdf](https://ec.europa.eu/research/openscience/pdf/ospp_open_access_publishing_report.pdf) *On the basis of this document, the European Competitiveness Council decided in 2017 to institute a new European Publishing Platform (as reported by Nature and Science magazines).*
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Digital Science Report (2016) The State of Open Data. London, Holtzbrinck Publishing Group. Featuring leading thought piece by Sabina Leonelli: "Why Open Data Now?", pp.7-11. <https://dx.doi.org/10.6084/m9.figshare.4036398>

Invited expert witness for Royal Society and British Academy joint consultation on Data Governance, London, 20 October 2016.

Chair and lead author of the Open Data Position Statement of the Global Young Academy and the European Young Science Academies. April 2016. <http://globalyoungacademy.net/wp-content/uploads/2016/04/Position-Statement-on-Open-Data-by-the-Young-Academies-of-Europe-and-the-Global-Young-Academy.pdf>

Co-author of GYA Response to the Call for Evidence by the Open Science Policy Platform of the European Commission "Next-generation Altmetrics: Responsible Metrics and Evaluation for Open Science"

Invited Participation as a 'Reader' for the Science International Expert Working Group on Big Data/Open Data, October 2015.

Data Studies Response to Draft Concordat on Open Research Data. September 2015. [www.datastudies.eu/resources](http://www.datastudies.eu/resources)

Invited participant in Discussion Group on Data Science and Ethics, Cabinet Office, UK Government Innovation Group (November 2014, March 2015).

Coordinator and lead author: Global Young Academy Response to 'Science 2.0: Science in Transition' consultation of The European Commission's Directorates-General for Research and Innovation (RTD), May 2014. [http://globalyoungacademy.net/wp-content/uploads/2015/06/Science2.0\\_EU-Consultation\\_GYA-Input.pdf](http://globalyoungacademy.net/wp-content/uploads/2015/06/Science2.0_EU-Consultation_GYA-Input.pdf)

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### **Datasets**

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Leonelli, S. (2017) [DATA\_SCIENCE] Interviews PomBase Users, January-February 2016. *figshare*. <https://doi.org/10.6084/m9.figshare.5484010.v1>

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### **Game**

PHIL\_OS team (2024) "*The Research Game*". Tabletop game about inequity in global research practices.

### **Non-Refereed Contributions**

Leonelli, S. (2024, under production) "The Continuing Significance of the Philosophy of Data." Preface to the Chinese edition of *Data-Centric Biology: A Philosophical Study*.

- Milano S, McGrane J, Leonelli S (2023) "Large Language Models challenge the future of higher education". *Nature Machine Intelligence* <https://doi.org/10.1038/s42256-023-00644-2>
- Leonelli, S, Kirk R, Myelnikov D (2023) Editorial. "Circulating bodies: Human-animal movements in science and medicine." *History and Philosophy of the Life Sciences*. 45:9 <https://doi.org/10.1007/s40656-023-00568-5>
- Leonelli, S (2023) "No End in Sight". *Jarhbuch Wissenschaftskolleg zu Berlin 2021-2022*, pp. 132-136.
- Leonelli, S. (2022) "Introduction: Biological Knowledge in a Time of COVID-19". *History and Philosophy of the Life Sciences* 40:44 <https://doi.org/10.1007/s40656-022-00520-z>
- Leonelli, S. (2022) "Scaling Up: The Radical Challenge of Democratic Data Governance." *Frontiers Policy Labs*. <https://policylabs.frontiersin.org/content/scaling-up-the-radical-challenge-of-democratic-data-governance>
- Leonelli, S. (2022) Interview with Sabina Leonelli. In Gouveia, S. (eds) *Thinking the New World: Conversations in Artificial Intelligence*. Kindle Publishing, pp. 241-267. <https://www.amazon.com/dp/B0BQY2F1SK>
- Video Animation (2021) "Open Science: using the power of responsible data sharing and open science to tackle climate change" <https://www.youtube.com/watch?v=uUl3i36uQaw>
- Leonelli, Sabina, Bezuidenhout, Louise, Schuster, Doug, & Stall, Shelley. (2021, October 1). Democratization of Data. Zenodo. <https://doi.org/10.5281/zenodo.5546659>
- Leonelli, S. (2021) Protecting High-Quality Scholarship through Fair Open Access: Reflections on the Diamond OA Study. *Coalition S Blog*. <https://www.coalition-s.org/blog/protecting-high-quality-scholarship-through-fair-open-access/>
- Leonelli, S. (2021, published online: 8 September 2021) Apriti, Scienza! In: *Wired Italia*, Spring edition, pp. 48-53. <https://www.wired.it/scienza/lab/2021/09/08/apriti-scienza-sabina-leonelli/>
- Leonelli, S. (2020) big data; plurality; neutrality; AI; Coronavirus; pandemic; relativism; open science. In: *The Index of Evidence*, 61 <https://www.indexofevidence.org/data>
- Leonelli, S. (2020). Opening the Research Process: From Publications to Data, and Back Again. *Zenodo*. <http://doi.org/10.5281/zenodo.4045738>
- Cousins T, Leonelli S, Pentacost M, Rajan KS. (2020) Situating the Biology of COVID-19: A Conversation on Disease and Democracy. *The India Forum* <https://www.theindiaforum.in/article/situating-biology-covid-19>
- Leonelli S and Williamson H. (2020) Intelligent plant data linkage: A view from history, philosophy and social studies of science [version 1; not peer reviewed]. *F1000Research* 2020, 9:260 (slides) (doi: [10.7490/f1000research.1117842.1](https://doi.org/10.7490/f1000research.1117842.1)).
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- Leonelli S. Intelligent plant data linkage: a view from history, philosophy and social studies of science [version 1; not peer reviewed]. *F1000Research* 2019, 8:1815 (slides) (doi: [10.7490/f1000research.1117580.1](https://doi.org/10.7490/f1000research.1117580.1))
- Leonelli, S. (2018) Without Urgent Action Big and Open Data may widen existing inequalities and social divides. *LSE Impact Blog*, 14 February 2018. <http://blogs.lse.ac.uk/impactofsocialsciences/2018/02/14/without-urgent-action-big-and-open-data-may-widen-existing-inequalities-and-social-divides/>
- Rappert, B, Leonelli, S. and Bezuidenhout, L (2018) New Deal on Data Needed If Open Science Is To Go Global. View from the Top, *Research Fortnight*, 17 January 2018.
- Leonelli, S. (2017) Interview for Cartaditalia issue 3, November 2017, as part of a series featuring leading Italian researchers under 40: [http://iicbruxelles.esteri.it/iic\\_bruelles/resource/doc/2017/11/cartaditalia\\_n3-rid.pdf](http://iicbruxelles.esteri.it/iic_bruelles/resource/doc/2017/11/cartaditalia_n3-rid.pdf)
- Leonelli, S. (2017) More than Data Collectors: Valuing Data Expertise Beyond Professional Science. *Harvard Bill of Health Blog*. 4 May 2017. <http://blogs.harvard.edu/billofhealth/category/critical-studies-of-citizen-science-in-biomedical-research-symposium/>
- Leonelli, S. (2017) Data-Centric Science Will Change How We Measure the Value of Research. *Research Europe*, 23 February 2017.

- Leonelli, S. (2017) Big and Open Data Are Prompting A Reform of Scientific Governance. The Times Higher Education Blog, 21 February 2017. <http://www.timeshighereducation.com/blog/big-and-open-data-are-prompting-reform-scientific-governance>; republished in Times Higher Education Magazine, February 2017.
- Leonelli, S. (2016) Open Data: Curation Is Under-Resourced. *Nature* 538 (7623): 41. doi:10.1038/538041d
- Leonelli, S. (2016) Why Open Data Now? In: Report "State of Data", Digital Science London.
- Leonelli, S. (2016) What Are Data? In *Atlas of Science*. <http://atlasofscience.org/what-are-data/> April 2016.
- Leonelli, S. (2016). Towards a Truly Global Open Science. *GYA Connections* 4, May 2016.
- Leonelli, S. (2016). Research Environment. *GYA Connections* 4, May 2016.
- Leonelli, S. and Prainsack, B. (2015). Learned Societies Should Lead the Way to Open Science. View from the Top Section, *Research Europe* 2 July 2015, [buff.ly/1GQil5q](http://buff.ly/1GQil5q).
- Leonelli, S. and Bezuidenhout, L. (2015) The Politics of Data: The Rising Prominence of a Data-Centric Approach to Scientific Research. *LSE Impact Blog*. Published online December 2015. <http://blogs.lse.ac.uk/impactofsocialsciences/2015/10/05/politics-of-data-scientific-data-centrism/>
- Prainsack, B. and Leonelli, S. (2015) To What Are We Opening Science? *LSE Impact Blog*. Published online May 2015. <http://blogs.lse.ac.uk/impactofsocialsciences/2015/04/21/to-what-are-we-opening-science/>
- Leonelli, S. (2015) Editorial: The Philosophical Import of the Philosophy of Special Sciences. *The Reasoner*, Vol 9, number 3. <http://blogs.kent.ac.uk/thereasoner/files/2015/02/TheReasoner-93.pdf>
- Leonelli, S. (2015) Interview with Rachel Ankeny, John Dupre and James Griesemer: On the Philosophy of Biology. *The Reasoner*, vol. 9, number 3. <http://blogs.kent.ac.uk/thereasoner/files/2015/02/TheReasoner-93.pdf>
- Leonelli, S. (2015) Interview for *LSE Impact Blog*, Philosophy of Data Science series. Published online 19 January 2015: <http://blogs.lse.ac.uk/impactofsocialsciences/2015/01/19/philosophy-of-data-science-series-sabina-leonelli/#author>
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- Levin, N. and Leonelli, S. (2014) Workshop Report "The Value of Open Science". *EASST Review*, March 2014.
- Leonelli, S. (November 2012) Open Data and Privacy Concerns in Biomedical Research. *Open Knowledge Foundation blog* <http://blog.okfn.org/2012/11/26/open-data-and-privacy-concerns-in-biomedical-research/> and *Open Science blog* <http://science.okfn.org/2012/11/19/open-data-and-privacy-concerns-in-biomedical-research-guest-post/> .
- Leonelli, S. (2012) The Brain Drain. *Britain in 2013*, p.88.
- Leonelli, S and Barwich, A (2012) Editorial: Philosophy and Experiments. *The Reasoner*.
- Donaghy, J and Leonelli, S (2012) Interview with Giovanna Colombetti. *The Reasoner*.
- Leonelli, S. (2011) The Human Face of Data-Intensive Biology. *The Newsletter of the ESRC Genomics Network*, issue 13, pp. 10-12.
- Leonelli, S. (2010) Key concerns that should travel between e-social and e-natural science. *E-Research Ethics Website*. <http://eresearch-ethics.org/>
- Leonelli, S. (2008) Circulating Evidence Across Research Contexts: The Locality of Data and Claims in Model Organism Biology. *LSE Working Papers on the Nature of Evidence: How Well Do 'Facts' Travel?*, No. 25/08.
- Leonelli, S. (2008) Regulating Data Travel in the Life Sciences: The Impact of Commodification. *LSE Working Papers on the Nature of Evidence: How Well Do 'Facts' Travel?*, No. 27/08.
- Leonelli, S. (2002) Understanding Infrared Metaphysics: Melloni's Quest for Identity, *Measurement in Physics and Economics Discussion Paper Series*, DP MEAS 22/02, ISSN1465-637X.

#### **Conference Proceedings**

- Leonelli, S (2009) A HPSSB (History, Philosophy and Social Studies of Biology) Perspective on Biomedical Ontologies. *eScience-2009: Workshop Proceedings*.
- Leonelli, S (2009) The Role of Bio-Ontologies In Data-Driven Research: A Philosophical Perspective. *Nature Proceedings Collection*. <http://proceedings.nature.com/documents/3646/version/1>

#### **PhD Dissertation [published Open Access by VU Amsterdam]**

- Leonelli, S. (2007) *Weed for Thought. Using Arabidopsis thaliana to Understand Plant Biology*. Vrije Universiteit Amsterdam Open Access:

<http://dare.uvu.vu.nl/bitstream/handle/1871/10703/7623.pdf;jsessionid=6AD4C79DF93F2C96D9D0110615F78B78?sequence=1>

#### **Under Review**

- Ankeny, RA and Leonelli, S (major revisions) Model organism futures in precision toxicology: Tracking the emergence of a research repertoire. *Biology & Philosophy*
- Leonelli, S and Trappes, R. (major revisions) Research in the Multiplex: Navigating Tensions in Transdisciplinary Environments. *European Journal for the Philosophy of Science*.
- Sheehan, N. and Leonelli, S. (minor revisions) Reconciling Data Actionability and Accountability in Global Health Research. *Global Health Research*.
- Castaño, P. and Leonelli, S. Defining 'Space' in Plant Space Biology: Metadata Practices as Experimental Controls in NASA's GeneLab. *Studies in the History and the Philosophy of Science*.
- Tsioukis F. and Leonelli S. *Data Management at HAO-DEMETER Data Practices and Requirements: Review and Recommendations*. Report.
- Bird, C, Williamson, D. and Leonelli, S. On the Meaning of Uncertainty for Ethical AI: Philosophy and Practice. *Harvard Data Science Review* (preprint here: <https://arxiv.org/abs/2309.05529> )
- Cavazzoni, E. and Leonelli, S. Data-Intensive Research, Technologies and Epistemic Risks. In: *Handbook for STS*. Routledge.
- Cavazzoni and Leonelli. Sample Models As Model Systems Across the Lab and the Field. *Synthese*.
- Trappes, R. and Leonelli, S. (major revisions, resubmitted) Conceptualising Research Environments Using Biological Niche Concepts. *European Journal for the Philosophy of Science*.

#### **In Preparation**

- Leonelli, S. *Beyond the Given: Data Shadows and Empirical Inquiry*. Monograph in preparation.
- Leonelli, S. When more knowledge is less power: Extractive epistemologies in crop data science. *ST&S Special Issue "Across the Layers: How Data Infrastructures Link Knowledge Practices and Planetary Matter"*, edited by Leman Çelik, Stefan Laser, Estrid Sørensen. *ST&S*
- Leonelli, S. What is environmental intelligence? *HDSR Meta Data Science Column*
- Mussnug, A. and Leonelli, S. Convenience AI. *Erkenntnis*.
- Boumans M, Goldberger M, Leonelli S *Misinformation*. Elements Series, Cambridge University Press. Short monograph in preparation.
- Leonelli, S. Contrasting visions of inquiry in an Open Society: Henri Bergson and Karl Popper between humane and rational openness. *Res publica or HOPOS*.
- Leonelli, S and Grundfast, K. Making Political Sense of Openness as a Scientific Norm: On the Emergence of Federal Funding for Science in post-WWII United States, 1945-1960.
- Ankeny RA, Dietrich M, Leonelli S. (eds) *Scaffolding: Selected Contributions of James R. Griesemer to History, Philosophy, and Biology*. Under contract with Springer.
- Bird, C. and Leonelli, S. The Role of Statisticians in the Ethics of AI.
- Leonelli, S. Not all research environments are created equal: Structural epistemic injustice in low-resourced scientific settings.
- Ankeny, RA and Leonelli, S. *Philosophy in the World: Repertoires as Framework and Method for an Empirical Philosophy of Science*. Monograph.
- Ankeny and Leonelli. *Ethnographic methods for empirical philosophy of science*.

#### **Teaching Experience**

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|           |   |
|-----------|---|
| 2019-2021 | Convenor and lecturer for MSc module "Data Governance and Ethics" and MA module "Cultures of the Life Sciences", University of Exeter.  |
| 2018-2019 | Co-teacher for MA modules "Cultures of the Life Sciences" and "Philosophical Methods". Programme director for MA degree "Philosophy and Sociology of Science".  |
| 2017-2018 | Convenor and lecturer for core module "Data in Business and Society" for MSc Data Science. Co-teacher for MA modules "Cultures of the Life Sciences" and "Philosophical Methods". Programme director for MA degree "Philosophy and Sociology of Science". |
| 2015-2017 | MA module "Cultures of the Life Sciences." Programme director for MA/MSc degrees "Philosophy and Sociology of Science" and "Science and Technology Studies".  |
| 2014-2015 | Co-lecturer of MSc module "Philosophy of Science".  |

- 2012, 2013 Director of Postgraduate Teaching. Convenor of MA degrees 'History and Philosophy of Biology' and "Science and Technology Studies". Lecturer for UG course 'Pragmatism and Its Enemies'. Co-lecturer of MA module "Cultures of the Life Sciences", MSc module 'Research Skills in Sociology', and BSc second-year module 'Research Skills and Bioethics'. Personal tutor to 15 philosophy undergraduates.
- 2010, 2011 Convenor of MA degree 'History and Philosophy of Biology'. Co-teacher of MSc module 'Research Skills in Sociology', and BSc second-year module 'Research Skills and Bioethics'.
- 2009-2010 Co-convenor of MA degree 'History and Philosophy of Biology'. Co-teacher of MSc modules 'Genomics in Society' (module on governance) and 'Research Skills in Sociology'.
- 2008–2009 Co-teacher of MA modules 'History and Philosophy of Biology' and 'Research Skills in Sociology'. Organiser of the fortnightly Philosophy of Biology Journal Club.
- 2003–2005 Co-teacher of UG Course 'Earth Sciences: Methodology and Ethics', VU Amsterdam.

#### **Postdoctoral Supervision**

Research Fellow Berris Charnley, 2011-2012; Visiting Scholar Adam Toon, 2013; Research Fellow Nadine Levin, 2013-2014; Post-Doctoral Fellow Jennifer Cuffe, 2013-2016; Research Fellow James Lowe, 2015-2016; Research Fellow Louise Bezuidenhout, 2016; Research Fellow Richard Carter, 2016; Research Fellow Niccolo Tempini, 2014-2019; Research Fellow Rebecca Lovell, 2017-2018; Engagement Officer Silvia Bortoli, 2018-2021; Research Fellow Hugh Williamson, 2019-2022; Research Fellow Rose Trappes, 2022-2025; Research Fellow Paola Castaño, 2022-2025; Research Fellow Mariana Vitti Rodrigues, 2023-2024; Research Fellow Yoshinari Yoshida, 2023-2025; Research Fellow Richard Williams, 2024-2026; Research Fellow Kim Hajek, 2024-2027; Research Fellow Paul Trauttmansdorf, 2024-2027; Research Fellow Rena Goldstein, 2025-2027.

#### **Postgraduate Supervision**

First supervisor PhD thesis:

*Ongoing:* Nathanael Sheehan 2021- ("Dilemmas of Openness in Research"); Joyce Acquah 2022- ("Sociology of Research to Policy Translations"); Emma Cavazzuti 2022- ("Philosophy of Data Collection Technologies"); Fotis Tsiroukis 2022- ("Philosophy of Research Cooperation").

*Completed:* Luca Iori 2011–2013 ('Agricultural Genetics in Italy, 1900-1950'), Pietro Berti 2009–2014 ('Fuelling Expectations: UK Biofuels Policy'), Josephine Donaghy 2010–2014 ('Researchers' Assumptions and Mathematical Models: A Philosophical Study of Metabolic Systems Biology'); Nicholas Binney 2012-2017 ('History and philosophy of diagnosis: the case of heart failure'); Gregor Halfmann 2014-2018 ('The epistemology of oceanographic data practices'); Necmiye Akali 2017-2021 ("The role of intuitions in experimental philosophy"); Elis Jones 2018-2023 ("Value Practices in Coral Reef Research"); Arthur Vandervoort 2020-2024 ("Gender Disaggregation of Mobility-Related Urban Data").

Second or co-supervisor PhD thesis:

*Ongoing:* Ria Ariani, Technical University of Berlin, 2024-; Maria Volkova 2023- (co-supervised with Kathrine Tyler, University of Exeter; "AI in Migration Checks in the UK"); Cassandra Bird 2020- (co-supervised with Daniel Williamson, University of Exeter; "Ethics in algorithms"); ~~Margaret Bolton 2020- (co-supervised with Regan Early; "Semantics of Biodiversity Data");~~ Alexander Mussgnug 2021- (co-supervised with Shannon Vallor, University of Edinburgh; "Machine-learning algorithms as measurement tools"); Abhi Navaneethanathan 2021- (co-supervised with Peter Channellor, University of Exeter; "Data fusion Machine Learning methods in oceanography").

*Completed:* Alexandra Sojic 2008–2013 (co-supervised with Giovanni Boniolo in Milan; 'Bio-ontologies in Breast Cancer Research'), Sara Green 2012-2014 (co-supervised with Hanne Anderson in Aarhus, Denmark; "Philosophical issues in systems biology"), James Lowe 2011-2015 ('The Concept of Normal Development in Experimental Embryology'), Tarquin Holmes 2011-2015 ('The History and Epistemology of Wildtype'), Stefano Canali 2016-2019 (co-supervised with Thomas Reydon, Hannover, Germany: "Data between Environment and Health: An Epistemological Study of the Exosome"), Miguel Lopez Paleta 2013-2019 (co-supervised with Edna Suarez, UNAM, Mexico; 'Chicken as a model organism'), Dook Sheperd 2016-2021 (co-supervised with Rachel Ankeny, Adelaide; "Bees as models for cognitive science").

Internship supervision:

Aditya Raj 2024 (Library of Congress); Kieran Grundfast 2024 (Library of Congress).

Mentor PhD thesis:

Kai Wang 2011-2012; James Watson 2011-2017; Thibault Racovski 2013-2017.

PhD and undergraduate Research Assistants:

Tarquin Holmes (2012), James Lowe (2013), Javier Suarez Diaz (2017), Alex Rose (2018-2019), Trish Novack (2020).

Supervisor MA dissertation:

Josephine Donaghy 2009; James Lowe 2010; James Platt, Tarquin Holmes, Federico Boem 2011; Riccardo Ricci 2012; Erik Svetich and Alper Yardimci 2013; Sarah Ward 2015; Elis Jones 2019.

Supervision for visiting MA or PhD students:

Ranjit Singh, 2010 (The Netherlands); Miguel Lopez Paleta, 2012 (Mexico; co-examiner MA thesis); Jessey Wright, 2015 (Canada); Julia Delgado, 2016 (UCL); Inge de Bal, 2016 (Gent); Danielle Rhianna Lemieux, 2018 (Adelaide).

### **Examiner Roles**

External Examiner Taught Programmes in History and Philosophy of Science (undergraduate and postgraduate levels), Department of History and Philosophy of Science, University of Cambridge (2022-2025).

External Examiner Taught Programmes in Philosophy of Science (undergraduate and postgraduate levels), Department of Science and Technology Studies, University College London (2013-2017).

PhD Examiner: Alexander Powell (2010, Exeter), Pierre-Olivier Methot (2012, Exeter), Sara Green (mid-term review 2012, Aarhus), Ann-Sophie Barwich (2013, Exeter), Dominic Berry (2014, Leeds), Rolf Hvidtfeldt (2016, Copenhagen), Javier Suarez-Diaz (upgrade 2017, Exeter), Tara Mahfoud (2017, Kings College London), Thomas Bonnin (2018, Exeter), Harry Lewendon-Evans (2018, Durham), Maria Dede (upgrade 2018, Exeter), Richard Sim (upgrade 2018, Exeter), Eglantine Schmitt (2018, Paris Sorbonne), Romina Zuppone (2018, Barcelona), Louana Polisel (2018, University of Salvador, Bahia), Virginia Ghiara (2019, University of Kent), Stefano Canali (2019, University of Hannover), Sophie Veigl (2020, University of Vienna), Rosalind Attenborough (2020, University of Edinburgh), Prakhhar Manas (2021, University of Bristol), Martin Zach (2021, University of Prague), Jonathan Doran (upgrade 2022, Exeter), Ben Smart (2022, Exeter), Clement Guiraud (2022, University of Nantes, France), Christoffer Bjerre Haase (2023, University of Copenhagen), Federica Bocchi (2023, Boston University), Francesca Morselli (2023, University of Verona).

### **Language Skills**

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*Italian, English:* Fluent. *French, Spanish, Dutch:* Advanced. *Modern Greek and German:* Intermediate.

### **Professional Associations**

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AcademiaNET (since 2023)  
Academia Europaea [AE] (since 2021)  
Society for the Philosophy of Science in Practice [SPSP] (since 2009)  
Philosophy of Science Association [PSA] (since 2007)  
European Philosophy of Science Association [EPSA] (since 2010)  
International Society for the History, Philosophy & Social Studies of Biology [ISHPSSB] (since 2002)  
American Association for the Advancement of Science [AAAS], section L (since 2016)  
British Society for the Philosophy of Science [BSPS].  
Society for the Philosophy of Information [SPI].  
European Association for Science and Technology Studies [EASST].  
Society for the Social Studies of Science [4S].  
Association of Italian Scientists in the UK [AISUK].  
Talented Italians in the UK [TIUK].  
Royal Society of Biology [RSB] since 2012, elected Fellow in 2019.

### **Conference and Seminar Organisation**

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**2026**

PHIL\_OS Final Conference "Open Science for Diverse Research Environments: Moving the Field", **Munich**, April/May 2026 TBD (with Richard, Rena co-organising).

#### **2025**

Symposium for Biennial Conference of the European Philosophy of Science Association (EPSA 2025), **Groningen**, The Netherlands, August: "Philosophy of Science and Science Policy" (with Richard Williams) TBD.

Symposium for Biennial Conference of the International Society for the History, Philosophy and Social Studies of Biology (ISHPSSB2025), **Porto**, Portugal, July: TBD.

PHIL\_OS Analysis Workshop "Towards a philosophy of open scientific practice: Fieldwork data, epistemic diversity and comparison", **Munich**, April 28-29 or May 7-9 (with Paola Castaño).

#### **2024**

Symposium for **PSA 2024, New Orleans**, November 17-20: "Openness and Inequity in Research".

Programme Committee member for PhilInBioMed Conference 2024, University of **Bielefeld**, September 30-October 2.

Open Panel "Openness in Data-Intensive Biology" for 4S/EASST Conference, **Amsterdam**, July 17-20 (15 papers, with Paola Castaño).

International Conference "Understanding Life in a Changing Planet: Celebrating 20+2 years of Egenis". University of **Exeter**, April 17-19 (with Adrian Currie, Adam Toon, John Dupré and Stephan Güttinger). <https://www.exeter.ac.uk/research/centres/egenis/conference/>

Multi-Stakeholder Workshop "New Directions for Global Activities in Data Ethics", Technical University of **Munich**, April 8-10: <https://ethicaldatainitiative.org/wp-content/uploads/2024/03/MULTI.pdf>

Conference "#BlueHumanities: Un Ponte Tra Discipline Umanistiche e Scienze Marine" (A Bridge Between Humanities and Marine Sciences), Stazione Zoologica Anton Dohrn, **Naples**, February 16. [https://www.ilmattino.it/napolismart/cultura/istituto\\_dohrn\\_introduce\\_blue\\_humanities\\_nuova\\_disciplina\\_studio\\_storico\\_rapporto\\_uomo\\_mare-7932685.html](https://www.ilmattino.it/napolismart/cultura/istituto_dohrn_introduce_blue_humanities_nuova_disciplina_studio_storico_rapporto_uomo_mare-7932685.html)

International Conference "Facts, Fake and Fiction: An Interdisciplinary Analysis of the Dissemination of Information", Lorenz Centre, **Leiden** (with Marcel Boumans), February 5-9. <https://www.lorentzcenter.nl/fact-fake-and-fiction.html>

#### **2023**

Programme committee member for **European Philosophy of Science Association 2023, Belgrade**, September 20-23.

Symposium "The Nature of Research Environments", **European Philosophy of Science Association 2023**, Belgrade, September 20-23.

Programme committee member for 2023 Conference of the **European Network for the Philosophy of the Social Sciences** (ENPOSS), Radboud University, Nijmegen, August 30 – September 1, 2023 ([www.enposs.eu](http://www.enposs.eu)).

Symposium "Conceptualising Environments in and for Research", Biennial Conference of the International Society for the History, Philosophy and Social Studies of Biology (ISHPSSB) 2023, July 9-15, University of **Toronto** (with Rose Trappes).

Symposium "Coordination in and beyond the lab: Challenges of transdisciplinary life science", Biennial Conference of the International Society for the History, Philosophy and Social Studies of Biology (ISHPSSB) 2023, July 9-15, University of **Toronto**.

Programme Committee member for French Society for Philosophy of Science Annual Conference "Gender and Science", University of **Nanterre**, May 31 – June 2.

Programme committee member for Philosophy in Medicine and Biology (PIMB4) Conference, University of **Cambridge**, May 5–6, 2023 (<https://sites.google.com/view/jacob-stegenqa/home/pibm4>).

Co-organiser of International Conference "Values at Sea: Science Studies Meet Marine Biology", University of **Exeter**, April 27-28 (with Elis Jones and Jose Canada). <https://marinesciencestudies.co.uk/programme/>



PHIL\_OS International Workshop "Whither Open Science?", March 30-31, University of **Exeter**.

## **2022**

Programme committee member for Third PhilinBio Meeting, University of **Bordeaux**, November 11-14.

Anchor teacher for WTMC Summer School 2022 "Opening Up Diversity", 22-26 August. **Ravenstein**, The Netherlands. <https://www.wtmc.eu/events/wtmc-phd-summer-school-22-26-august-2022/>

Organiser of SPSP Symposium "Opening Up Data Sharing", University of **Gent**, 2-4 July 2022.

Co-organiser of SPSP Pre-Conference Workshop "Method Matters: Empirical Research in Philosophy of Science in Practice" (with Rachel Ankeny), Ghent, July 1. <https://www.philosophy-science-practice.org/events/spsp2022-ghent/methods-matter-pre-conference-workshop>

Programme committee member of SPSP 2022, University of **Gent**, July 2-4.

Reproducibility Conference, Belgian Royal Academy of Science, **Brussels**, June 1 (with Steve Lewandowsky).

Co-organiser of KLI Symposium "Looking through COVID-19", **online**, January 13.

## **2021**

Organiser and Chair of Session 4: "Artificial Intelligence", **UK Conference of Bioinformatics and Computational Biology** (UKBCB), 28-29 September, **online**. <https://www.earlham.ac.uk/uk-conference-bioinformatics-and-computational-biology-21>

Organiser of Thematic Session "Plant data science between policy and technology: Reframing plant research to serve global food security", **online**, 2021 ISH meeting.

Co-organiser of "Responsible Plant Data Linkage" International Seminar Series, **online**, University of Exeter & Alan Turing Institute, March 5-26 (with Hugh Williamson). <https://datastudies.eu/events/55-towards-responsible-plant-data-linkage-march-2021> Videos: <https://datastudies.eu/events/55-towards-responsible-plant-data-linkage-march-2021> .

Programme Committee for 10th International Conference on Data Science, Technology and Applications (DATA 2021: <http://www.dataconference.org>).

## **2020**

Co-organiser of Thematic Session "Plant Data Semantics and Food Security: Incorporating Local Imperatives into FAIR Data Linkage Tools" at International FAIR Convergence Symposium, **Paris**, December 1-4 (with Hugh Williamson, online event).

Book launch Data Journeys in the Sciences, University of **Exeter**, July 3 (online event).

Programme Committee for the Biennial Meeting of the Society for the Philosophy of Science in Practice. **Madison State University**, July 7-10. *CANCELLED due to pandemic*

Co-organiser of Thematic Session "Plant data science between policy and technology: Reframing plant research to serve global food security", 2020 Meeting of the Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE), **Madison State University**, July 6-8 (with Hugh Williamson). *CANCELLED due to pandemic*

## **2019**

Co-organiser of "AI between Plant and Agricultural Science: Green Paths towards Environmental Intelligence" Conference, **Alan Turing Institute**, London, December 16 (with Hugh Williamson).

Programme committee for second PhilBioinMed conference in **Bordeaux**, October 14-18.

Programme committee for biennial meeting of the European Philosophy of Science Association 2019, **Geneva**, September.

Programme committee for the Congress for Logic, Methodology and Philosophy of Science 2019, **Prague**, August 5-10 (responsible for the section "Philosophy of Emerging Sciences").

Co-organiser of international workshop on "Animal Research Unbound", **Exeter**, July 15-17 (with Rachel Ankeny, Gail Davies and Rob Kirk).

Co-organiser of thematic double session "Organism Names In and Out of Biology", Biennial Meeting of the International Society of the History, Philosophy and Social Studies of Biology, **Oslo**, July 9-12 (with Beckett Sterner).

Co-organiser of "Values in HPS", 12<sup>th</sup> meeting of the UK Network of Integrated HPS, **Exeter**, June 20-21 (with Ric Sims, Adrian Currie and Kirsten Walsh).

Organiser of Symposium "Big Data", American Association for the Advancement of Science, **Washington DC**, February 14-18 (with Nancy Nersessian).

### **2018**

Co-organiser of thematic symposium "Beyond theory-centric studies of scientific progress: Repertoires in biology", SPSP cognate session of the Philosophy of Science Association meeting in **Seattle**, November 1.

Co-director of European Advanced Seminar in the Philosophy of Biology 2018 on the theme of "Interdisciplinarity in the Life Sciences", Konrad Lorenz Institute, **Austria**, September 10-14 (with Thomas Reydon).

Programme committee for the Biennial Meeting of the Society for the Philosophy of Science in Practice. **Gent**, 29 June – 2 July.

Program committee for East European Network for Philosophy of Science 2018 (EENPS 2018), 20-22 June, **Bratislava**.

Program committee for Models&Simulations 8 Conference (MS8), Columbia, New York, March 15-18.

Co-organiser of the Research Data Alliance EU Science Workshop 2018 "Strategies and tools for data sharing: researchers in dialogue with the Research Data Alliance", Royal Netherlands Academy of Arts and Science, **Amsterdam**, January 17-18.

### **2017**

Final ERC DATA\_SCIENCE Conference "The Epistemology of Data-Intensive Science: Varieties of Data Journeys" (with N. Tempini), **Exeter**, November 2-3.

Symposium on "Trustworthiness, Quality and Value in the Age of Big Data", **Exeter**, October 17 (with UK Statistical Authority).

Deputy Chair of the Local Organising Committee for the European Philosophy of Science Association 2017 meeting, **Exeter**, September 6-9.

Symposium "Data Amalgamation", biennial meeting of the European Philosophy of Science Association (EPSA 2017), **Exeter**, September 6-9.

Symposium "Organisms From Here To There: Exploring the Effects of the Local and of Place on Research with Organisms" (with R. Ankeny, M. Dietrich) within the 25th International Congress of History of Science and Technology, **Rio de Janeiro**, Brazil, 23- 29 July.

Thematic Session "Data Integration in Biology and Biomedicine", ISH biennial meeting, **Sao Paulo**, Brazil, 17-22 July.

International Conference "Critical Studies of Citizen Science in Biomedical Research" (with B. Prainsack, B. Strasser, A. Buyx), Kings College **London**, March 2-3.

International Workshop "Data Journeys in Biomedicine: Data Use, Research Translation and the Management of Infrastructures" (with N.Tempini), **Exeter**, January 12-14.

### **2016**

Symposium "Data in Time: The Epistemology of Historical Data", PSA 2016 (biennial Philosophy of Science Association conference), **Atlanta**, November 3-6. Review of the symposium by Adrian Currie here: <http://www.extinctblog.org/extinct/2016/11/14/the-swamp-zombies-journey-breathing-new-life-into-old-data>

Programme Committee for PSA 2016 (biennial Philosophy of Science Association conference), **Atlanta**, November 3-6.

Track "The Lives and Deaths of Data" (with B. Rappert) for 4S/EASST 2016 (joint conference of the Society for the Social Studies of Science and the European Society for Science and Technology Studies), **Barcelona**, August 31- September 3: the track comprised five sessions for a total of 24 papers.

Programme Committee for Biennial Conference of the Society for the Philosophy of Science in Practice, **Rowan**, NJ, USA, June 17-19.

Organising Committee for Global Young Academy Annual General Meeting 2016 "Building Bridges in Science and Diplomacy", **Eindhoven**, The Netherlands, May 24-29 (in particular, I organised the Open Data and Science Diplomacy Plenary Session)

Egenis/ESRC Workshop "Pacing Science", **Exeter**, May 16-17 (with A. Kelly, L. McGoey, B. Rappert, L. Bezuidenhout).

International Egenis/GARNet Workshop "Integrating Large Data Into Plant Science". **Exeter**, April 21-22 (with R. Bastow, D. Salt and G. Parry).

GYA/Egenis Workshop "Global Access to Open Software: Fostering Uptake", **Exeter**, January 22.

### **2015**

Symposium "Situated Cognition and Scientific Practice", EPSA Biennial Conference, **Duesseldorf**, September 23-26 (with A. Toon).

Thematic Session "Situating Organisms: Perspectives on 20<sup>th</sup> Century Biology", ISHPSSB Biennial Conference, **Montreal**, July 5-10 (with R. Ankeny).

Double Symposium "Data Practices in Biology and Biomedicine", SPSP Biennial Conference, **Aarhus** (DK), June 26-29.

Chair of Programme Committee for Biennial Conference of the Society for Philosophy of Science in Practice, **Aarhus** (DK), June 26-29.

Egenis/Data Studies Workshop "Understanding in Scientific Practice", **Exeter**, February 16 (with A. Toon).

### **2014**

International Exploratory Workshop 'What Is Data-Intensive Science?', **Exeter**, December 17-19.

International Conference 'Dark Data and Knowledge/Value', **Exeter**, December 15-16 (with G Davies, B Rappert and K Sunder Rajan).

Programme Committee for Annual Conference of the Italian Society for Logic and Philosophy of Science (SILFS). **Rome**, June.

### **2013**

International Workshop "The Value of Open Science". **Exeter**, December 12-13.

(with O. Soyer and M. O'Malley) Philosophical Perspectives on Evolutionary Systems Biology. International Expert Workshop, KLI Altenberg, **Austria**, September 5-8.

Roundtable 'Plant Science: Its Role in Biology'. Biannual Meeting of the International Society for the History, Philosophy and Social Studies of Biology, **Montpellier**, July 9-11.

Programme Committee for Biannual Meeting of the Society for the Philosophy of Science in Practice, University of **Toronto**, June 26-28.

(with O. Soyer) International Workshop 'Understanding Evolvability and Robustness'. University of **Exeter**, 18 January.

### **2012**

(with K. Haynes and J. Dupre) Respecting Complexity: New Methods and Concepts for a More Robust Synthetic Biology. International Workshop, **Exeter**, 13-14 December.

(with R. Bastow) Conference: Making Data Accessible to All. **Exeter**, 12-13 July.

(with B. Charnley) Workshop 'Credit in Science'. **Exeter**, 29 May.

Workshop 'On the epistemology of biology'. **Exeter**, 30 March.

(with O. S. Soyer) Workshop "Robustness in Biology and Engineering". **Exeter**, 16 March.

(with B. Charnley) Workshop "Ethical Issues in Agriculture". **Exeter**, 10 February.

### **2011**

Chair of the local organising committee and member of the programme committee for the Biannual Meeting of the Society for the Philosophy of Science in Practice (22-24 June, **Exeter**).

International Conference 'Making Sense of Large Databases: Perspectives Across the Sciences' (20-21 June, **Exeter**).

Teaching panel in Integrated HPS workshop (18-19 April, **Cambridge**).

(with G. Davies and E. Frow) International Workshop 'Making It Big' (17-18 March, **Exeter**).

### **2010**

Workshop 'Mayr's Legacy' (17 September 2010, **Exeter**).

Fifth Integrated HPS Workshop 'What is HPS for?' (28-29 June 2010, **Exeter**).

International Conference 'Data-Driven Research in the Biological and Biomedical Sciences' (15-16 April 2010, **Exeter**).

Workshop 'The Governance of Data Sharing', Egenis, **Exeter** (2 March 2010).

### **2009**

Symposium 'The Epistemic Role of Model Organisms'. Biannual Meeting of the Society for the Philosophy of Science in Practice (June 19 2009, **Minneapolis**).

Member of the programme committee for biannual meeting of European Philosophy of Science Association, **Amsterdam**.

Organiser of weekly Egenis seminar series, University of **Exeter**.

#### **2008**

International Workshop 'Making Small Facts Travel: Labels, Packages and Vehicles' (27-28 March 2008, **LSE**).

#### **2007**

Organiser of weekly 'How Well Do Facts Travel' seminar series, **London** School of Economics.

(with E. Mattila and E. Ramsden) Symposium 'How Do Practices Move Knowledge Around? Insights from 'Facts' Travelling across Disciplinary Domains' (24 August 2007, **Twente**, NL).

Thematic session 'Bio-ontologies: A New Type of Theory in Biology?'. Biannual Meeting of the International Society for the History, Philosophy and Social Studies of Biology [ISHPSSB] (25-29 July 2007, **Exeter**, UK).

#### **2006**

Programme committee for International Conference 'Science and Democracy' (**Ghent**, Belgium, 28-30 September 2006).

Thematic session: 'Scientific Facts: Whose Expertise?' at the International Conference 'Science and Democracy' (**Ghent**, 28-30 September 2006).

(with Pieter Dehon and Jeroen van Bouwel) Expert Workshop 'Science and Social Movements' (27 September 2006, VU **Brussels**).

Symposium 'Modeling and Experimentation in Biology' (23 May 2006, VU **Amsterdam**).

#### **2005**

(with H. de Regt and K. Eigner) International Conference 'Philosophical Perspectives on Scientific Understanding' (24-27 August 2005, VU **Amsterdam**).

#### **2004**

(with S. Ortman) GJSS International Workshop on Interdisciplinarity in the Social Sciences: 'Unity or Pluralism in the Social Sciences?' (24-25 September 2004, **LSE**).

(with faculty committee) Free University Opening Conference for Academic Year 2004-5 (2-3 September 2004, **Mennorode**, NL).

(with T.A.C. Reydon) NVWF Symposium 'Philosophy of Biology in the Netherlands and Belgium' (13 Februari 2004, VU **Amsterdam**; reviewed by Lemmens, P. (2004): 'Biofilosofen bezorgd om de toekomst van hun vak', *Algemeen Nederlands Tijdschrift voor Wijsbegeerte*, 96).

### Presentations and Public Lectures

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#### **2025**

**Keynote**, Niels Bohr Open World Conference, **Copenhagen**, November 19-21: TBA.

Invited seminar, University of Copenhagen, November 21-22: TBC.

**Keynote**, Asia-Pacific Philosophy of Science Association 2025 Biannual Conference in association with the Taiwan Association for Logic, Methodology, Philosophy of Science and Technology (APPSA 2025), **Taipei**, Taiwan, June 17-19: "Empiricism for the 21st Century."

<https://appsa2025taiwan.mystrikingly.com/>

Invited talk, Empirical Ethics Series "Values in Research, Research on Values", Institute of Advanced Studies, **Amsterdam**, May: TBA.

BEMACS Distinguished Lecture, Bocconi University, **Milan**, May: TBA.

[https://www.unibocconi.eu/wps/wcm/connect/bocconi/sitopubblico\\_en/navigation+tree/home/programs/bachelor+of+science/economics+management+and+computer+science/bemacstalks/](https://www.unibocconi.eu/wps/wcm/connect/bocconi/sitopubblico_en/navigation+tree/home/programs/bachelor+of+science/economics+management+and+computer+science/bemacstalks/)

Invited talk, Res Philosophica International Conference "Pragmatism and Scientific Inquiry", **St Louis Missouri**, April 25-26: "Contrasting Visions of Inquiry in an Open Society"

**Keynote**, **German Society for the Philosophy of Science**, March: TBA.

Invited seminar on Data Models, Universidad Complutense **Madrid**, March: TBC.

**Keynote**, International Conference "The Future of Knowledge and Democracy: Navigating the Rise of Large Language Models". **Prague University of Economics and Business**, 7-8 February.  
Invited seminar, **LMU** Department of Philosophy, Munich, January 29.  
Invited seminar, University of **Aachen**, January 22.

## 2024

**Keynote**, Munin Conference on Scholarly Publishing, Tromsø, **Norway**, November 26-28: "Human-Centric Open Science: Shifting Practices and Social Significance for Scholarly Publishing"

Organiser and discussion lead, Workshop on "Mechanisms for Transdisciplinary Co-Production", Munin Conference on Scholarly Publishing, Tromsø, **Norway**, November 26-28 (with Stefano Rimini).

Invited talk, International Workshop 'Flora in Focus: Tracing the Roots of Plants in History, Philosophy & Society', Ruhr University **Bochum**, 28-29 November (with Hugh Williamson, presenting): "When more knowledge is less power: Extractive epistemologies, data-intensive crop science and the history of cassava research"

**Keynote**, Workshop "Epistemic Foundations and Limitations of Statistics and Science - Explaining the replication crisis?", Department of Statistics, LMU, Munich, November 22.

Invited webinar, Ethics of AI series, November: "Open Science, Data Sharing and AI: A Philosophical Perspective".

Contributed talk at PSA 2024, **New Orleans**, November 17-19: "Not all research environments are created equal: Structural epistemic injustice in low-resourced scientific settings"

**Keynote**, Trust in Philosophy and Science Centre (TIPS), Cà Foscari, **Venice**, November 4: "Engaged Empirical Inquiry in the Age of AI: The Question of Research Environments" (follow from EJPS introduction + papers + PSA paper on inequity + book empiricism)

Invited main speaker, Public Symposium "Can AI Be Responsible?", Technical University of **Munich**, October 30.

Invited panelist, Conference "The Future of Philosophy of Science", University of **Minnesota**, Minneapolis, October 17-19.

**Keynote**, PhilinBioMed 2024, University of **Bielefeld**, October 2: "Towards Engaged Empirical Inquiry: The Role of Philosophy of Science".

Launch of Report "Data Management at the Crop Research Institute", Crop Research Institute, **Ghana** (online), September TBD.

**Keynote**, 3rd International Conference on the Ethics of Artificial Intelligence, University of Azores (online), September 19-20: "The Challenges of Convenience AI for Biomedical Research and Healthcare"

Invited talk, Research Colloquium in Science Studies, **ETH Zürich**, Switzerland, September 18: "Engaged empiricism and the challenge of open research". <https://wiss.ethz.ch/en/teaching/research-colloquium.html>

Invited talk, LMU & MPS Open Science Summer School, **Munich**, September 11: "Inclusive Open Science: Focusing on Discrimination" <https://osip.mpd.lmpg.de/lmu-mpg-open-science-summer-school-2024/public-lectures/>

Firestarter Remarks, "The Knowledge Augmentation Initiative, Expert Conversation Series: The Evolution of Evidence in the Age of AI and What Does It Mean for Decision-Making", Geneva Science and Diplomacy Anticipator Foundation (GESDA), Hotel Intercontinental, **Geneva**, 10 September: "The Shifting Weight of Evidence in the Age of AI"

**Keynote**, EuroScience Open Forum 2024 (#ESOF2024), Katowice, **Poland**, June 13: "The Multiple Lives of Excellence: Diversifying Open Science" <https://www.esof.eu/> (pre-recorded speech with live Q&A).

Invited panelist, Harvard Data Science Review 5th Anniversary Celebration, Session "Amid Advancement, Apprehension, & Ambivalence: AI in the Human Ecosystem", **Harvard University**, Boston, June 13. [https://datascience.harvard.edu/calendar\\_event/ai-data-science-integrating-artificial-human-ecosystems/](https://datascience.harvard.edu/calendar_event/ai-data-science-integrating-artificial-human-ecosystems/); Video: [https://www.youtube.com/watch?v=SyNZU5NqI40&list=PLCQO8R6Z\\_izILa\\_rf0MogkpVHCKRjtFa6&index=3](https://www.youtube.com/watch?v=SyNZU5NqI40&list=PLCQO8R6Z_izILa_rf0MogkpVHCKRjtFa6&index=3)

Invited talk, **PhenoHarmonIS2024** "Agriosemantics in the Age of Artificial Intelligence", 27-30 May, **Montpellier** France: "Responsible Plant Data Linkage: Towards Process-Sensitive Naming" (with Hugh Williamson, presenting). <https://www.hdiqitaq.fr/evenements/phenoharmonis-workshop-2024>

**Keynote**, International Symposium "Back to the Fundamentals of Basic Research: Reproducibility, Transparency and Reliability", University of **Bologna**, May 20: "Reproducible, Reliable and Responsible Research: How Open Science Can Help" <https://eventi.unibo.it/fundamentals-of-research/programme-of-reliability-transparency-and-reproducibility>

Invited panelist, Public Debate "Intelligenza Ambientale: La Tecnologia Puo' Salvare il Pianeta?" (Environmental intelligence: Can technology save the planet?), **Modena**, May 16. <https://www.pianeta.org/category/intelligenza-artificiale/>

Contributed talks, Biennial Conference of the Society for the Philosophy of Science in Practice (SPSP 2024), **University of South Carolina**, May 16-19:

"Model systems across the lab and the field: Organismal samples" (with Emma Cavazzoni, presenting);

"The Future of the Model Organism Repertoire" (with Rachel Ankeny, presenting);

"Hyperspecialisation of stem cell biology and its downside: Three case studies" (with Yoshinari Yoshida, presenting).

Game lead, Play Festival in **Modena**, Italy, May 17: The Research Game (session at national boardgames festival) <https://www.play-modena.it/2024/programma/il-gioco-della-ricerca-the-research-game-131/>

Introduction and chair, Egenis Conference "Understanding Life in a Changing Planet", **Exeter**, April 17-19. <https://www.exeter.ac.uk/research/centres/egenis/conference/>

Panelist, Egenis Conference, **Exeter**, April 17-19: "Automation in Research: Prospects and Challenges"

**Keynote**, Open Science Conference, Belgian Presidency of the European Union, **Brussels**, 16 April: "Human-Centric Open Science". <https://belgian-presidency.consilium.europa.eu/en/events/the-european-open-science-cloud-eosc-and-national-regional-open-science-policy/>; <https://eosc.eu/events/national-tripartite-event-belgium/>

**Keynote**, Multi-Stakeholder Workshop "New Directions for Global Activities in Data Ethics", Technical University of **Munich**, 9 April: "Why Ethical Data in the Age of XAI?" <https://ethicaldatainitiative.org/wp-content/uploads/2024/03/MULTI.pdf>; Video of the talk: <https://www.youtube.com/watch?v=-6GjEreL3nA>

Invited panelist, Agile Rabbit Panel "How Safe is Artificial Intelligence? AI and Security", Phoenix Centre, **Exeter**, March 26. <https://www.agile-rabbit.com/event/how-safe-is-artificial-intelligence/>

**Keynote**, "Model Organisms: Materiality, History and Politics", International Conference, Institute for Cultural Inquiry (ICI), Berlin, March 21-22: "The Future of the Model Organism Repertoire" (with R. A. Ankeny). <https://www.ici-berlin.org/events/model-organisms-materiality-history-and-politics/> Video: <https://www.ici-berlin.org/events/sabina-leonelli/>

**Keynote**, Ethics of Science Conference, **Hannover**, March 14-15 (online): "Open Science and the Ethics of Research: A Troubled Relationship".

Invited seminar, Events series on Research Culture, Centre for Research in the Arts, Social Sciences and Humanities (CRASSH), University of **Cambridge**, March 12: "Towards Equitable and Cross-Disciplinary Open Science: A Philosophical Analysis" (online) <https://www.crassh.cam.ac.uk/events/41416/#description>

Invited seminar, Center for Science and Philosophy, University of **Bristol**, February 28: "A Reformed Empiricism for 21<sup>st</sup> Century Research".

Invited talk, Conference "#BlueHumanities: History, philosophy and social studies of the marine sciences", Stazione Zoologica di **Napoli**, February 16: "La Storia, Filosofia e Studi Sociali Come Complemento alle Scienze Marine"

Invited speaker and scribe, Lorenz Workshop "Facts, Fakes and Fiction: An Interdisciplinary Workshop", Snellius, **Leiden**, February 5-9: "Introductory Remarks: Science for the Public Good?"; "Scientific Quality Criteria: Why the Fuss?" <https://www.lorenzcenter.nl/fact-fake-and-fiction.html>

Invited Speaker at Virtual Analytic Exchange, Office of Analytic Outreach in the **Bureau of Intelligence & Research (INR)** at the **U.S. Department of State**, January 31: "Biological Data Journeys and Governance" (>140 attendees)

Field Code Changed

Invited Office Hour for Philosophy of Science Association, online, 26 January: "Philosophy of biology and data science".

Invited Panelist at **Webinar Plantae**, 26 January: "The Role of AI in Plant Science" (>600 attendees) <https://plantae.org/plantaepresents-artificial-intelligence-and-machine-learning-in-plant-science/>

Public Dialogue with Edward Humpherson, UK National Statistics Regulator, University of **Exeter**, January 15: "Data Science and Statistics for the Public Good?"

Invited talk, Evidence-Gathering Expert Workshop "Successful and timely uptake of Artificial Intelligence in science in the EU", **European Commission's Scientific Advice Mechanism (SAM)**, **Brussels**, January 10: "What is responsible and timely AI uptake in science in the EU?".

## 2023

Invited talk, Evidence-Gathering Expert Workshop "Successful and timely uptake of Artificial Intelligence in science in the EU", **European Commission's Scientific Advice Mechanism (SAM)**, December 7: "Changing research environments in the context of AI and open science"

Invited talk, University of **Bochum**, 24 November: "Extractive epistemologies and the sustainability of data environments".

Invited talk, University of **Milan**, 22 November: "Data regimes in world-making sciences: The case of economics" (online).

Invited talk, Automation Cultures Symposium, University of Western Australia, **Perth**, November 17-19: "Selecting a Chassis in Synthetic Biology: The Challenges of and Lessons Learned from Model Organisms" (with Rachel Ankeny, presenting) [https://automationcultures.com/?page\\_id=190](https://automationcultures.com/?page_id=190)

Invited talk, Royal Institute for Philosophy Series, University of **Oxford**, 15 November: "Empiricism for 21<sup>st</sup> Century Research".

**Keynote**, "Science for Policy – Challenges and Opportunities" Conference, Permanent Representation of Estonia to the EU, **Brussels**, November 8: "Open Science for Policy"

Invited panelist, "Panel Discussion: Citizen science as a way towards patient-oriented research", Conference **Open Innovation in Life Sciences**, October 26-27, **Zurich** and online: <https://oils23.b2match.io/>

Invited visit, Italian Big Data and Quantum Computing Pole, **Bologna**, October 23-25.

**Keynote**, Launch event of the Regional Digital Innovation Hub **ER2Digit**, **Bologna**, 19 October: "Aprire il Digitale per il Bene Comune" ("Opening up the Digital for the Common Good"). <https://www.er2digit.it/eventi/save-date-emilia-romagna-ecosistema-regionale-di-innovazione-digitale>

Invited panelist, "Future-Proofing the Code of Practice for Statistics: Data Ethics and AI", UK Office for National Statistics Regulation, online event, October 18: "Data Ethics and AI: Challenges to Statistical Practice" URL: <https://www.eventbrite.co.uk/e/futureproofing-the-code-of-practice-for-statistics-data-ethics-and-ai-tickets-711099125627?aff=oddtcreator> ;

Invited talk, Symposium "Ocean and Us", University of **Edinburgh** (online), 11 October: "Ocean data governance and the challenge of fair exchange in marine research".

Invited Seminar, CLIMASAT conference, **Barcelona**, October 6: "Open or Closed? Reflections on Data Circulation Across Diverse Research Environments"

Invited seminar, Hellenic Agronomic Institute, Chania, **Crete**, October 3: TBC.

Invited talk, Department of Anthropology, **Leiden** University, 28 September: "Open Science and Ethnographic Methods"

**Keynote**, STI2023 The 27<sup>th</sup> International Conference on Science, Technology and Innovation Indicators, University of **Leiden**, September 27-28: "Telling Research Like It Is: Openness, Transparency and the Quest for Trustworthy Assessment"

Contributed talk, "Il Ritorno del Sociale: Quarto Convegno Italiano di Antropologia Culturale", **Rome** La Sapienza, September 22: "Which Integration for Health? Comparing Epidemiological Approaches" (with Stefano Canali, presenting). <https://www.siacantropologia.it/prodotti/il-ritorno-del-sociale-quarto-convegno-nazionale-siac-3/>

Contributed talk, EPSA23 **Belgrade**, September 21: "Using Ecological Niche Theories to Understand Research Environments" (with Rose Trappes). <https://philsci.eu/EPSA23/Programme>

Contributed talk, EPSA23 **Belgrade**, September 22: "Research in the Multiplex: When Scientific Practice Inhabits Multiple Research Environments" (with Rose Trappes). <https://philsci.eu/EPSA23/Programme>

Invited talk, International Conference on Open and FAIR Data Ecosystem: Principles, Policies, and Platforms, **India**, September 11-13: "The Importance of Data Ethics: Introducing the Ethical Data Initiative" (with Suchith Anand, presenting, and Kathryn Bailey).  
<https://www.pkc.org.in/openfairdataconf/>

Invited lecture, Methods conference, University of **Exeter**, September 6: "How to Design 'Philosophy of Science in Practice' Research?" (with Rachel Ankeny).

**Keynote**, Symposium "Open to Complexity: Symposium on Open Science in the Social Sciences and Humanities", University of **Tilburg**, 5 September: "Telling Research Like It Is? Openness, Transparency and the Potential of Social Science and Humanities as Models of Best Practice"  
<https://www.tilburguniversity.edu/current/events/open-complexity>

Invited talk, Department of Philosophy, University of **Tilburg**, 4 September: "Empiricism for 21<sup>st</sup> Century Research".

Invited seminar, Crop Research Institute, CSIR, **Ghana**, August 29: "Open Science, Data Linkage and Cassava Research".

Invited panelist, "ChatGPT and the Future of Society", IDSAI Panel Discussion, University of **Exeter**, July 18. <https://www.exeter.ac.uk/news/events/details/index.php?event=13086>

Contributed talk, ISHPSSB 2023 Symposium "Coordination In and Beyond the Lab", University of **Toronto**, Canada, July 12: "Themes and variations in the 'precision' sciences: On the relation between regimes and repertoires" (with Rachel Ankeny).

Contributed talk, ISHPSSB 2023 Symposium "Conceptualising Environments in and for Research", University of **Toronto**, Canada, July 13: "What can be learnt about research environments from niche concepts?" (with Rose Trappes)

Invited plenary chair and organiser, Session "Creating, communicating and evaluating science in the 21<sup>st</sup> century", **BSPS Annual Conference 2023**, University of **Bristol**, July 7.  
<https://www.thebsps.org/wp-content/uploads/2022/12/BSPS2023v8.pdf>

Invited lecture, **Society for Experimental Biology Centenary Conference 2023**, Session "Big Data in Biology" University of **Edinburgh**, July 6: "Philosophical perspectives on data-intensive pest-plant interaction studies across the lab and the field" (with Emma Cavazzoni, presenting).  
<https://www.sebiology.org/events/seb-centenary-conference-2023/sessions/cell.html>

**Keynote**, "PSI2023: Current Debates in Philosophy of Science", First Annual Conference of the PhilSci India group, Azim Premji University, **Bengaluru**, June 21-23: "Rethinking Empiricism for 21<sup>st</sup> Century Research". <https://www.philsciindia.com/apply-psi23>

Public discussion, Giunchiglia Community Centre, **Nonantola**, June 7: "Big Data: Cosa Sono?" (with Emma Cavazzoni). [https://www.facebook.com/watch/live/?ref=watch\\_permalink&v=588480403419023](https://www.facebook.com/watch/live/?ref=watch_permalink&v=588480403419023)

Invited talk, virtual conference on Global Health Data, University of **Edinburgh**, June 2: "Data Actionability *versus* Accountability? An Avoidable Trade-Off" (with N. Sheehan)

Invited lecture, **Science Europe Working Group for Open Science and Research Culture**, Brussels, May 10: "Fostering Cultures of Open Science"

Invited Introductory Remarks, 'The Reproducibility Crisis for Machine Learning-Based Science', **Royal Society Virtual Seminar**, April 27: "The Many Faces of Reproducibility"

**Keynote**, Precision Toxicology Consortium, University of Birmingham, April 25-26: "Precision science across domains". <https://precisiontox.org/project/>

Invited lecture, Launch of the Exeter Health Data Analytics Network, University of Exeter, 24 April: "Is data science transforming health research?"

Invited panelist, Public Debate "Can We Trust Science?", Agile Rabbit, Phoenix Centre **Exeter**, March 30.

Introduction, PHIL\_OS Conference, **Exeter** Central Library, March 30.  
<http://www.exeter.ac.uk/news/events/details/index.php?event=12681>

Contributed talk, Workshop "Community Engagement as Scientific Practice", **Exeter**, March 28: "Turning Prospecting into Participation: Data Sharing and Inequity within Scientific Knowledge Production"  
<http://www.exeter.ac.uk/news/events/details/index.php?event=12716>

Invited opening, Book Presentation "Towards Responsible Plant Data Linkage", University of **Trento**, March 27 (online).

Contributed talk, Workshop "Perspectives on Scientific Practice", University of **Exeter**, March 14: "Niche-based theories of scientific practice: A scoping survey" (with Rose Trappes)  
<http://www.exeter.ac.uk/news/events/details/index.php?event=12723>



Invited lecture at "Global Engagement on Human Germline Genome Editing" workshop, **Senate House**, London, March 9: "From Portal to Analysis: Data Governance Models for SARS-COV-2 Sequencing Data" (with Nathanael Sheehan, presenter).

Invited talk, 25-year Anniversary Celebration of *Current Issues in Education*, online, March 3: "The Pros and Cons of Journal Editing for a PhD Student: Reflections on My Own Experiences"

Invited webinar for the Collaborative Research Centre "Virtual Lifeworlds", Seminar Series "Across the Layers: Scientific Knowledge Production, Planetary Resources, and Data Centres", University of **Bochum**, March 3: "The conceptual architecture of data sustainability: Examples from crop science" [https://rustlab.ruhr-uni-bochum.de/across\\_layers/](https://rustlab.ruhr-uni-bochum.de/across_layers/)

Invited talk, HALY-ID Conference, University of **Perugia**, February 13-14: "I viaggi dei dati e le sfide della Scienza Aperta: Un'introduzione al progetto PHIL\_OS" <https://www.haly-id.eu/workshop-2023/>

Invited lecture, HPS Department Seminar Series "50 Years of HPS", University of **Cambridge**, January 19: "Against Presence Empiricism" <https://www.hps.cam.ac.uk/news-events/seminars-reading-groups/departamental>

## 2022

Invited lecture, Conference "Objectivité, Big Data et Médecine / Objectivité Graphique en Sciences", Université de **Strasbourg**, December 14-15: "How do Big Data affect understandings of biomedical evidence?" (remote)

Invited Roundtable Speaker "Openness in Science from an Intersectional Perspective", Series on "Transnational feminist dialogues in science and technology", Margherita von Brentano Centre for Gender Studies, **Berlin**, December 14 (online). <https://www.mvbz.fu-berlin.de/forschung/veranstaltungsreihen/transnational-feminist-dialogues/tfd-on-science-technology-and-society/index.html> ; <https://www.youtube.com/watch?v=iS4xlz-4clw&list=PLqiyv4YjL2Yla1sj70CdTZzfST4G0vQoI>

Invited seminar, History and Philosophy of Biology Teaching Lab, University of **Bahia, Brasil**, November 22: "Beyond 'indigenous knowledge': Situated data governance as an answer to resourcist understandings of biodiversity"

Contributed talk, PhiInBioMed, **Pittsburgh**, November 14-15: "COVID-19 Data Representativeness versus Actionability: An Avoidable Trade-Off?" (with Nathanael Sheehan). <https://www.philinbiomed.org/event/philinbiomed-at-psa-pittsburgh/>

Contributed talk, Symposium "Scientific Medicine", **PSA 2022**, November 10-13: "Is Data Science Transforming Medicine? The Case of COVID-19" <https://psa2022.dryfta.com/program-schedule>

**Keynote**, **BMBF Conference on Quantitative Science Studies**, online event, 4 November: "Is Open Science compatible with quantitative research assessments?"

Invited Roundtable Speaker, "The Forest Multiple" Symposium, University of **Cambridge**, 27 October: "The Challenges of Datafying Plants". <https://smartforests.net/the-forest-multiple> ; podcast on <https://atlas.smartforests.net/en/radio/>

**Keynote**, International Conference "Beyond Quantity", **Paris**, October 21-22: "The Qualitative Side of Automation: Lessons from the Reproducibility Debate". <https://howisaichangingsscience.eu/conference-beyond-quantity/>

Invited talk, Les jeudis de l'histoire et de la philosophie de la science, **Paris**, October 20: "Globalising local knowledge beyond extractive epistemologies: Lessons from crop data science" <https://www.ens.psl.eu/agenda/les-jeudis-de-l-histoire-et-de-la-philosophie-des-sciences-jhps-2022-2023/2022-09-22t160000>

Invited talk, International Workshop "Scientific Knowledge Across Jurisdictions: Traceability, Access and Benefit Sharing (ABS), and Scientific Policy in a Multicultural World", University of **Edinburgh**, October 11: "Whither transnational science? Moving research data across communities and borders" <https://www.skaje.uk/events/>

Invited talk, Technische Universität **Munich**, October 5: "Datafication, Openness and Overwhelming Inequity: Reframing Scientific Discovery in the 21<sup>st</sup> Century".

**Keynote**, International Conference "Engaging Ethics and Epistemology of Science" (EES 2022), University of **Hannover**, September 28-29: "The Ethics of Empiricism" <https://grk2073.org/eesconference2022/schedule/>

Invited talk, Workshop "Science and its Others: Histories of ethno-science from the 18th century to the present-day", University of **Cambridge**, September 19-20: "Globalising local plant knowledge: Cassava research in 21st century crop science".

Invited Enabling Openness in Australian Stem Cell Research (EOAR) seminar, University of **Adelaide**, September 14: "Big and Open Data: Mind the Gaps". <https://www.eoar.com.au/seminars>

Invited talk, European Advanced School for Philosophy of the Life Sciences, University of **Bordeaux**, September 5-9: "Handling biological, social and scientific complexity: Reflections on crop science"

**Keynote & Anchor Teacher, WTM Summer School 2022 "Opening Up Diversity"**, August 22-26: Five lectures delivered under the school theme. <https://www.wtmc.eu/events/wtmc-phd-summer-school-22-26-august-2022/>

Invited talk, Joint PHIL\_OS/ISEED Roundtable "Good Science Across Diversity of Research Environments", **Università Cà Foscari**, Venice, July 7: "Citizen Science, Openness and the Diversity of Research Environments"

Contributed talk, **Society for the Philosophy of Science in Practice** 2021, University of Ghent, July 2-4: "Openness as Disruption: Epistemic Injustice in Crop Data Linkage"

Invited talk, University of **Hannover**, 17-18 June: "Does Open Science Need Philosophy?"

Invited talk, Technische Universität **Berlin**, 13 June: "Data Absence and the Failures of Big Data Empiricism"

Invited talk, **International Conference "The Philosophy of Data Science: Data Science Governance"**, Centre for Human and Machine Intelligence, University of **Frankfurt**, 10-11 June: "Governing Data Circulation: An Underrated Concern for Scientific Inquiry"  
[https://dgpil.de/veranstaltungen/veranstaltungsankuendigungen/lesen/?tx\\_ttnews%5Byear%5D=2022&tx\\_ttnews%5Bmonth%5D=01&tx\\_ttnews%5Bday%5D=31&tx\\_ttnews%5Btt\\_news%5D=5719&cHash=af6346c2ba32c4f57c69c737eaa0d02a](https://dgpil.de/veranstaltungen/veranstaltungsankuendigungen/lesen/?tx_ttnews%5Byear%5D=2022&tx_ttnews%5Bmonth%5D=01&tx_ttnews%5Bday%5D=31&tx_ttnews%5Btt_news%5D=5719&cHash=af6346c2ba32c4f57c69c737eaa0d02a)

**Keynote**, Reproducibility Conference, **Belgian Royal Academy of Science**, Brussels, June 1: "The Many Faces of Reproducibility". <https://www.youtube.com/watch?v=dxIVk-4Llu8> ; ; <https://kvab.be/en/events/final-symposium-reproducibility-and-replicability-science>

Invited talk, Department of Philosophy, **Freie Universität Berlin**, 18 May: "Datafication and Scientific Discovery: From Presence to Absence"

**Keynote, STS Conference Graz 2022** "Critical Issues in Science, Technology and Society Studies", May 2-4: "Open Science Beyond 'Sharing'" <https://sts-conference.isds.tugraz.at/event/15/> ; video: <https://stsconf.tugraz.at/wp-content/uploads/2022/05/STS2022-Keynote-3.m4v>

Invited seminar, **Digital Humanities Centre Series**, Freie Universität Berlin, April 27: "Datafication and the Practice of Discovery" <https://www.fu-berlin.de/sites/dhc/programme/termine/dhc-leonelli.html> (cancelled due to surgery)

Invited lecture, Seminar Series "Taming the Machines", Research Group "Ethics in IT", University of **Hamburg**, April 6: "Trouble in the (big) data house" <https://www.inf.uni-hamburg.de/en/inst/ab/eit/taming-the-machines/summer22.html>

Invited seminar, Michigan Institute for Data Science (MIDAS), University of **Michigan**, April 4: "Beyond Access: Framing the Use of Big and Open Data for Research" <https://midas.umich.edu/calendar/?trumbaEmbed=view%3Devent%26eventid%3D157180820>

Invited seminar, **Deutsche Zentrum für Hochschul- und Wissenschaftsforschung (DZHW)**, 30 March: "What is the Trouble with Open Science?" <https://www.dzhw.eu/veranstaltungen/kolloquien/index.html>

**Keynote**, International Conference "**Development Counts: Data Skills for International Development Careers**", 16 March: "Big and open data for development: Mind the gaps" <https://uniofglos.blog/dataskills/2022/02/18/registration-for-development-counts-dissemination-event-on-16th-march-2022-now-open/>

Invited seminar, Colloquium Series of the **Wissenschaftskolleg zu Berlin**, March 15: "Wither Open Science?" <https://www.wiko-berlin.de/en/events/calendar-of-events/2022-03-15-whither-open-science>

Invited talk, **Westminster Higher Education Forum Policy Conference** 'Next steps for the Research Excellence Framework', March 11: "Open Science from Theory to Practice". <https://www.westminsterforumprojects.co.uk/conference/WHEF-REF-22>

Invited speaker, **DivSeek Annual General Meeting**, January 19: "Globalising Plant Knowledge through Transnational Data Management" (with Hugh Williamson, presenting).  
<https://divseekintl.org/divseek-2022-agm-and-roundtable/>

Panelist on The Vision for Data Spaces, High Level Panel on Future Data Space, **FAIR Digital Objects Forum**, January 19. <http://Fairdo.org> (400 audience)

Invited speaker, **KLI seminar** "Seeing Through COVID-19", Austria (remote), January 13: "Responses to the pandemic within history and philosophy of biology".

## 2021

Invited talk, Joint Centre for Environmental Intelligence Conference, University of **Exeter**, December 16-17: "Steps Towards Intelligent Openness"

Invited talk, **GEOS Seminar**, University of **Wageningen**, 9 December: "The Dilemmas of Openness: Sharing Knowledge Across Research Environments"

Invited speaker, Workshop on Interdisciplinarity in History and Philosophy of Science, University of **Taipei**, Taiwan, December 8: "The Future of Interdisciplinary Philosophy".

**Keynote**, Conference on Statistics, Data and Scientific Integrity, **Flemish Interuniversity Council**, VUB Brussels, 29 November: "Research Integrity, Data Quality and Fair FAIR Data"

<https://www.vub.be/en/weekvandeethiek#programme-and-registration-ethics-week-2021>

Invited panelist, High Level Workshop "Research Culture in the ERA: Ensuring the Attractiveness of the Research Sector for Current and Future Generations", **Science Europe, Luxembourg**, 24 November: "Diversity and its Impact on Research Cultures"

**Keynote**, 1<sup>st</sup> International **TRIPLE Conference** "Empowering Discovery in Open Social Science and Humanities", **Polish Academy of Sciences**, 22 November: "Openness in the social sciences and humanities: lessons to and from the natural sciences" <https://project.gotriple.eu/triple-international-conference-2021/>

Invited panelist, History of Science Society Conference (**HSS 2021**), Panel "The Future of Open Access in the History of Science, Technology and Society", November 19.

<https://hssonline.org/meetings/2021-hss-annual-meeting/#program>

Invited panelist, Three Cultures Forum "Living with Diversity", **Wissenschaftskolleg zu Berlin**, November 18: "Diversity in Research"

Contributed talk, Symposium "Opening Up Open Science", **Philosophy of Science Association 2020** meeting in **Baltimore**, November 15: "Open Science and Epistemic Diversity: Friends or Foes?" (postponed from 2020) <https://psa2020.philsci.org/program-schedule/sponsor-lounge>

Invited seminar, **College de France**, November 12: "COVID research in a transnational perspective" <https://republique-des-savoirs.fr/events/event/seminaire-les-temps-de-la-pandemie-2021-2022/>

Invited talk at VolkswagenStiftung Symposium for Breakthroughs in the Social Science and Humanities (as a Winner in that category), **Falling Walls Conference 2021**, November 8: "Breaking Walls for Understanding Data" <https://falling-walls.com/discover/videos/data-ethics-a-relational-approach-to-data/>

Invited talk at Informal Advisory Group on Digital Sequence Information informing negotiations on the Global Biodiversity Framework (Convention for Biological Diversity **COP 15**), October 20: "Intelligent Data Sharing"

Invited Panelist for **Ada Lovelace Institute** Webinar Series "Data for the Public Good", October 14: "Lessons Learnt from COVID-19: How should data usage during the pandemic shape the future?" <https://www.adalovelaceinstitute.org/event/lessons-learned-from-covid-19-how-should-data-usage-during-the-pandemic-shape-the-future/> ; <https://www.youtube.com/watch?v=kb83qe3VDL4>

Invited Turing Seminar, **Alan Turing Institute**, 11 October: "The Evidence Base of Artificial Intelligence: Supporting Data Fairness to Enhance Research Quality"

Invited speaker, "Data Democratization", **Data Sharing Seminar Series for Societies**, 1 October. <https://zenodo.org/communities/data-sharing-seminar-series-for-societies/?page=1&size=20> ; video: <https://www.youtube.com/watch?v=OTNEQudyZuc&t=3s>

Invited seminar, History and Philosophy of Science Department at **University of Indiana Bloomington**, September 30: "Can – and should – philosophy help to "open" science?"

**Keynote**, Annual Conference (Jahresversammlung) of the **Leopoldina** "Biodiversität und die Zukunft der Vielfalt", German National Academy of Sciences, Halle, September 23-24: "Reframing Biodiversity from the Data Up: Challenges from Plant Data Semantics" (postponed from 2020)

Invited talk, Symposium "Science Policies, Research Funding, and the Future of the University," Biennial Conference of the **European Philosophy of Science Association (EPSA 2021)**, Torino, September 18: "Research Excellence".

Invited commentary, Symposium 'Scientific Evidence and Expertise in the COVID-19 Pandemic and Beyond', Biennial Conference of the **European Philosophy of Science Association (EPSA 2021)**, Torino, September 17.

**Keynote**, UK Association for Studies of Innovation, Science and Technology (**AsSIST-UK**) **2021 Conference** "Infrastructures, Institutions and Cultures: New Relations and New Challenges", September 9-10: "The Open Data Challenge: Cultural, Institutional and Infrastructural Dilemmas of Data Sharing"

**Keynote**, Conference "Giornate di Epidemiologia Carlo Corchia", University of **Florence**, September 9: "Open Science"

**Keynote**, **INGSA2021** International Conference 'Building Back Wiser: Knowledge, Policy and Publics in Dialogue', August 30 – September 2. Q&A Plenary with Daniel Sarewitz: "Evidence and Democracy". <https://www.ingsa.org/ingsa2021/>; YouTube recording: <https://www.youtube.com/watch?v=8GuHMF0Fqu4>

Contributed talk, **ISHPSSB** 2021, July 15: "From philosophy of plant data to international science policy.. and back".

**Keynote**, Plenary Session "Open science, data sharing and solidarity: who benefits?", ISHPSSB 2021, July 14.

**Keynote**, Annual meeting of the **British Society for the Philosophy of Science**, July 7: "Data and the Quest for Facts".

**Keynote**, **Joint CEPE/IACAP 2021 Conference: The Philosophy and Ethics of Artificial Intelligence** organised by International Association of Computing and Philosophy and the International Society of Ethics and Information Technology, University of **Hamburg**, July 5: "Pandemic Data Science: What Have We Learnt?"

Contributed talk, Conference Historical Perspectives on the Consultative Group on International Agricultural Research (**CGIAR**), University of **Cambridge**, June 28: "Describing Crops in the CGIAR Era" (with Helen Curry). <https://www.cultivation.hps.cam.ac.uk/CGIAR-histories>

**Keynote**, **Research Ethics Conference**, Exeter, June 25: "Where Is Ethics in Research Practice?" <https://www.researchethicsconference.co.uk/>

Invited panelist, Panel on Open Access, Launch Event of "Basic Research Programme", **National Science Centre, Poland**, June 17.

Invited speaker, Data Science & AI Day: Green Futures Conference, **G7 Meeting** in Cornwall, June 11: "What do the data say about... open and responsible science to cope with a changing planet?"

Invited seminar, POLICY AID Final Conference, University of **Copenhagen**, June 4: "Data Linkage in Times of Pan(dem)ic: Towards Socially Robust Interventions"

Invited speaker, Epidemiology Conference, June 3: La Scienza Aperta"

Invited speaker, **Madrid UNED Open Science Café**, June 3: "Plan S and its Impact on Research"

Invited speaker, **Edinburgh Futures Institute Seminar Series**, University of **Edinburgh**, May 27: "Big Data and the Nature of Scientific Inquiry"

Invited speaker, University of **Edinburgh**, 27 May: "Plan S and Open Access in Scientific Inquiry"

Invited speaker, Conference on Agricultural Rights and Open Science, University of **Trento**, May 22: "Aprire I Campi? La Gestione Transnazionale Dei Dati per l'Agricoltura di Precisione" (Opening the fields? The Transnational Governance of Data for Precision Agriculture). <https://webmagazine.unitn.it/evento/cjm/92785/diritto-agroalimentare-e-scienza-aperta>

**IRSA Distinguished Lecture**, Conference "Big Data and Reproducibility", Institute for Research on Statistics and its Applications and Minnesota Centre for the Philosophy of Science, May 6-8: "Reproducing Reproducibility: The Role of Research Environments". Video: [https://www.youtube.com/watch?v=6ZaExW\\_sIec&list=PL7aKYVTGDNONSkkWJ1aJXpHJ4cBtwTqFU&index=5](https://www.youtube.com/watch?v=6ZaExW_sIec&list=PL7aKYVTGDNONSkkWJ1aJXpHJ4cBtwTqFU&index=5)

Contributed talk, Conference "Philosophy of Plant Science", Egenis, **Exeter**, May 5-7: "Process-Sensitive Naming: Crop Descriptors and the Shifting Semantics of Plant (Data) Science". <https://www.youtube.com/watch?v=IjjeJSAI95U&list=PLe8vyktlR0b33ceOITFOiapbJi9G6CdzT&index=30>

Invited speaker, **GODAN Webinar**, April 28: "Making Crop Data Sharing Responsible *and* Reliable: How Social Intelligence Fuels Ethical Data Management Strategies for Precision Agriculture" (with Hugh Williamson) <https://www.godan.info/news/making-crop-data-sharing-responsible-and-reliable>

**Keynote**, **Boston University Graduate Student Philosophy Conference**, April 23: "Where to Go with the Philosophy of Data?"

Invited panelist, **Festival dei Diritti Umani 2021** (Italian Festival of Human Rights) on "Algoritmocrazia" (Algorithmocracy), April 21.

Invited speaker, Symposium "A Critical Analysis of the Scientific Reform Movement" organised by the **Centre for Open Science**, April 20: "The Scientific and Social Implications of Implementing Open Science Policies and Procedures". Programme and video: <https://www.cos.io/services/webinars/symposium-a-critical-analysis-of-the-scientific-reform-movement>

Contributed talk, Conference on Responsible Data Linkage, **Alan Turing Institute & University of Exeter**, March 26: "Responsibility Beyond Ethics and Infrastructures" (with H Williamson) Video: <https://www.youtube.com/watch?v=3RNQE5pf2Ws&list=PLe8vyktiR0b33ceOITFOiapbJl9G6CdzT8&index=27>

Invited talk, Session "Climate Change Mitigation and Adaptation", **AI UK 2021**, March 24: "Making Data Work for the Planet". Video: <https://www.youtube.com/watch?v=mFPHIUPY3VM>

**Keynote**, International Conference "Digital Studies of Digital Science", University of Louvain, March 15-17: "Rethinking HPS through Digital Studies of Science" <https://pencilab.be/events/ds2-2021/> ; Video: <https://www.youtube.com/watch?v=88e1GmkJqhQ>

Invited panelist, Symposium "Data, Society, and Open Science III: Challenges for data management and data-based research", **European Open Science Cloud seminar series**, March 1.

Invited talk, **University of British Columbia**, STS Seminar series, February 24 (online lecture): "Data Science in Times of Pan(dem)ic" Video: [https://zoom.us/rec/play/-3xqZMqKKKymtDFglDrskKVT3uTw8fWfN2gi7Fto3Yb4fTmgLMc\\_oHuOetvJW6hP7l4TIWM7Af7wMxJm.WD\\_GVq0bviWknHcn?startTime=1614198858000&x\\_zm\\_rtaid=rkoJkZ9pQSSrTuxohpUvTA.1616148766293.35af410ff9abba3384f1797e0bd8dc3b8\\_x\\_zm\\_rtaid=719](https://zoom.us/rec/play/-3xqZMqKKKymtDFglDrskKVT3uTw8fWfN2gi7Fto3Yb4fTmgLMc_oHuOetvJW6hP7l4TIWM7Af7wMxJm.WD_GVq0bviWknHcn?startTime=1614198858000&x_zm_rtaid=rkoJkZ9pQSSrTuxohpUvTA.1616148766293.35af410ff9abba3384f1797e0bd8dc3b8_x_zm_rtaid=719)

Invited Panelist, Conversation on Covid and Global Health, Centre for the Study of Developing Societies, **Delhi**, 12 February: "Beyond Global Health? Diasporic Perspectives on Health and Social Justice" (delivered remotely) [https://www.cds.in/beyond\\_global\\_health\\_panel\\_discussion](https://www.cds.in/beyond_global_health_panel_discussion) Video: <https://www.youtube.com/embed/U4DC6AMRzXU>

Invited talk, Seminar series of the Institute for Science in Society of **Radboud University**, January 26: "Reproducibility Rewired: The Dangers of Technical Fixes in Times of Pan(dem)ic"

Invited panelist, Symposium on **Open Access in Philosophy of Science**, January 13 (online seminar): "Why Open Access Matters"

Invited talk, **GCRF Blue Communities Seminar Series**, January 11: "How data governance supports good science" (online seminar, 120 participants)

**2020**

Invited lecture, Conference "**Artificial Intelligence and Agnostic Science**", Sorbonne, **Paris**, December 15: "Are findings from philosophy of big data compatible with views of AI as agnostic science?" (delivered remotely) <https://scai.sorbonne-universite.fr/public/events/view/550617451f1e06ee0093/5>

Invited lecture, Data Ethics Webinar Series, **University of Oregon**, December 9: "Data Science in Times of Pan(dem)ic: From FAIR Data to Fair Data Use" (delivered remotely)

Contributed talk, **International FAIR Convergence Symposium**, Session "Plant Data Semantics and Food Security: Incorporating Local Imperatives into FAIR Data Linkage Tools", Paris, November 30: "FAIR Data and Climate-Adaptive Plant Breeding" (with Hugh Williamson). <https://conference.codata.org/FAIRconvergence2020/sessions/187/> ; <https://web-eur.cvent.com/hub/events/c407330f-1b56-49c8-88c4-f51bd7844811/sessions/e2ff4729-943f-4293-a87b-9ccc5a9620d7>

Invited lecture, Seminar Series Science in Transition, Graduate School in Life Sciences, **University of Utrecht**, November 27: "How (Data) Science Supports Life with COVID-19: or, What We All Need to Slow Down" (delivered remotely)

Invited talk, Royal Institute of Philosophy Lecture, **University of Kent**, November 25: "Processual Empiricism in the Covid-19 Era" (with J. Dupré).

Panelist, **Book Launch** of "Model Organisms", University of **Adelaide**, November 23 (virtual event). <https://universityofadelaide.app.box.com/s/58wvnlwzqmkr60x0w1d4f1a2pyyb77>

Invited talk, **STS Italia Forum** "Pandemia e Interdisciplinarietà", La Sapienza, Roma (virtual attendance), 20 November: "La scienza dei dati di fronte alla pandemia: sfide e priorità" <http://www.stsitalia.org/STS%20Italia%20-%20Webinar%20La%20pandemia%20sfida%20i%20confini%20disciplinari,%2020-11-20.mp4>

**Keynote**, **Society for Computation in Psychology**, virtual annual conference, November 19: "Prospects for the Automation of Research: Reproducibility and Human Agency".

**Keynote panelist**, **Phaidracon 2020**, November 17: "Scrutiny and Repeatability: The Danger of Post-Truth Academia".

Invited speaker, Political Theory Reading Group, University of **Exeter**, November 18: "Covid and the challenge of translationalism"

Invited speaker, Falling Walls Circle Table "The Understanding of the Scientific Method in the 21<sup>st</sup> Century", organised by the European Research Council for the **World Science Forum**, November 5 <https://falling-walls.com/event/circle-table-understanding-the-scientific-method-in-the-21st-century/>; Video of the panel: <https://www.youtube.com/watch?v=IEBaknKY6do>

**Keynote**, Conference "UK-China Tech for Global Good Roundtable: Climate, Clean and Green Tech", **British Embassy in Beijing**, October 28: "AI for the Green Agenda: What Data Landscape Do We Need?" (with Gavin Shaddick)

Contributed talk, Egenis Seminar Series, University of **Exeter**, October 5: "Processual Empiricism in the Covid-19 Era" (with J Dupré).

Invited speaker, **Digital Ethics Forum 2020**, October 2: "Perche' condividere dati sulla salute, e come farlo in maniera responsabile?" (delivered remotely) Video of intervention: <https://www.youtube.com/watch?v=D60ZS-p0Iq&feature=youtu.be>

**Keynote**, **IDC Digital Forum: Data Strategy 2020**, September 29: "Dati, Algoritmi e Società: Più Opportunità o Paure?" (online event)

Contributed talk, Political Ecology Network Conference **POLLEN 2020**, September 23: "Speed, Statistics and Speed: Implications of Focusing Plant Breeding on Genetic Gain" (with Hugh Williamson, presenting). <https://event.pollen2020.exordo.com/presentation/510/p029-g0-speed-statistics-and-seed-implications-of-focusing-plant-breeding-on-genetic-gain>

**Keynote**, **Open-Access-Tage 2020**, Bielefeld, Germany, September 15-17: "Opening the Research Process: From Publications to Data, and Back Again" (delivered remotely)

Invited Mentor for virtual session on "Publishing challenges: Negotiating interdisciplinarity and Open Access", organised by **European Advanced School for the Life Sciences**, September 9.

**Keynote**, Swiss Summer School "Open Data and Open Access", University of **Zurich**, August 28: "Plan S: What It Means for Researchers" (delivered remotely)

Invited speaker, **Synthace industry webinar** "The Metadata Responsibility", 25 August: "Understanding Data Science through Data Journeys" [https://www.synthace.com/about/events/detail/the-metadata-responsibility-webinar/?utm\\_content=137921302&utm\\_medium=social&utm\\_source=twitter&hss\\_channel=tw-742368693917732864](https://www.synthace.com/about/events/detail/the-metadata-responsibility-webinar/?utm_content=137921302&utm_medium=social&utm_source=twitter&hss_channel=tw-742368693917732864)

**Keynote**, Opening Plenary Symposium "Science at the Speed of a Pandemic", 2020 (Virtual) **FORCE11**, Scholarly Communications Institute, August 3. <https://www.force11.org/fsci/2020/plenary-events> Recording and transcript of the session: <https://ucla.zoom.us/rec/play/uZN7db2p-zq3TtPD5QSDV6J6W9W4L66s1ShN-KEKyhy9USUKZif3ZLUQONORy0BNoRmhtNRBzdQWYhfm8?startTime=1596499311000>

Contributed talk, Society for the Philosophy of Science in Practice, **Minnesota State University**, Lansing, July 8-10: "Organisms as Models between Representation and Intervention"

Contributed talk, 2020 Meeting of the Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoISE), Minnesota State University, July 6-8: "Plant data science between policy and technology: Reframing plant research to serve global food security" (cancelled due to COVID)

**Keynote**, Advances in Data Science Conference, University of **Manchester**, June 22-23: "Intelligent Data Linkage and Distributed Semantics for (Big) Data Interpretation" (delivered remotely) Lecture URL: [https://www.youtube.com/watch?time\\_continue=5&v=2qYkdT12etM&feature=emb\\_logo](https://www.youtube.com/watch?time_continue=5&v=2qYkdT12etM&feature=emb_logo)

Invited speaker, "Distanti e connessi: società digitale dopo il COVID", **R2B OnAir 2020** (Research to Business: Salone internazionale della ricerca industriale e della competenza nell'innovazione), June 11. URL: <https://www.rdueb.it/Event/digital-life/>

Invited talk, **The CogX Global Leadership Summit and Festival of AI & Breakthrough Technology 2020**, Session Data Science for Science: "Plant and Agricultural Science", June 11, URL: <https://cogx.co/topics/research-the-long-view/> (with Hugh Williamson)

Invited speaker, "**Calculating Trust**" virtual conversation organised by Department for History and Philosophy of Science, University of **Cambridge**, May 28. URL: <https://www.hps.cam.ac.uk/news-events/seminars-reading-groups/departamental> VIDEO: <https://sms.cam.ac.uk/media/3234026>

**Keynote**, VI ESCo TECH FORUM on "Efficienza Energetica e Sostenibilità – COVID-19, Acceleratore del Cambiamento?", within IOTHINGS WEEK, May 26: "Utilizzo i Big Data come aiuto alla "vita con Covid-19" per migliorare la sostenibilità e l'immagine delle aziende". URL: [http://www.iothingsweek.com/palimpsesto/#26\\_2](http://www.iothingsweek.com/palimpsesto/#26_2) (delivered remotely)

Invited speaker, **Futures Institute Seminar Series**, University of **Edinburgh**, May 28: "Big Data and the Nature of Scientific Inquiry" *postponed due to coronavirus*

Roundtable **STS Approaches to Covid-19**, organised remotely by the Virginia Tech STS Program, 24 April: "Emergency Data Science?" <https://www.facebook.com/VirginiaTechSTS/posts/sts-approaches-to-covid-19-a-roundtable-discussion-the-panel-jenny-reardon-ucsc-s/3706158566123625/>

Invited speaker at **SPRU Freeman Friday Seminars**, University of Sussex, April 24: "Navigating Data Sharing and Inequity within Scientific Knowledge Production" *Postponed due to coronavirus*

Invited Webinar, Webinar Series on Agriculture, **Research Data Alliance (RDA) & Food and Agriculture Organisation (FAO)**, April 9: "Intelligent Plant Data Linkage: A View from History, Philosophy and Social Studies of Science". URL: <https://f1000research.com/slides/9-260> ; <http://aims.fao.org/capacity-development/webinars/rdaigad-webinar-series-intelligent-plant-data>

Invited *Lectio*, **EnergyWay**, April 7: "Looking Ahead, Helping Today: Emergency Data Science"

Invited Webinar on **COVID data modelling** for "History of Science on Call" project of the Max Planck Institute for the History of Science, March 2020: <https://www.mpiwg-berlin.mpg.de/video/history-science-call-sabina-leonelli> (English); <https://www.mpiwg-berlin.mpg.de/video/history-science-call-sabina-leonelli-italian> (Italian)

Invited speaker, "Involved Philosophy Workshop: Data, Trust and Diversity", Tel-Hai College Upper-Galilee, **Israel**, April 1: "Datification as a Tool for Representation" *Postponed due to coronavirus*

Invited speaker, Department of Anthropology, Seminar Series "Human and Non-Human Adaptations to Changing Environments", University of **Oxford**, March 13: "Between Local Communities and International Law: How Ontologies Help Plant Data to Cross Borders" *Postponed due to strike*

Invited speaker at Francis Bacon Conference "Transnational Transactions: Negotiating the Movement of Knowledge Across Borders", **Caltech**, Pasadena, February 19-22: "How Data Cross Borders: Globalising Plant Knowledge through Transnational Data Management"

Invited seminar at Institute for Science and Genetics, **UCLA**, February 18: "What Data Practices Mean for Understanding the Sciences"

Invited speaker for the Inaugural Event of the Exeter X-AI Society, **Exeter**, February 3: "Can AI Be Responsible? The Role of Humans in Automated Systems"

Invited speaker for the International Workshop "Philosophical Issues in Cancer Biology", University of **Bristol**, January 29: "Actionable Data for Precision Oncology: Building Trustworthy Evidence for Diverse Research Spaces".

Invited talk at International Plant and Animal Genome conference (**PAG**) 2020, Workshop on "Challenges and Opportunities in Plant Science Data Management", January 11-15, **San Diego**: "Tracking data linkage for intelligent and responsible reuse" (with and presented by Hugh Williamson). <https://www.intlpag.org/2020/>

Invited talk in "Do we need an historiography of science?" session of the conference Turning the Mirror: From Scientific Pluralism to Pluralism in HPS, University of **Exeter**, January 8-9: "Do we need a philosophical outlook on historiography to do our job?"

## 2019

Introductory talk for "AI between Plant and Agricultural Science: Green Paths towards Environmental Intelligence" Conference, **Alan Turing Institute**, London, December 16.

**Keynote** at **Cidacs** anniversary celebration, Salvador, Bahia, **Brazil**, December 6: "Placing AI at the service of public health: The role of data management and linkage"  
<https://cidacs.bahia.fiocruz.br/?p=6009> ; video available on YouTube.

Invited speaker at Lakatos Award Expert Workshop with Henk W. de Regt, Centre for the Philosophy of Natural and Social Sciences, **LSE**, November 21: "Using organisms as models for life: Performative and social skills for understanding"

Invited speaker at **Sawyer Seminar** "Information Ecosystems: Creating Data (and Absence) From the Quantitative to the Digital Age", Humanities Centre, University of **Pittsburgh**, November 14: "Data In and Out of Information Ecosystems: Lessons from the Study of Data Journeys"

**Keynote** at V Congress of the Italian Association for Open Science (Associazione Italiana per la Scienza Aperta, AISA), University of **Udine**, November 8: "La Scienza Aperta: Dalla Teoria alla Pratica."

**Keynote** at Second Italian Congress on Education and Artificial Intelligence (EDuIA), Dipartimento di Scienza della Formazione, **Roma** Tre, November 7: "Come educare i data scientists a combinare l'AI con intelligenza umana"

Invited panelist at Springer/Wellcome Trust Conference "Better Science through Better Data 2019" (**#scidata19**), panel "Who is afraid of data misuse?", **London**, November 6. Slides available on [https://figshare.com/articles/Panel\\_Discussion\\_Who\\_s\\_afraid\\_of\\_data\\_misuse\\_/10318823/2](https://figshare.com/articles/Panel_Discussion_Who_s_afraid_of_data_misuse_/10318823/2)

**Keynote** at roundtable discussion "EU-LIFE Focuses on Open Science: Research Data, Research Institutes and Researchers", European Institute of Oncology, **Milan**, November 5: "Research Data Management: Lessons from the Study of Data Journeys".

**Keynote** at Avant-Conference: Trends in Interdisciplinary Studies (forth edition), University of **Porto**, October 24-26: "Distributed Reasoning in (Big) Data Interpretation" <http://avant.edu.pl/trends4/#/>

Contributed talk at IGAD Seminar, **Research Data Alliance, Helsinki**, October 22-25: "Intelligent Plant Data Linkage: A View from History, Philosophy and Social Studies of Science"

**Plenary speaker** at **Trieste NEXT** - Festival della Ricerca Scientifica (Italian Festival for Scientific Research) on "Le Nuove Frontiere della Ricerca Europea: Big Data, Deep Science", Teatro Miele, Trieste, 27-29 September: "La Ricerca Scientifica nell'Era dei Big Data"  
[https://www.triestenext.it/qw\\_relatori/sabina-leonelli/](https://www.triestenext.it/qw_relatori/sabina-leonelli/)

**Lectio magistralis** at "Contemporary Harmonia Mundi", EnergyWay, **Modena**, September 13: "La Scienza dei Dati Oltre il 2020: Verso l'Innovazione Intelligente, Efficiente e Sostenibile"  
<https://www.energyway.it/contemporary-harmonia-mundi/>

Invited speaker at "La Ricerca Scientifica Nell'Era dei Big Data: Author Meets Critics" symposium organised by Istituto per la Memoria e la Cultura del Lavoro, dell'Impresa e dei Diritti Sociali (Ismel), Polo del 900, **Torino**, September 12. <https://www.polodel900.it/evento/la-ricerca-scientifica-nellera-dei-big-data/> ; <http://www.sloweb.org/evento/big-data/>

Invited speaker at Session 2019 of the **Academie Internationale de Philosophie des Sciences** on "The Human Facing New Biomedical Technology", Prague, August 11-13: "Five Ways in which Big Data Threaten the Credibility of Science".

**Invited plenary speaker** for section "Philosophy of the Life Sciences" of the 16th International Congress of Logic, Methodology and Philosophy of Science and Technology (CLMPST 2019), **Prague**, August 5-10: "The Shifting Semantics of Plant (Data) Science"

Contributed speaker at 16th International Congress of Logic, Methodology and Philosophy of Science and Technology (CLMPST 2019), **Prague**, August 5-10:

- thematic session "Philosophy of Big Data": "Semantic interoperability: The oldest challenge and newest frontier of Big Data"
- co-authored paper (with Rachel Ankeny): "Organisms as Situated Models"

Invited speaker to Summer School in Philosophy and History of Science "Big Data nelle scienze fisiche, sociali, umanistiche e della vita", University of **Pavia**, July 17 (via Skype): "Big Data e la conoscenza scientifica"



Contributed speaker to "Animal Research Unbounded" Conference, University of **Exeter**, July 15-16 (with Rachel Ankeny): "Repertoires and Animal Movements In and Out of Research"

Contributed speaker at thematic double session "Organism Names In and Out of Biology", Biennial Meeting of the International Society of the History, Philosophy and Social Studies of Biology (ISHPSSB 2019), **Oslo**, July 9-12: "The Globalisation of Plant Descriptors and its Relevance to Biological Research"

Chair for thematic session "Stability and Migration of Research Strategies Within and Across Different Levels of Scientific Organization", Biennial Meeting of the International Society of the History, Philosophy and Social Studies of Biology (ISHPSSB 2019), **Oslo**, July 9-12

Contributed panelist to UK Integrated HPS meeting, Egenis, University of **Exeter**, June 20-21: "Values in HPS"

**Keynote** for the **10<sup>th</sup> Conceptions of Libraries and Information Science Conference (CoLis)**, **Ljubljana**, Slovenia, June 16-19: "New Frontiers in Data Curation: A View from Scientific Practice"

Invited speaker at **Earlham Institute** Seminar Series, Norwich, June 11: "Opening Plant Data: Challenges of Dissemination and Re-Use"

Invited speaker at **IHPST Seminar** in Philosophy of Biology, Sorbonne, **Paris**, May 27: "What's in a name? The Globalisation of Plant Descriptors and Its Relevance to Biological Research"

Invited headline speaker at Journée PSL "Science des données, Données de la science", **Ecole Normale Supérieure Paris**, May 27: "Big Data, Open Data et la Recherche Scientifique". Video: <https://www.ohnk.net/open-data-quesaco-2019>

Invited speaker at **PhilinBioMed** Seminar Series, University of **Bordeaux**, May 24: "Actionable Data for Precision Oncology" <https://www.philinbiomed.org/event/sabina-leonelli-university-of-exeter-uk-title-tba/> Video: <https://www.philinbiomed.org/event/sabina-leonelli/>

Invited speaker for Astor Seminar Panel "The Trouble with Open Science", Institute for Science, Technology and Society, University of **Oxford**, May 21.

**Keynote** for the European Universities Association Workshop "[Research Assessment for Researchers' Recruitment and Career Progression](#)", May 14, **Brussels**: "Incentives and Rewards for Researchers in the Transition to Open Science". Video recording available soon.

Contributed speaker at **AAAS 2019** Session "Big Data: Crossing Boundaries to Facilitate Data Re-Use", **Washington DC**, February 14-18: "Lessons from the Study of Data Journeys".

Invited speaker (with Rachel Ankeny) at **National Academy of Science** Committee on 'Biological Collections: Their Past, Present, and Future Contributions and Options for Sustaining Them', **Washington DC**, February 15: "A Philosophical Perspective on Biological Collections" <https://www8.nationalacademies.org/pa/projectview.aspx?key=51270> ; presentation: <https://vimeo.com/326662039>

Invited speaker at the **Max Planck Institute for the History of Science Colloquium Series** "Philosophy and the History of Science: A Troubled Relationship?", **Berlin**, January 22: "Data and the Quest for Facts: Empirical Knowledge in the Age of Big and Open Data".

**2018**

Invited speaker at **CWTS Symposium** "On Quality: What Will the Future of Valuing Science and Scholarship Look Like?", **Leiden** University, December 14: "Open Science: A Threat or an Opportunity for Research?"

**Keynote** at First French Open Science National Conference (Journées Nationales de la Science Ouverte), **Ministère de l'Enseignement supérieur, de la Recherche et de l'Innovation**, Amphithéâtre Poincaré, **Paris**, December 4: "Making Open Data Work for Research and Researchers"

**Keynote** at 5<sup>th</sup> Biennial Conference of the Greek Philosophy of Science Society, **Athens**, November 29 – December 1: "Re-Thinking Empiricism from the Data Up". [http://greekphilsci.blogspot.com/p/blog-page\\_19.html](http://greekphilsci.blogspot.com/p/blog-page_19.html)

Invited speaker at Seminar Series "Human Sciences, Computer Science & Digital Media", Centro Internazionale di Studi Umanistici Umberto Eco, University of **Bologna**, November 23: "La Ricerca Scientifica Nell'Era dei Big Data"

Presentation at launch event of book "La Ricerca Scientifica nell'Era dei Big Data", Libreria Coop Zanichelli, **Bologna**, November 23.

Presentation at launch event of book "La Ricerca Scientifica nell'Era dei Big Data", **Leonardo da Vinci Museum of Science & Technology**, **Milan**, Sala del Cenacolo, November 22.

**Plenary Speaker** at **Philosophy of Science Association Public Forum** "Algorithms: For Whose Good? Questions of Value and Accountability in AI and Data Science" held during PSA2018 (biennial meeting of Philosophy of Science Association), Microsoft Auditorium of **Seattle** Central Library, November 1. Title of my talk: "Big data analysis and the human face of automated systems". <https://psa2018.philsci.org/en/74-program/program-schedule/program/124/psa2018-public-forum-for-the-public-good-values-and-accountability-in-ai-and-data-science> Video of my talk: <https://vimeo.com/301399662> ; Video of panel discussion: <https://vimeo.com/301400052>

Contributed talk to thematic session "Beyond theory-centric studies of scientific progress: Repertoires in biology", SPSP cognate session of the **Philosophy of Science Association** meeting in **Seattle**, November 1: "The Epistemological Significance of Repertoires: Tools to Understand Representational Attributions" (with Rachel Ankeny).

Contributed talk to session "Organisms without Borders: Transnational Travel Stories of Practices, Data, and Standards" at HSS2018 (annual meeting of the **History of Science Society**), **Seattle**, November 1-4: "Phenomic Data Between Local Fields and Global Databases: Developing Labels for Field Data Collection in Crop Phenomics, 1990-2016"

**Lakatos Award Lecture**, London School of Economics and Political Science, October 26: "Understanding Science from the Data Up" <http://www.lse.ac.uk/philosophy/events/lakatos-award-lectures-2018/>

Invited talk at Lakatos Award Expert Workshop with Sabina Leonelli, London School of Economics, October 25: "Data-Centric Biology" <http://www.lse.ac.uk/philosophy/blog/2018/10/02/lakatos-award-expert-workshop-with-sabina-leonelli/>

**Keynote** at "Science as a FACTory? Looking at Science Eye to Eye, not from above the Facts", Closing Workshop of the DK "The Sciences in Historical, Philosophical and Cultural Contexts" <http://dk-sciences-contexts.univie.ac.at/> University of **Vienna**, October 4-6: "Investigating Science through Involvement"

**Inaugural lecture**, University of Exeter, September 24: "What's the point of empirical philosophy? Making sense of Research in the age of Big and Open Data"

Director and moderator at **European Advanced Seminar in the Philosophy of Biology 2018** on Interdisciplinarity in the Life Sciences, KLI, Austria, September 10-14.

Contributed talk to **EASST 2018**, Lancaster, July 25-28: "Actionable Data for Precision Oncology: Developing a Trustworthy Data Source" (with N. Tempini, presenting).

**Keynote** Speaker at Biennial Conference of the Société de Philosophie des Sciences (French Society for the Philosophy of Science), **Nantes**, France, July 4-6: "Research in the Age of Big and Open Data".

Contributed talk at **&HPS 2018** meeting in **Hannover**, July 4-6: "How Organisms Represent" (with, and presented by, Rachel Ankeny). <https://hps7conference.wordpress.com/program/>

Contributed talk at Biennial Conference of the Society for the Philosophy of Science in Practice (SPSP), **Ghent**, Belgium, June 29 - July 2: "The Epistemological Significance of Repertoires: Tools to Understand Representational Attributions" (with, and presented by, Rachel Ankeny).

**Keynote** Speaker at Biennial Conference of the Society for the Philosophy of Science in Practice (SPSP), **Ghent**, Belgium, June 29 - July 2: "Philosophy of Science in the Age of Big and Open Data: What Does "Studying Practice" Involve?"

Invited talk for Philosophy Department of the Vrije Universiteit **Brussels**, Belgium, June 20: "What Are Data Models?"

**Keynote** Speaker at Biennial Conference of STS Italia "Technology from Below", University of **Padova**, June 14-16: "Big Data Mobilization: Subversive or Reactionary?"

Invited seminar at Department of Philosophy, University of **Groningen**, June 6: "Five Ways in which Big Data Can Destroy Science, and What to Do About It"

Contributed talk at **Planetary Health Meeting**, June 1-2: "Towards an Ethical Handling of Big Data in Environment and Human Health" (with L Fleming, R Lovell, B Wheeler, C Sarran, H Gordon Brown, G Leonardi, N Tempini, R Barciela, presented by L Fleming).

Contributed talk at PhenoHarmonis 2018, Agripolis Scientific Park, **Montpellier**, May 14-18: "Towards data studies of Roots, Tubers and Banana phenotyping"

**Keynote** Speaker at PhenoHarmonis 2018, Agripolis Scientific Park, **Montpellier**, May 14-18: "Open plant trait data: challenges of dissemination and re-use" <https://sites.google.com/a/cgxchange.org/cropontologycommunity/home/2018-phenoharmonis> <https://www.youtube.com/watch?v=7FwRC3Eos-I&list=PLpRdrLJL1iC0vnMJ-Ty6WyAOfZVo2b4&index=15>

Invited seminar at Department of Philosophy, University of **Rotterdam**, May 14: "The Use of Invariant Parameters for Big Data Integration and Analysis"

Invited presentation at **European Universities Association**, Brussels, May 8: "Rewarding Open Science Within Research-Performing Institutions".

Invited talks at "Historical Research in Model Organism Biology" Workshop, **Cold Spring Harbour Laboratory**, April 22-24: "Making Organisms Into Models" (with R Ankeny) and "The Historiography of *Arabidopsis thaliana*" <http://library.cshl.edu/pages/Model-Organisms/>

Invited presentation at European Research Agency Stakeholder Meeting, **European Commission**, Brussels, April 17: "Results of the MLE on Open Science: Incentives and Rewards".

Invited presentation at Conference "La Cura Del Cancro e l'Innovazione Tecnologica: Aspetti Etici e Sociali", University of **Rovigo (Italy)**, April 13-14: "Produrre Conoscenza Attraverso la Cura dei Dati: La Costruzione di Evidenza Affidabile in COSMIC" (with N. Tempini, presenting).

Invited discussant in the closing panel of the "Process Biology" Conference, the Royal Institution, **London**, March 21-23. <http://socialsciences.exeter.ac.uk/sociology/events/probioprojectconference/>

Invited speaker at Workshop "New Perspectives on Open Science" and Launch Event for GYA Report "Global Access to Open Software", University of **Oxford**, March 20: "Implementing Open Science: Incentives and Rewards". Videos: <https://www.youtube.com/watch?v=No4BGXOw4kQ&list=PLvH0GwgxT54zFkErGahmjZ9rJjYz8fFv&index=4> ; <https://www.youtube.com/watch?v=lu3GlpXUhes>

**Keynote** Speaker at IDCC2018 (the 13<sup>th</sup> International Digital Curation Conference), NH Collection Barcelona Tower, **Barcelona**, February 19-21: "No (Open) Science Without Data Curation: Five Lessons from the Study of Data Journeys"

Invited talk at the Department of Sociology, University of **Warwick**, February 7: "The Impact of Big and Open Data on Research"

Public Debate with Professor Heather Douglas, University of **Cambridge**, January 30.

Public lecture at **Trinity College**, University of **Cambridge**, January 29: "How to (Re)Use Big Data", organised by the Centre for the Study of Existential Risk and the Leverhulme Centre for the Future of Intelligence (event sold out a month in advance). Available on YouTube: <https://www.youtube.com/watch?v=mx9pIDbwJ5s>

Invited talks at CSER Workshop "Scientific Governance at the Ground Level", Centre for the Study of Existential Risk, University of **Cambridge**, January 29-30: "Open Science as an Approach to Research Governance"; and "Is the Current Research System Broken?"

## 2017

Invited talk in the 58th edition of the 2017-2018 Annual Lecture Series of the **Pittsburgh Centre for Philosophy of Science**, University of Pittsburgh, December 1: The Epistemology of Data Use: Conditions for Inferential Reasoning in the Age of Big Data Science. Available on YouTube: <https://www.youtube.com/watch?v=qc1aQep4DE8>

**Keynote** Speaker for "Big Data and the Philosophy of Science" Seminar, part of the "Humanity and Technology at the Crossroads: Where Do We Go from Here?" Andrew W. Mellon Sawyer Seminars Series at the **Boston** Centre for Philosophy and History of Science, November 27-28.

Invited talk at MLE Open Science Country Visit in Switzerland, **Zurich**, November 10-11: "A Roadmap to Open Science: Experiences, Strategies and Models"

**Plenary** Speaker at **World Science Forum 2017**, Session "The Opportunities and Challenges of Digital Transformation," Jordan, November 6-9: "Using Open and Big Data to Benefit Humanity" [http://worldscienceforum.org/programme?programe\\_search\\_text=&day\\_id=3&type\\_id=0&venue\\_id=0](http://worldscienceforum.org/programme?programe_search_text=&day_id=3&type_id=0&venue_id=0) ; video of plenary: <https://www.youtube.com/watch?v=rIzPGlyZJqk>

Introduction and contributed talk (with Marcel Boumans) for International Conference "Varieties of Data Journeys", **Exeter**, November 2-3: "Data Journeys as Units of Analysis"; and "From Dirty Data to Tidy Facts"

Invited talk at Conference "Making Sense of Data-Intensive Science", Leibniz University, **Hannover**, October 26-27: "Aggregating to Disaggregate: Using Invariance Strategies to Analyse Big Data"

**Keynote** Speaker at "Future Open Science Services for Scientific Communities" Conference organised by European Open Science Cloud and OpenAIRE in **Berlin**, October 24: "Towards the European Open Science Cloud: Four Lessons from the Study of Data Journeys" <https://eoscpilot.eu/future-open-science-services-scientific-communities-agenda>

Response to Ed Humpherson (UK Statistics Authority), Symposium on "Trustworthiness, Quality and Value in the Age of Big Data", **Exeter**, October 17: "Data Quality Challenges: A View from the History, Philosophy and Social Studies of Science"

**Keynote** Speaker at Swedish National Conference "Coordination of Open Access to Research Publication in Sweden", National Library of Sweden, **Stockholm**, October 17: "Open Science: Why and How" [http://openaccess.blogg.kb.se/files/2017/10/OA\\_Kickoff\\_Sweden\\_2017.pdf](http://openaccess.blogg.kb.se/files/2017/10/OA_Kickoff_Sweden_2017.pdf) . YouTube video of the lecture: [https://www.youtube.com/watch?v=q4\\_UBAtms0k&index=2&list=PLZVkeICvA5-EJG7Hok3L9dDq\\_haIq-d63](https://www.youtube.com/watch?v=q4_UBAtms0k&index=2&list=PLZVkeICvA5-EJG7Hok3L9dDq_haIq-d63)

Invited talk at MLE Open Science Country Visit in Croatia, Centre for Advanced Studies, **Dubrovnik**, September 12: "Incentives and Rewards to Engage in Open Science Activities" <https://rio.jrc.ec.europa.eu/en/policy-support-facility/mle-open-science>

**Plenary talk** at Biosciences Research Away Day, Royal Albert Museum, University of **Exeter**, September 11: "How to Use Big and Open Data to Do Better Science"

Contributed talk at symposium "Data Amalgamation" within the **European Philosophy of Science Association Conference**, Exeter, September 6-9: "Health and Environment Data Integration"

Invited talk at Conference "Imagination and Surprise", University of **Utrecht**, August 31-September 1: "Re-Thinking Reproducibility as a Criterion for Research Quality"

Contributed talk to CHSTM Congress in **Rio de Janeiro**, Brazil, July 23-29: "When Plant Traits Go Online: Phenomic Data between Local Fields and Global Databases"

Contributed talks to Biennial Meeting of the International Society for the History, Philosophy and Social Studies of Biology 2017, **Sao Paulo**, Brazil, July 16-21:

(1) "Studying Plant Traits Across Cultures: Data Integration in Plant Phenomics"

(2) "Using Organisms as Models" (with R. Ankeny)

Invited talk at Western Africa Hub, **International Institute for Tropical Agriculture**, Ibadan, **Nigeria**, July 5: "Towards a Sustainable Approach to Open Plant Data: Challenges of Data Sharing and Re-Use".

**Keynote** at triennial meeting of the **Italian Society for the Philosophy of Science** (SILFS) and the Italian Society for the History, Philosophy and Social Studies of Biology and Medicine (BIOM), **Bologna**, June 21-23. [http://www.silfs.it/provvisorio/wp-content/uploads/2017/06/Poster-SILFS2017\\_HD.pdf](http://www.silfs.it/provvisorio/wp-content/uploads/2017/06/Poster-SILFS2017_HD.pdf)

Invited Panelist for Big Data Analytics Conference on "Data Quality", organised by Cancer Research UK and Winton Capital Management, **Francis Crick Institute, London**, June 13. <https://www.bigdataconference.co.uk/big-data-analytics-conference-2017-agenda/>

Invited Speaker for Data Debate "Health Data: Fit or Fail? The Use of Data in Healthcare", organised by the **Alan Turing Institute** at the **British Library**, London, June 12.

Contributed talk to **Global Young Academy Annual General Meeting** on "Social Justice", **Aviemore**, Scotland, May 15-19: "Open Data Standards and Global Inequalities in Research Environments: Deciding What Counts as Best Research Practice"

Invited speaker at **Roundtable on Open Access of the European Universities Association**, Brussels, May 4.

**Keynote** at Symposium on the implications of big data in the healthcare sector at the Centre de Recherche Médecine Sciences Santé Santé Mentale et Société (**CERMES3**) in **Paris**, April 19: "Biomedical knowledge production in the age of big data"

Invited speaker at "The End of the World? 2017 Existential Risk Symposium," Alumni Auditorium, University of **Exeter**, March 30: "Utopian and Dystopian Scenarios for the Social Impact of Big Data and Open Science".

Invited participant in **Open Science Conference 2017**, Berlin, March 21-22 <https://www.open-science-conference.eu/>

Invited speaker (as Chair of the Open Science Policy Platform Working Group on the future of scientific publishing) at **Berlin 13 Open Access Conference: Building Capacity for the Transformation** organised by the European Commission, **Berlin**, March 22: "OA2020 from the Perspective of the Open Science Policy Platform".

Invited speaker at Conference "Critical Approaches to Citizen Science", **London**, March 2-3: "Citizen Data Beyond "Citizen Science"."

Invited speaker at symposium "Practical Philosophy of Science: The Key To Better Policies?", hosted by the European Research Council at the **American Association for the Advancement of Science**

**(AAAS) 2017 meeting** "Serving Society through Science Policy" in **Boston**, February 17-20: "The Epistemology of Data-Intensive Science and Its Implications for Science Policy"

Invited talk at ResViva International Conference "Sliding Doors: Prediction and Contingency in Biosciences", **Roma**, February 2-4: "The time of data: Big Data re-use and implications for predictive ability in biology and biomedicine"

Invited talk at Philosophy of Medicine Workshop organised by the Department of Philosophy of the University of **Calgary**, Canada, January 19-20: "Data Integration in Biomedicine: Practical Strategies and Epistemic Challenges"

Invited Seminar at Department for the Social Studies of Medicine, **McGill** University, Montreal: "Integrating big biomedical data: conceptual, technical and social challenges", January 18.

Introduction to the 3<sup>rd</sup> DATA\_SCIENCE Workshop "Biomedical Data Journeys", **Exeter**, January 11-13.

## **2016**

Invited Speaker for Digital Science **Webinar** "The State of Open Data", December 14, <https://www.digital-science.com/blog/events/digital-science-webinar-state-open-data-dswebinar/> (450 registered live listeners)

Invited Seminar at Department of Philosophy, **Durham** University, December 8: What Distinguishes Data from Models?

Invited Talk at Workshop "Scales and the Sciences", Institute of Advanced Studies, **Durham** University, December 7: Time-Scales of Data Processing.

Invited Seminar at Department of Computer Science, **Royal Holloway**, December 1: Challenges of Data Integration: the Impact of Digital Technologies on Biomedical Research.

Panelist for the Launch of the British Pharmacological Society Report "The Future of UK *in vivo* Education and Training: Lessons from the Integrative Pharmacology Fund", Genesis 2016 Conference, **Westminster**, December 1.

Contributed lecture to symposium "Data in Time: The Epistemology of Historical Data", **PSA 2016, Atlanta**, November 3-6: Time-Scales of Data Use: On The Life-Cycles, Ontology and Understanding of Biological Data.

Invited Seminar at Synthetic Biology Centre, University of **Edinburgh**, October 27: How to Transform a Project into a Research Community? A Philosophical Perspective on Scientific Change and Collaborative Research.

Invited participation in **Royal Society/British Academy** Roundtable "Governance of data: humanities and social science perspectives on data's collection, management and use", London, October 20.

Public lecture at **Business Leaders' Forum** Autumn Event of the University of Exeter on "Maximising Decision Making and Performance through Effective Data Management", October 13: Big and Open Data Challenges and Opportunities.

Invited talk at the **Twelfth World Conference "The Future of Science"** on Digital Revolution: What is Changing for Humankind?, Fondazione Giorgio Cini, **Venice**, September 24: Integrating Biological, Biomedical and Environmental Data: The Impact of Digital Technologies on Research.

Invited Panelist at "Global Challenges: Is Big Data the Answer?" Roundtable organised by **the World Academy of Science** (TWAS) within "TriesteNext – European Science Research Forum", **Trieste** (IT), September 23: Ingredienti per un Approccio Sostenibile a Big e Open Data (Spearheading a Sustainable Approach to Big and Open Data).

Keynote at Conference "Digitalisation, Big Data and the Objective of Theorizing", Annual Meeting of German Society for History of Science, Technology and Medicine (DGMNT) Lubeck, September 16-18: What Difference Does Quantity Make? On the Epistemology of Data-Centric Science.

Contributed lecture to "Lives and Deaths of Data" Track at **4S/EASST** Conference, Barcelona, August 29-September 3: Journeys and Deaths of Scientific Data.

Contributed lecture to **&HPS6**, Edinburgh, July 3-5 (peer-reviewed, 15% acceptance rate): Repertoires: A Post-Kuhnian Approach to Scientific Change and Research Collaboration.

Contributed talk to 6th Biennial Conference of the Society for the Philosophy of Science in Practice, Rowan University, Glassboro (**Philadelphia**), June 16-18: The Function of Repertoires in Science.

**Keynote** at 4th meeting of Philosophy of Biology in the UK, **Bristol**, UK, June 8-9: Data Models and the Processing of "Big Data" in Plant Phenomics

**Plenary Talk** at GYA Annual General Meeting "Building Bridges", University of **Eindhoven**, NL, May 25-28: Data, Openness and Diplomacy.

**Keynote** at 7th Models&Simulations Conference, Universitat de **Barcelona**, Spain, May 18-20: What Distinguishes Data From Models?

Contributed lecture to conference "Pacing Science", Egenis, Exeter, May 16-17: Global Standards for Data Quality and the Situated Nature of Best Research Practices

Contributed talk to workshop "Scientific Models in Action", Egenis, Exeter, April 26: What Distinguishes Data From Models?

Introduction, Workshop "Integrating Large Data Into Plant Science", Dartington Hall, Totnes UK, April 21-22.

Invited Talk in the "Researcher Involvement" session of the **Open Science EU Presidency Conference** organised by the Dutch Ministry of Education, Culture and Society on the occasion of the Dutch Presidency of the EU, **Amsterdam**, April 4-5: Researchers' Views of Open Data Policies and Their Implementation: The Positions of the Young Academies of Europe and the Global Young Academy.

Invited Lecture, Conference on Integrated History and Philosophy of Biology, University of **Utrecht**, March 18-20: The Epistemology of Data-Intensive Science: Integrating History, Social Studies and Philosophy of Data Practices.

Invited Lecture, Department of History, University of Wisconsin-**Madison**, USA, March 11: Data Journeys in Biology: Openness and Shadows.

Invited Panelist at Open Data Infrastructures for Innovation - Big Data in the Life Sciences. Biblioteque Solvay, **European Commission**, Brussels, February 4.

**Keynote** for LERU Conference on Open Data, Chancellor's Hall, Senate House, University College **London**, January 29.

Egenis Seminar, University of **Exeter**, January 11: On the Value and Movements of Research Data.

## **2015**

Invited talk for Alan Turing Workshop "The Ethics of Big Data", **Oxford** Internet Institute, November 30: Locating Accountabilities in Data Science.

Invited panellist for Conference "The Past and Future of Scientific Publishing", Royal Society, **London**, November 27.

Contributed talk in session "Technologies, Data and DNA: Contemporary Histories of Genomics," History of Science Society meeting, **San Francisco**, November 19-22 (with R. Ankeny): Exploring MODs Culture and Communication: A History of Model Organism Databases (MODs) in Genomics Research

Invited Panelist for Workshop "Capitalising on the Potential of UK Biobank for Environmental Change, Health and Sustainability Research," Wellcome Trust, **London**, November 17.

Invited Participant to the WSF Side Event "Scoping the Future: Views and Ideas of Young Scientists to Tackle Global Challenges" and to the **World Science Forum**, Hungarian Academy of Science, Budapest, November 4-6 (nominated by the Global Young Academy).

Invited Seminar, HPS Department, University of **Cambridge**, October 15: On the Value and Movements of Scientific Data.

Contributed Talk, European Philosophy of Science Association, **Düsseldorf**, September 24-26: Distributed Reasoning in Data-Centric Science.

**Keynote** Lecture, Workshop on Research Data Management organized by the Swiss National Science Foundation, **Berne**, 14 September: The Challenges of Making Data Travel.

Invited Lecture, International Workshop "Studying Knowledge Transfer and its Context", Centre for Advanced Study at the Ludwig-Maximilians-University **Munich**, September 10-11: On the Movements and Value of Scientific Data.

**Keynote** lecture, 15th Congress of Logic, Methodology and Philosophy of Science, **Helsinki**, August: Repertoires: How to Transform a Project into a Research Community (joint work with Rachel Ankeny, who delivered the paper).

Contributed Talks, International Society for the History, Philosophy and Social Studies of Biology, **Montreal**, July 5-10: How Simple Organisms Grew Into Research Communities (with R. Ankeny) & Data Journeys in Biology.

Contributed Talks, Biennial Meeting of the Society for the Philosophy of Science in Practice, **Aarhus**, Denmark, June 24-26: Data, Models and Data Models; and Data Repertoires (with R. Ankeny).

Contributed Talk at 5th International Conference and Annual General Meeting of the Global Young Academy "Innovation for Sustainable Globalisation", Montebello, **Canada**, May 25-29: Making Open Science Sustainable Across the Globe.

Invited lecture in International Workshop "Just Playing? Toy Models in the Sciences", May 8-9, University of **Munich**: Just a Game? Data Models in Plant Science.

Contributed talk, Annual Conference of UK Network for Integrated HPS on "Evidence", University of **Durham**, April 13-14: Valuing Data as Evidence for Multiple Claims.

Contributed Talk, Society for the Philosophy of Information annual meeting on "Conceptual Challenges of Data", University College **London**, March 30-31: Data Journeys: Openness and Shadows.

Invited lecture at Info-Metrics Institute 2015 Spring Workshop on Philosophy of Information and Information Processing, Pembroke College, **Oxford**, March 27: The Epistemology of Data-Intensive Science.

Invited lecture at International Seminar on Data Science, Indian Statistical Institute, **Bangalore**, March 19: Research Data Sharing: Key Concerns.

Invited lecture at CODATA ISI International Training Workshop on Big Data, Indian Statistical Institute, **Bangalore**, March 18: The Epistemology of Big Data.  
<http://drtc1.isibang.ac.in/bdworkshop/index.php>

Invited lecture in series "Contemporary Trends in the Philosophy of Science", Department of Philosophy, University of **Edinburgh**, February 26: When Data Travel: Re-Thinking the Epistemology of Data. Available to watch online: <https://www.youtube.com/watch?v=XYNV1EuHVXk>

Invited lecture in Philbio seminar series, Institute de l'Histoire et Philosophie de la Science, **Paris**, February 12.: What Counts as Scientific Data? Learning from Data Journeys in Biology.

**Keynote** lecture at Belgian Science and technology Studies Conference, Gent, 10-11 February: When STS Meets Philosophy of Science: Reflections on Context in Scientific Inquiry

Invited seminar at Philosophy Department of the University of **Ghent**, 9 February: What Counts as Scientific Data? A Relational Framework.

Invited seminar at Data Visualisation Workshop, hosted by the Exeter Imaging Network and Big Data Challenges, 28 January: Organising Data for Re-Use: Visualisations in Biological Databases.

**2014**

Introductory Lecture, ERC International Workshop "What is data-intensive science?", Exeter, December 17-19.

Invited discussant, "Nature in Numbers" symposium, History of Science Society 2014, **Chicago**, November 7.

Contributed paper, Biennial Conference of the Philosophy of Science Association 2014, **Chicago**, November 7: What Counts as Scientific Data? A Relational Framework.

Invited lecture, Conference "Is More Data Always Better? Constraints on Big Data for Biology", Integrative Research Centre, **Field Museum, Chicago**, November 4-5: Big Data for Small Biology? Setting Up Biological Databases to Facilitate Research.

Invited Lecture, Workshop "Beyond the Meme: Articulating Dynamic Structures in Cultural Evolution", University of **Minnesota**, Minnesota Centre for the Philosophy of Science, October 16-19: "The Evolution and Extraction of Data Structures" (virtual participation).

**Introductory Keynote**, ERC Workshop on Research Data Management and Sharing, September 18-19 (ERC Headquarters, **Brussels**): Data-Intensive Science: A Philosophical Introduction.

<http://erc.europa.eu/media-and-events/events/erc-workshop-research-data-management-and-sharing>

Invited Panel Discussion, "Mediated Worlds: Knowledge, Information and Communication in the Digital Age", Union of the German Academies of Sciences and Humanities, **Berlin**, September 1: The Role of Online Databases in Scientific Research: Opportunities and Dangers.

Invited lecture in the series "PhilTech – Philosophy & Technology Research Seminars", Oxford Internet Institute and Department of Philosophy, University of **Oxford**, May 1: Researching Life in the Digital Age: A Philosophical Analysis of Data-Intensive Biology.

Invited seminar at the e-Humanities Group of the **Royal Netherlands Academy of Arts and Sciences**, Amsterdam, April 10: What Difference Does Quantity Make? On the Epistemology of Big Data Biology.

**Keynote lecture** at symposium 'Data at Work', **German Network for the Philosophy of Life Science**, Muenster, April 3-4: What Counts as Scientific Data? A Relational Framework.

Invited colloquium at Max Planck Institute for the History of Science, **Berlin**, February 26: Data Journeys in the Life Sciences.

**Keynote Lecture** at Swiss STS meeting "Collecting, organising and trading big data", Lausanne, Switzerland, February 20-22: What Difference Does Quantity Make? On the Epistemology of Big Data Biology.

Contributed paper (with Nadine Levin) at Swiss STS meeting "Collecting, organising and trading big data", **Lausanne**, Switzerland, February 20-22: Questioning the Openness of Big Data.

Invited seminar, Department of Philosophy, University of **Munich**, January 30: Data Integration, Model Organisms and Translational Research

### **2013**

Lecture at International Workshop 'The Value of Open Science', December 12-13, **Exeter**: 'Valuing Open Science: Meanings, Incentives, Challenges'

Invited contribution to Science, Technology and Culture Workshop, December 4, **Exeter**: 'Large Data Science'

Invited lecture at **Exeter Cafe Scientifique**, December 2: 'Data, data everywhere: Is this a good thing?' (with R. Ankeny) Contributed talk to Session 'Sharing Data in the Digital Age', History of Science Society, **Boston**, November 22-24.

Invited seminar at University of **Roehampton**, London: "Using non-human organisms as scientific models"

Invited Final Commentary at International Conference on Big Data, Max Planck Institute for the History of Science, **Berlin**, October 31-November 2.

Invited lecture at the Centre for STM, **Manchester** University, October 22: "Data integration and translational research: what counts as knowledge in plant science?"

Invited lecture at 'Data Matters' workshop, St Anne's College, **Oxford**, October 20: "Why the Current Insistence on Open Access to Scientific Data?"

Invited final commentary to 'Systems Biology' symposium at 24<sup>th</sup> International Congress for the History of Science, Technology and Medicine, **Manchester**, July 23-27.

Contributed talk to 'Data at Work', 24<sup>th</sup> International Congress for the History of Science, Technology and Medicine, **Manchester**, July 23-27: 'Putting data to work in plant science, 1990-2012'.

(with R. Ankeny) Contributed talk to thematic session 'Towards Epistemologies of Biological Practice' at Biannual Meeting of the International Society for the History, Philosophy and Social Studies of Biology, **Montpellier**, July 7-10: 'The ethos of organism-based communities'

Contributed talk to Annual Meeting of the British Society for the Philosophy of Science, Exeter, July 4-6: 'What Counts as the Context of Scientific Inquiry?'

Contributed talk to Biannual Meeting of the Society for the Philosophy of Science in Practice, University of **Toronto**, June 25-29: 'What counts as knowledge in plant science? Philosophical challenges from green translational research'.

Invited lecture at workshop 'Quality and accuracy of genetic data and knowledge produced by next-generation sequencing (NGS)', **Institute Curie, Paris**, June 6-7: Understanding the science behind big-data production: epistemological assumptions.

Invited Lecture at workshop 'Bioproperty: Animal Exchanges', **Oxford University**, 23-24 May.



Invited talk at Annual Meeting of the Global Young Academy, **Leopoldina**, Halle-Saale (Germany), 15-18 May: The Impact of Open Science on Biological Research.

**Keynote Lecture** at Conference 'Crossing the Divides: Exploring Boundaries and Overlaps Between Sociology and Philosophy of Science and Bioethics', **Brunel University**, London, 13-15 May: What counts as the context of scientific inquiry?

Invited Talk at EGN Conference 'Genomes and Society: Global Challenges Around Life Sciences', **Westminster**, London, 30 April-1 May: Open Science, Open Data and Life in the Digital Age.

Invited Lecture at Annual Meeting of the Exeter Initiative for Statistics and Its Applications (EXISTA), University of Exeter, 25 April: 'A philosophical perspective on data-intensive biology'.

Invited commentary at Knowledge/Value 4: Property and Intellectual Property, **UC Davies**, April 19-20: 'The materiality and tangibility of information and data authorship'

Invited discussion of my paper 'Classificatory Theory in Biology' at the Philosophy of Biology Munch, **California Academy of Sciences**, 17 April.

Invited talk as RCUK delegate at Shared Horizons: Data, Biomedicine, and the Digital Humanities Symposium (organised by Maryland Institute for Technology in the Humanities, the National Endowment for the Humanities, the National Library of Medicine at the National Institutes of Health, and the Research Councils UK). University of Maryland, **Washington**, April 10-12.

**Keynote Lecture** at the 5th Workshop in the Philosophy of Information, University of **Hertfordshire**, 26-27 March: 'What Counts as Good Data in Biology?'.

Invited Lecture at British Society for the Philosophy of Science ordinary meeting, **London School of Economics**, March 11: Integrating Data to Acquire New Knowledge.

Invited Lecture at STS Seminar, University of **Edinburgh**, 18 February: Life in the Digital Age: The Impact of Open Science and Digital Technologies on Biological Research.

## 2012

(with Ankeny) Invited talk at International Conference 'Modeling Complexity', University of Exeter, 13-14 December: Digital organisms.

(with Ankeny, Nelson and Ramsden) Contributed Talk at HSS meeting in **San Diego**, November: 'Making Organisms Model Humans: Situated Models in Alcohol Research'.

Invited lecture at STS Seminar, **University College London**, November 12: 'Life in the Digital Age: The Impact of Open Science and Digital Technologies on Biological Research'

Contributed talk at EASST/4S meeting in **Copenhagen**, October: 'Design through displacement: Understanding life in the digital age'.

Invited final commentary at International Workshop on Modelling Animals, University of **Manchester**, September 21-22: 'Epistemology of animal models'.

Invited lecture at European Advanced Seminar in the Philosophy of Biology, theme 'Models in vivo, in vitro, in silico', Brocher Foundation, **Geneva**, September 10-14: 'Model organisms in vivo and in silico'

Invited lecture at International Conference 'Information, Databases and Archives', **Beijing**, September 7-9: Data Integration and Knowledge in Plant Science

Invited lecture at **Royal Society/International Council for Science** Conference 'Revaluing Science in the Digital Age', September 2-4: 'Shifting Scientific Norms in the Digital Age: Insights from the History, Philosophy and Social Studies of Science'

Contributed Talk at British Society for the Philosophy of Science, **Stirling**, July 5-6: 'Classificatory Theory in Biology'

Invited Lecture at KLI Focal Symposium 'Data-Intensive Science: Why Google Won't Replace Science', University of **Vienna**, June 14-15: 'Promise and Dangers of Data-Intensive Science'

Talk at 4th Biennial ECPR Standing Group for Regulatory Governance Conference: New Perspectives on Learning, Regulation and Governance, Exeter 26 June: 'How Data-Intensive Science Challenges the Regulation of Credit Attribution'

Contributed Talk at Annual Meeting of the Global Young Academy 'Sustainability: Lessons on the Road from Rio to Rio+20', **Johannesburg**, May 20-23: 'Using digital infrastructures to facilitate governance at the national and international levels'

Invited lecture at International Conference on Integration in Biomedicine, University of **Sydney**, May 3-4: 'Data integration and community data sharing: Three types of integrative efforts'

Invited seminar at the Department of History and Philosophy of Science, University of **Sydney**, April 30: 'Understanding life in the digital age: Towards a philosophy of data-intensive biology'

## 2011

- Invited lecture at the Centre for the Philosophy of Science, University of Minnesota, **Minneapolis**, December: Towards an Epistemology of e-Biology.
- Invited lecture at Max Planck Institute (**Berlin**, November 2011): Respect for Epistemic Diversity: A Guiding Principle for Biological Cyberinfrastructures.
- Invited commentaries on Hans-Joerg Rheinberger and Gail Davies at 'Knowledge/Value' Conference at University of **Chicago** (November 2011).
- Invited panellist at public debate 'Frankenstein and the limits of science', ESCR Festival of Social Science, Exeter Phoenix.
- Invited lecture at Philosophy Department in **Bristol**, 14 October 2011: The epistemic impact of data-intensive methods in biology.
- Invited as 'group leader' to International Conference 'Synthesis: Interdisciplinary Interconnections in Synthetic Biology', ZIF, University of **Bielefeld** (30 September-1 October 2011).
- Invited lecture at International Workshop on *The Meaning of Theory in Biology*, Konrad Lorenz Institute, **Altenberg**, Austria, July 2011: Classificatory Theory in Experimental Biology.
- Talk at International Conference 'Making Sense of Large Datasets' (Exeter, June 20-21).
- Invited commentary on Mary Morgan at Knowledge/Value Conference at the University of **Chicago** (3-5 June 2011): 'Chasing Phenomena'.
- Talk at Integrated HPS meeting at University of **Cambridge** (April 2011): 'When HPS Critiques Science: An Achievement or a Problem?'.
- Invited lecture at Social Studies of Medicine Seminar, McGill University, **Montreal**, 23 March 2011: 'Towards an Epistemology of e-Biology'.
- Invited lecture at Making It Big Workshop, Exeter (17 March 2011): 'Is e-science necessarily big science?'.

## 2010

- Invited seminar at the Centre for the History of Science at the University of **Bologna** (December 17 2010): 'Understanding Data in the Digital Age'.
- Invited talk at European Science Foundation Conference 'Points of Contact between Philosophy of Biology and Philosophy of Physics' (**London School of Economics**, 13-15 December 2010): 'The Experimental Context in Silico'.
- Invited panellist at ESRC Festival Research Methods, **Oxford**, July 7 2010: 'The Ethics of e-Science Research'.
- Invited lecture at International Workshop on *Understanding and the Aims of Science*, Lorentz Centre, University of **Leiden**, June 2010: 'Experimental Biology *In Silico*'.
- Invited Lecture at *2010 Gordon Cain Conference*, titled 'Personalized medicine here and now: Empirical studies of post-genomic medicine' (**Philadelphia**, Chemical Heritage Foundation, 5-6 May 2010): 'When Humans Are the Exception: Cyberinfrastructure Across Species'.
- Talk at Egenis International Workshop *Data-Driven Research in the Biological and Biomedical Sciences*, Exeter (15-16 April 2010): 'The Role of Theory in Data-Driven Research: The Case of Bio-Ontologies'.
- (with Rachel Ankeny) Talk at Egenis International Workshop *Data-Driven Research in the Biological and Biomedical Sciences*, Exeter (15-16 April 2010): 'Re-Thinking Organisms'.
- Public lecture at Science in the Docks (18 March 2010): 'Model Organisms'.
- Talk at Egenis Workshop *Governance Issues in Data Sharing*, Exeter (2 March 2010): 'Scientific Governance and Cross-Species Databases'.
- Invited lecture at Universidad Complutense, **Madrid** (4 February 2010): 'Bioinformatics and biology in the 21<sup>st</sup> century'.
- Peer-Reviewed Contribution to the *Biannual Meeting of the European Philosophy of Science Association* (**Amsterdam**, 23 October 2010): 'On the Role of Theory in Data-Driven Research: The Case of Bio-Ontologies'.

## 2009

- Peer-reviewed Contribution to Workshop 'Web Semantics in Action: Web 3.0 in e-Science', within *5<sup>th</sup> IEEE International Conference on e-Science*, **Oxford** (11 December 2009): 'Documenting the Emergence of the Gene Ontology: An HPSS Approach'.

Invited Lecture at the *History and Philosophy of Science Seminar*, **Cambridge** (19 November 2009): 'Dynamic (Bio)Ontologies for Good Epistemology'.

Talk at *EGN conference* (8 October 2009, **Cardiff**): 'Issue-Based Scientific Governance'.

Invited Lecture at the *History of Genetics Day*: 'From Humble Weed to Botanical Drosophila' (John Innes Centre, **Norwich**, 9 September 2009).

Invited Lecture at the Konrad Lorenz Institute/Institute for Theoretical Biology (**Vienna**, 8 June 2009): 'Bio-Ontologies as Theories'.

*Biannual Meeting of the Society for the Philosophy of Science in Practice* (20 June 2009, **Minneapolis**, with Rachel Ankeny): 'Re-Using Data, Re-Thinking Organisms: The Epistemic Impact of Databases on Model Organism Biology'. Presented as part of a symposium I organised, titled *The Epistemic Status of Model Organisms*.

Talk at *Theory and Practice*, Fourth Joint Workshop on Integrated History and Philosophy of Science (1 June 2009, **Durham**): 'Researching Contemporary Biology'.

Invited Talk at CRASSH Conference *Policy, groups and populations in a genomic era: philosophical and social scientific perspectives* (**Cambridge**, 17-18 April 2009): 'When Humans are the Exception: Cross-Species Data Mining'.

Invited Talk at *Objects and Methods of Reproduction in 20ies Century Life Sciences. 1st Reproduction workshop MPI Berlin – EGENIS* (3 April 2009, **Exeter**): 'Standardisation of organisms through 'digitalisation' for the purposes of reproduction.

Public Seminar at Egenis, **Exeter** (3 February 2009): 'Issue-Based Scientific Governance'

#### 2008

Contributed Paper at the *Philosophy of Science Association Meeting*, **Pittsburgh** (6-9 November 2008): On the Locality of Data and Claims About Phenomena.

Invited Paper to Workshop *Writing Genomics: Historiographical challenges for new historical developments: 'The Emergence of Data Dissemination Policies: Re-Thinking Regulation in Genomics'*. Max Plank Institute for the History of Science, **Berlin** (28-29 October 2008).

*European Graduate Meeting in Philosophy of Biology*: 'Philosophical Issues in Bioinformatics', Gorino Sullam, Italy (4 September 2008).

Joint meeting 4S/EAAST, contributed paper within the session '*Governing and Institutionalizing Genomics: An Interdisciplinary and Interorganizational Perspective. I. Impact on Organizations, Healthcare and Work*': 'Governing Data Sharing: Bio-Ontologies and the Creation of Labelling Centres', **Rotterdam** (23 August 2008).

Joint meeting of the Three History of Science Societies, contributed paper within the session '*Collaboration and Interdisciplinarity in the Life Sciences*': 'A Happy Marriage? The Introduction of Bioinformatics to Model Organism Biology', **Oxford**, UK (6 July 2008).

Invited Lecture at BBSRC Workshop *Data Sharing in the BioMedical Sciences: Data Sharing in Model Organism Research*, Institute for E-Science, **Edinburgh**, UK (26 June 2008).

Invited Lecture at SEMM (European School of Molecular Medicine): '*Assessing the Impact of Bio-Ontologies on Biological Research*', with follow-up seminar for doctoral students in the philosophy of biology. **Milan**, Italy (9 June 2008).

Facts Workshop 'Making Small Facts Travel': '*Making Small Facts Travel: Databases in Model Organism Biology*' **London**, UK (27 March 2008).

Public Seminar in the series 'How Well Do Facts Travel', **London School of Economics**: 'Labels, Vehicles and Packages: Making Facts Travel in Model Organism Biology' (6 February 2008).

#### 2007

Invited Lecture at **British Academy** Conference 'Enquiry, Evidence and Facts': 'Circulating Small Facts About Organisms: Biological Databases.' London, UK (13-14 December 2007).

Invited Lecture at Egenis Seminar: 'Bio-Ontologies: A New Type of Theory to Make Facts Travel'. University of **Exeter**, UK (4 December 2007).

Invited Lecture at Workshop 'Medical Evidence': 'Circulating Evidence About Organisms' (5 October 2007, Universidad Complutense, **Madrid**, Spain).

International Conference of the Society for the Philosophy of Science in Practice: 'Evidence, Facts and the Database Revolution in Biology' in special thematic session 'How Do Practices Move Knowledge Around?' (26 August 2007, University of **Twente**, NL).

Biannual Meeting of the International Society for the History, Philosophy and Social Studies of Biology: 'Bio-Ontologies: A New Means of Travel for Biological Facts' in special thematic session 'Bio-Ontologies: A New Type of Theory in Biology?' (25 July 2007, **Exeter**, UK).

Invited lecture at Expert Workshop 'The Commodification of Academic Research': 'The Commodification of Knowledge Exchange' (21 June 2007, **Amsterdam**).

**Keynote Address** at Biannual Congress of the Dutch Society for the Philosophy of Science [Nederlandse Vereniging Wetenschapsfilosofie]: 'Can We Have Integration Without Theoretical Unification?' (20 May 2007, Leusden, NL).

Public Defence of the PhD Dissertation: Weed for Thought. Using *Arabidopsis thaliana* to Understand Plant Biology (10 April 2007, Amsterdam).

'The Epistemic Status of Model Organisms: A Raging Debate in the Philosophy of Biology?' (10 April 2007, Amsterdam).

### 2006

Invited Lecture at the Department of Philosophy of the Technical University of **Delft** (20 November 2006): '*Understanding and Integration in the Arabidopsis Research Community*'.

4S Meeting 2006, **Vancouver** (November 2006): '*Understanding Facts Across Scientific Communities*' in special thematic session 'Models as Vehicles for Travelling Facts'.

International Conference 'Science and Democracy', **Ghent** (28-30 September 2006): '*Scientific Understanding: A Matter of Which Expertise?*' in special thematic session 'Scientific Facts: Whose Expertise?'.

Invited lecture, **Amsterdam** (23 May 2006): '*Modeling to Understand: the Case of Model Organisms*'. Symposium 'Modeling and Experimentation in Biology', Vrije Universiteit.

### 2005

Invited Lecture at Expert Workshop 'A New Form of Experiment? Exploring the Performative Potential of Models and Computer Simulations', **Harvey Mudd**, California (17-19 October 2005): '*Abstracting to Model, Handling to Understand*'.

International Conference 'Philosophical Perspectives on Scientific Understanding', Vrije Universiteit **Amsterdam** (25-27 August 2005): '*Committed to Understand: on Models and Skills in Plant Biology*'

(with Hasok Chang) Symposium Paper 'Models and Scientific Reasoning', University of **Amsterdam** (24 August 2005): '*Intelligibility and the Unified Theory of Radiation*'.

International Society of the History, Philosophy and Social Studies of Biology, **Guelph** (13-17 July, 2005): '*Performing Abstraction: two ways to model Arabidopsis thaliana*'.

Research Colloquium Faculty of Philosophy, Vrije Universiteit **Amsterdam** (13 May 2005): '*From Representation to Understanding... And Back?*'.

### 2004

Invited Lecture at Reunion Internacional sobre Historia y Filosofia de la Biologia, Instituto de Investigaciones Filosoficas, UNAM, **Mexico City** (17 November 2004): '*What does the materiality of a model have to do with its intelligibility? The Case of Arabidopsis thaliana*'.

Invited Lecture at Postgraduate Seminar of the Postgraduate Programme in Philosophy of Science, Instituto de Investigaciones Filosoficas, UNAM, **Mexico City** (12 November 2004): '*Where Critical Contextual Empiricism is Not Enough: Understanding within the Arabidopsis Model Community*'.

4S/EASST Meeting 2004, **Paris** (25-28 August, 2004) - Session Panel 'Assessing Interdisciplinary Methodology': '*Disciplined Publishing vs. Interdisciplinary Research? Peer Review in the Graduate Journal of Social Science*'.

VISU School, **Vienna** (26 July 2004): '*The Collective Quest for Epistemic Objectivity: Communicative Understanding in Biology*'.

Brown Bag Invited Seminar, Konrad Lorenz Institute, **Vienna** (7 July 2004): '*Arabidopsis thaliana as a material and abstract model*'.

International Conference 'Knowledge and Imagination', Vrije Universiteit **Amsterdam** (23-25 June, 2004): '*Scientific Imagination in Practice: Modelling the Material*'.

WTMC Workshop, **Ravenstein** (26-28 May, 2004): '*Understanding an Organism in Theory and Practice: Investigations on the Epistemology and Politics of a Model Organism Community*'.

Third Flanders-Netherlands Congress for Philosophy of Science, **Leusden** (14-16 May, 2004): '*Model Organisms as Biological Models – Where the Theoretical Meets the Material*'.  
C-SAP Conference 'Looking Back, Taking Stock: Reflecting on five years of learning and teaching', **Birmingham** (18-19 March, 2004): '*The Graduate Journal of Social Science: Strategies, Plans, Projects*'.  
GDPS Lunchtime Practitioner's Lecture, SOAS, **London** (March 3rd, 2004): '*European Social Forum and other activism in Europe*'.

### 2003

Opening conference Faculty of Philosophy Vrije Universiteit **Amsterdam** (September 7th, 2003): '*Can truth be a temptation? The Ethics of Experimentation: Research on Human Subjects in Manchuria, 1932-1945*'.  
2th International Congress of Logic, Methodology and Philosophy of Science, **Oviedo** (7-13 August 2003): '*Understanding the Usefulness of Biological Models*'.  
International Society for the History, Philosophy and Social Studies of Biology Meeting, **Vienna** (16-20 July 2003): '*Understanding the Usefulness of Model Organisms*'.

### 2002

Expert Workshop 'Measurement in Economics and the Natural Sciences', Tinbergen Institute, **Amsterdam** (13th of May 2002): '*Understanding Infrared Metaphysics*'.

### Media Appearances

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- Until 2024 I used to tweet through **@sabinaleonelli** (>8600 followers), **@DataScienceFeed** (>1100 followers) and **@StudiesOpen** (>500 followers); from 2024 I toot from **@sabinaleonelli@mastodon.social** (>2k followers); and am a member of **BlueSky** (>1100 followers) and **LinkedIn** (>1600 connections). I run the **LinkedIn Philosophy of Open Science group** (>180 followers).
- Video of Panel "Amid Advancement, Apprehension, & Ambivalence: AI in the Human Ecosystem", Harvard University, June 13 2024: [https://www.youtube.com/watch?v=SyNZU5NqI40&list=PLCQO8R6Z\\_izILa\\_rf0MogkpVHCKRJtFa6&index=3](https://www.youtube.com/watch?v=SyNZU5NqI40&list=PLCQO8R6Z_izILa_rf0MogkpVHCKRJtFa6&index=3)
- HPS Podcast featuring Sabina Leonelli on The Philosophy of Open Science (series 3, episode 12, launched 30 May 2024): <https://thehpspodcast.buzzsprout.com/2180146/15140154-s3-ep-12-sabina-leonelli-on-the-philosophy-of-open-science>
- Video launching and promoting the Ethical Data Initiative (produced May 2024): <https://www.youtube.com/watch?v=4ZKmbwah2bY>
- Video of keynote in occasion of the launch of the Ethical Data Initiative at the TUM Think Tank, 9 April 2024: "Why Data Ethics in the Age of XAI?" <https://www.youtube.com/watch?v=-6GjEreL3nA> ; <https://ethicaldatainitiative.org/2024/04/12/new-directions-for-global-activities-in-data-ethics/>
- Video of keynote "The Future of Model Organisms", ICI Berlin, March 2024: <https://www.ici-berlin.org/events/sabina-leonelli/>
- Podcast on Open Research for the Exeter Postgraduate Researcher Podcast: available on Podbean (<https://exeterpostgraduateresearcherpodcast.podbean.com/>), Spotify (<https://open.spotify.com/show/3Yv0NoC4EkHIXUJanoZ2OcR>), and Amazon Music (<https://music.amazon.com/podcasts/25bc4119-cc66-465e-880e-2009e54880d6/exeter-postgraduate-researcher-podcast>).
- Video documenting PHIL\_OS participation in CSIR\_CRI Participatory Farming (Varietal Selection), October 2023: <https://youtu.be/xhersxsvxE8?si=06jizhqv5QD-1en->
- Article documenting my visit and start of collaboration with the Crop Research Institute of Kumasi, Ghana, 6 September 2023: <https://cropsresearch.org/csir-crops-research-institute-embraces-the-culture-of-open-science-for-agricultural-innovations/>
- Article documenting EPSA 2023 conference in Belgrade: <https://www.danas.rs/vesti/beograd/jedna-od-naivaznijih-i-naivech-konferencija-za-filozofiju-nauke-u-evropi-od-20-do-23-septembra-u-beogradu/> and video interview for Serbian national TV on the significance of philosophy of science for society, September

- 2023: <https://youtu.be/5g3yDs8QYIs?t=363> ;  
<https://www.youtube.com/watch?v=54Dqik8FTt4&t=1092s> ;
- Interview for Nature feature article Perkel, J. M. (2023) "How to make your scientific data accessible, discoverable and useful." *Nature* **618**, 1098-1099 (2023) doi: <https://doi.org/10.1038/d41586-023-01929-7> ; <https://www.nature.com/articles/d41586-023-01929-7>
  - Video interview on Philosophy of Open Science, produced by Azjim University, Bangalore, June 2023: <https://www.youtube.com/watch?v=mumWP0GRuxg>
  - Video of Award Ceremony for the Patrick Suppes Award for the Philosophy of Science at the American Philosophical Society, 17 November 2022 (minute 4:10): <https://boxcast.tv/channel/ufhng8iwqjtkontsuhsr?b=btqvr6nqyvdgexk1ovnf>
  - Video launching the Brazilian edition of my book "Scientific Research in the Era of Big Data" (English with Portuguese subtitles, May 2022): <https://www.youtube.com/watch?v=xxSwO2tBUZk&t=40s>
  - Keynote for Flemish Royal Academy of Science, "The Many Faces of Reproducibility", Brussels June 1, 2022: <https://www.youtube.com/watch?v=dxlVk-4Llu8>
  - Video of **Keynote**, STS Conference Graz 2022 "Critical Issues in Science, Technology and Society Studies", May 2-4: "Open Science Beyond 'Sharing'": <https://stskonf.tugraz.at/wp-content/uploads/2022/05/STS2022-Keynote-3.m4v>
  - Video as Winner of Falling Walls Award "Science Breakthrough of the Year 2021": "Breaking the Wall to Understanding Data" <https://falling-walls.com/discover/videos/data-ethics-a-relational-approach-to-data/>
  - Video of Ada Lovelace Webinar on COVID-19 Lessons on Data Protection, 14 October 2021: <https://www.youtube.com/watch?v=kb83qe3VDL4>
  - Leonelli, Sabina, Bezuidenhout, Louise, Schuster, Doug, & Stall, Shelley. (2021, October 1). Democratization of Data. Zenodo. <https://doi.org/10.5281/zenodo.5546659>; video of the seminar: <https://www.youtube.com/watch?v=OTNEQudyZuc&t=3s>
  - Press coverage of Inauguration of 2021-22 Cohort of Fellows at *Wissenschaftskolleg zu Berlin*: <https://www.tagesspiegel.de/wissen/41-fellowjahrgang-im-wissenschaftskolleg-weniger-maennlich-weniger-deutsch-juenger-und-diverser/27655360.html>
  - Video of Q&A Plenary with Daniel Sarewitz and myself: "Evidence and Democracy", during INGSA2021 International Conference 'Building Back Wiser: Knowledge, Policy and Publics in Dialogue', August 30 – September 2 2021. <https://www.ingasa.org/ingasa2021/> ; YouTube recording: <https://www.youtube.com/watch?v=8GuHMF0Fqu4>
  - Animation for PHIL\_OS Project, September 2021: <https://www.youtube.com/watch?v=uUJ3i36uQaw>
  - Video for Turing project in occasion of G7 conference, June 2021: "Open Science: using the power of responsible data sharing and open science to tackle climate change". URL:
  - Video for Policy@Exeter on policy engagement: <https://www.youtube.com/watch?v=KI2qC6-nf7Y&t=7s>
  - Video of talk at Conference "Philosophy of Plant Science", Egenis, May 5-7: "Process-Sensitive Naming: Crop Descriptors and the Shifting Semantics of Plant (Data) Science". <https://www.youtube.com/watch?v=IjjeJSAI95U&list=PLe8vyktiR0b33ceOITFOiapbJi9G6CdzT&index=30>
  - Video of IRSA Distinguished Lecture, Conference "Big Data and Reproducibility", Institute for Research on Statistics and its Applications and Minnesota Centre for the Philosophy of Science, May 6-8, 2021: "Reproducing Reproducibility: The Role of Research Environments" -- URL: [https://www.youtube.com/watch?v=6ZaExW\\_sIec&list=PL7aKYVTGDNONSkkWJ1aJXpHJ4cBtwTqFU&index=5](https://www.youtube.com/watch?v=6ZaExW_sIec&list=PL7aKYVTGDNONSkkWJ1aJXpHJ4cBtwTqFU&index=5)
  - Video of talk at symposium "A Critical Analysis of the Scientific Reform Movement" organised by the **Centre for Open Science**, April 20, 2021: "The Scientific and Social Implications of Implementing Open Science Policies and Procedures": <https://www.cos.io/services/webinars/symposium-a-critical-analysis-of-the-scientific-reform-movement>
  - Video of talk on "Climate Change Mitigation and Adaptation" at **AI UK** 2021: <https://www.youtube.com/watch?v=mFPHIUPY3VM>
  - Feature in Wired Italy, Spring edition 2021: "Apriti Scienza!" pp. 48-53. <https://www.wired.it/attualita/media/2021/03/18/wired-edicola-salute/>
  - Video of Keynote Lecture, International Conference "**Digital Studies of Digital Science**", University of Louvain, March 15-17: "Rethinking HPS through Digital Studies of Science" <https://www.youtube.com/watch?v=88e1GmkJqhQ>

- Video of Symposium "Plant Data Semantics and Food Security" that we organised at FAIR Convergence Conference, November 30 2020: <https://conference.codata.org/FAIRconvergence2020/sessions/187/>
- Video of talk and discussion at **STS Italia Forum** "Pandemia e Interdisciplinarietà", La Sapienza, Roma, 20 November: "La scienza dei dati di fronte alla pandemia: sfide e priorità"  
<http://www.stsitalia.org/STS%20Italia%20-%20Webinar%20La%20pandemia%20sfida%20i%20confini%20disciplinari,%20-11-20.mp4>
- Video of Book Launch of "Model Organisms", November 23 2020:  
<https://universityofdeladeide.app.box.com/s/58wvniowzqmkr60x0w1d4f1a2pyyb77>
- Video of my interventions at Phaidracon 2020, The Vienna Sessions, November 19-20:
  - Roundtable 1: "Scrutiny and Repeatability – The Danger of Post-Truth Academia"
  - Roundtable 2: "The Role of Data in Accessibility"
- Video of **Falling Walls Circle Table** "The Understanding of the Scientific Method in the 21<sup>st</sup> Century", organised by the European Research Council for the World Science Forum, November 5:  
<https://www.youtube.com/watch?v=IEBaknKY6do>
- Interviewee within the feature-length documentary "The Age of Artificial Intelligence", released November 2020 on YouTube: <https://www.youtube.com/watch?v=BeUijPULOCY>
- Video of Ankeny and Leonelli presentation: A Philosophical Perspective on Biological Collections. Presentation to Committee on Biological Collections: Their Past, Present, and Future Contributions and Options for Sustaining Them, webinar on February 15, 2019. <https://vimeo.com/326662039>
- Video of my intervention in the Digital Ethics Forum 2020, October 2 (on responsible handling of personal health data) <https://www.youtube.com/watch?v=D60ZS-p0Iq&feature=youtu.be>
- Video of Egenis seminar on Processual Empiricism in the COVID-19 Era given together with John Dupre, September 2020: <https://www.youtube.com/watch?v=3-ZeZGY5MM0&list=PLe8vyktR0b33ceOITFOiapbJi9G6CdzT&index=1>
- EU Article summarising key results of DATA\_SCIENCE project, available in 6 languages:  
<https://cordis.europa.eu/article/id/421505-shedding-new-light-on-role-of-data-science-big-data-and-open-data-in-research>
- Video of keynote lecture "Intelligent Data Linkage and Distributed Semantics for (Big) Data Interpretation" at Advances in Data Science Conference, 23/06/2020, Manchester:  
[https://www.youtube.com/watch?time\\_continue=5&v=2qYkdT12etM&feature=emb\\_logo](https://www.youtube.com/watch?time_continue=5&v=2qYkdT12etM&feature=emb_logo)
- Interview for Euroscientist (Technoscience Podcast) on Open Science, 18/06/2020 (interview actually performed February 2020): <https://www.youtube.com/watch?v=DOGDbyFYUhi#action=share>
- Interviewed for article in Italian national newspaper Sole 24 Ore: Luca De Biase "Dalla sostenibilità al lavoro, l'eredità della clausura digitale", 12/06/20, p.19.
- Webinar on **COVID data modelling** for "History of Science on Call" project of the Max Planck Institute for the History of Science, 20 March 2020: <https://www.mpiwg-berlin.mpg.de/video/history-science-call-sabina-leonelli> (English); <https://www.mpiwg-berlin.mpg.de/video/history-science-call-sabina-leonelli-italian> (Italian)
- Interview for EnergyWay on the implication of digital transformation for industry (in Italian), released February 2020: <https://www.youtube.com/watch?v=yq-P5nIxzCA&feature=youtu.be>
- Cited in article for Brazilian national, December 2019:  
<https://www.uol.com.br/tilt/noticias/redacao/2019/12/28/afogados-em-dados-como-nossa-historia-sera-resgatada-no-futuro.htm>
- Interviews at CIDACS (Salvador, Brazil) over Big Data society, published 14 Jan 2020:  
<https://www.youtube.com/watch?v=n2fwq74XDbA>  
<https://www.youtube.com/watch?v=n2fwq74XDbA&t=5s>
- Interviewed by The Economist for Babbage Podcast "The End of the Scientific Method?", 27 November 2019: <https://www.economist.com/podcasts/2019/11/27/the-end-of-the-scientific-method>
- Interview featured in STOA "Europe leads the way in the transition to open access", 23 October 2019: sciencemediahub.eu
- Lectio Magistralis at launch of the Manifesto of Energyway, Modena, 13 September 2019:  
<https://razionalitasensibile.it/it/event> . See also media reactions:
  - <https://www.modenatoday.it/attualita/manifesto-razionalita-sensibile-modena-2019.html>
  - <https://www.google.co.uk/amp/s/it.finance.yahoo.com/amphtml/notizie/ai-modena-domani-presenzione-manifesto-razionalita%25C3%25A0-sensibile-142224439.html>

- o <https://www.i-talicom.it/tech/innovazione-tecnologica/energy-way-presenta-il-manifesto-della-razionalita-sensibile/>
- Public video of talk on Open and Big Data in Research, Ecole Normale Supérieure, May 27 2019: <https://www.ohnk.net/open-data-quesaco-2019>
- Youtube video of talk on "Actionable Data in Oncology", University of Bordeaux, May 24 2019: <https://www.philinbiomed.org/event/sabina-leonelli/>
- Interview for *Nature* feature article "Data Sharing and How it Can Benefit Your Scientific Career" by Gabriel Popkin, published 13 May 2019: <https://www.nature.com/articles/d41586-019-01506-x>
- Three-Minute Interview for the European Philosophy of Science Association newsletter, March 2019: <http://www.philsci.eu/Newsletter/2019/Interview>
- ORION Open Science Podcast Interview with Sabina Leonelli: "Plan S: Solution or Short-Sightedness?" (released February 2019) <https://orionopenscience.podbean.com/e/plan-s-solution-or-short-sightedness/>
- Interview for Laboratory Equipment (online resource), February 2019: <https://www.laboratoryequipment.com/article/2019/02/labs-develop-competitive-advantage-embracing-iot-integration>
- Technoculture Podcast #13: "Sabina Leonelli: The Open Science Movement" <http://technoculture-podcast.com/index.php#sabina> (released December 2018)
- YouTube video of my Keynote lecture for French Open Science Conference (launch of the French Open Science National Initiative), December 2018: TBA
- Vimeo video of the PSA Public Forum 2018 on Artificial Intelligence, where I was a plenary speaker: <https://vimeo.com/301399662> (my lecture); <https://vimeo.com/301400052> (discussion)
- YouTube video of my Lakatos Award lecture, October 2018: "Understanding Science from the Data Up" <https://www.youtube.com/watch?v=POq6SHv11ho>
- YouTube video of my interview at DataSante project, Nantes Philosophy of Science Congress, July 2018: Qu'est-ce qu'une donnée? <https://www.youtube.com/watch?v=3JxWIPGKVsw>
- YouTube video of my keynote to PhenoHarmonIs2018 in Montpellier, May 2018: <https://www.youtube.com/watch?v=7FwRC3Eos-I&list=PLpRdrLJLtiC0vnMJ-Ty6WyAOfZVo2b4&index=15>
- Interview featured in Jop de Vrieze, What We Can (and Can't) Learn from Replicating Scientific Experiments, *Undark Magazine*, 6 December 2018 <https://undark.org/2018/12/06/what-we-can-and-cannot-learn-from-replication/?platform=hootsuite>
- Press covering the publication of my book with Meltemi in 2018:
  - o Bianchini, E & Maturi, M. "Big Data, le trappole per la ricerca: dalla fretta del profitto al potere di Google" *Il Fatto Quotidiano*, 18 October 2018, <https://www.ilfattoquotidiano.it/2018/10/18/big-data-le-trappole-per-la-ricerca-dalla-fretta-del-profitto-al-potere-di-google/4692481/>
  - o "Il Libro", *Repubblica*, 24 Novembre 2018
  - o Luigi Ripamonti, "Cosa Dicono Davvero I Big Data", *Corriere della Sera*, 25 Novembre 2018: <https://www.pressreader.com/italy/corriere-della-sera/20181125/282686163276834>
  - o Mauro Capocci, "Analisi Critica del Datocentrismo", *Le Scienze*, Dicembre 2018 (p.95): <http://www.meltemieditore.it/wp-content/uploads/capocci-le-scienze-big-data-leonelli.pdf>
  - o Videoreview by Alberto Trobia (30'), YouTube series "Panopticon": <https://www.youtube.com/watch?v=IEJDNhaCFEw>
  - o Lovesini, L. "Approcci Sistemici alla Gestione dell'Informazione", *L'Indice dei Libri del Mese*, Numero 6, 3 Giugno 2019, pp.12-14. <https://www.lindiceonline.com/l-indice/sommario/giugno-2019/>
- Feature article "La Modenese Sabina Leonelli Si Aggiudica il Premio Lakatos "Oscar" di Filosofia della Scienza", *La Gazzetta di Modena*, 22 November 2018: <https://gazzettadimodena.gelocal.it/modena/cronaca/2018/11/22/news/alla-modenese-leonelli-il-prestigioso-premio-filosofia-della-scienza-1.17485506>
- Video interview for the Blog of University of Padova, articolo "Immersi nei big data, risorsa o rischio per la società?" di Francesco Suman: <https://ilbolive.unipd.it/it/news/big-data-risorsa-rischio-societa-agcom>
- Interview in *SCI PHI Podcast* (The Philosophy of Science Podcast, episode 42), 17 June 2018: <https://t.co/01smPynj72>



- Interview with featured in article on "Bringing the Internet of Things into the Lab", *The Scientist*, 1 June 2018: <https://www.the-scientist.com/?articles.view/articleNo/54670/title/Bringing-the-Internet-of-Things-into-the-Lab/>
- Interview with Silvia Lazzari featured in article on "DNA: I Tuoi Dati Sono al Sicuro?" (DNA: Are Your Data Safe?), *Corriere della Sera* (main national newspaper), 27 April 2018:
- YouTube videos of my talks at "New Perspectives on Open Science" workshop, University of **Oxford**, March 20 2018: <https://www.youtube.com/watch?v=No4BGXOw4kQ&list=PLvvhOQwqxT54zFkErGahmJZ9rJjYz8fFv&index=4> ; <https://www.youtube.com/watch?v=lu3GlpXUhes>
- Lead Interview in *The Reasoner* (by Virginia Ghiara), issue 3, volume 12, March 2018.
- Interview for *Cartaditalia* issue 3, November 2017, as part of a series featuring leading Italian researchers under 40: [http://iicbruxelles.esteri.it/iic\\_bruelles/resource/doc/2017/11/cartaditalia\\_n3-rid.pdf](http://iicbruxelles.esteri.it/iic_bruelles/resource/doc/2017/11/cartaditalia_n3-rid.pdf)
- My 2017 report on Big Data in Biomedicine was cited in *Research Europe*, 22 February 2018, p.12: "Keeping the Lights On" (by Craig Nicholson)
- Presentation to **National Academy of Science** Committee on Biological Collections, **Washington DC**, February 15: "A Philosophical Perspective on Biological Collections" (with Rachel Ankeny) <https://vimeo.com/326662039>
- YouTube video of my public lecture for the University of Cambridge, January 2018: <https://www.youtube.com/watch?v=mx9pIDbwJ5s&t=4s>
- YouTube video of my talk for the Annual Lecture Series of the Pittsburgh Centre for the Philosophy of Science, November 2017: <https://www.youtube.com/watch?v=qc1aQep4DE8>
- Feature article concerning my research and career in celebration of Talented Young Italians Award 2017: "Ricerca e Big Data: La Modenese Sabina Leonelli Svola I Segreti", *Gazzetta di Modena*, 10 January 2018: [http://m.gazzettadimodena.gelocal.it/modena/cronaca/2018/01/12/news/ricerca-e-big-data-la-modenese-sabina-leonelli-svola-i-segreti-1.16342083?refresh\\_ce](http://m.gazzettadimodena.gelocal.it/modena/cronaca/2018/01/12/news/ricerca-e-big-data-la-modenese-sabina-leonelli-svola-i-segreti-1.16342083?refresh_ce)
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- Article by Craig Nicholson on my report for the EU MLE Exercise, 8 December 2017: "Open Science Movement Needs Supervision, Report Warns" *Research Professional*. [www.researchresearch.com/news/article/?articleId=1371863](http://www.researchresearch.com/news/article/?articleId=1371863)
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- Article by Craig Nicholson on my report for the Swiss Research Council, 3 November 2017: "Lack of Data Hampers Biomedical Research, Report Warns", *Research Professional*.
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- YouTube Video of Keynote lecture on "Rewards and Incentives for Open Access Publishing: Why and How Open Science?" (given in occasion of Swedish conference on Open Access, October 16 2017) [https://www.youtube.com/watch?v=q4\\_UBAtms0k&index=2&list=PLZVkeICvA5-EJG7Hok3L9dDq\\_haIq-d63](https://www.youtube.com/watch?v=q4_UBAtms0k&index=2&list=PLZVkeICvA5-EJG7Hok3L9dDq_haIq-d63)
- Podcast interview on my book *Data-Centric Biology*, New Books Network, published online June 2017.
- Press coverage and interviews concerning my intervention in European debate over Open Access Publishing as Chair of the Open Science Publishing Working Group of the Open Science Policy Platform (2017):
  - *Nature*, 29 March 2017: <http://www.nature.com/news/gates-foundation-announces-open-access-publishing-venture-1.21700>
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- Interview with *Wise.it*, published online 10 January 2017: "Sabina Leonelli: Here's the impact of big data on medicine" <http://wisesociety.it/incontri/sabina-leonelli-big-data-medicina/>
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- Italian National Press around my intervention at the 12<sup>th</sup> World Conference "Future of Science: Digital Revolution" on September 22-24, Venice:
  - *Corriere della Sera*, September 2016, "No All'Individualita': L'Innovazione Deve Essere Condivisa": <http://sociale.corriere.it/no-allindividualita-linnovazione-deve-essere-condivisa/>
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  - *Wired.it*: <http://www.wired.it/scienza/biotech/2016/09/27/futuro-della-scienza-big-data/>
  - *Corriere della Sera* Special Edition, 14 October 2016: <http://www.corriere.it/extra-per-voi/2016/10/06/cioccolata-premi-nobel-ovvero-come-big-data-possono-aiutare-medicina-21cd5f92-8bd3-11e6-8000-f6407e3c703c.shtml>
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- Lead Interview for *The Reasoner* (by Federica Russo), September 2013 issue: [http://www.kent.ac.uk/secl/philosophy/jw/TheReasoner/vol7/TheReasoner-7\(9\).pdf](http://www.kent.ac.uk/secl/philosophy/jw/TheReasoner/vol7/TheReasoner-7(9).pdf)
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- *Phonic FM*: Main guest speaker on Open Data, March 2012.
- Interview with *BBC Radio Devon* on the myth of Frankenstein and synthetic biology, 3 November 2011.

## Posters

- 'Introducing Meta Data Science: The Philosophy of Science Column of the Harvard Data Science Review', PSA 2024, New Orleans, November 2024.
- 'A Philosophy of Open Science for Diverse Research Environments', PSA 2024, New Orleans, November 2024.
- 'Organismal Samples as Models for the Life Sciences', Paris, 13-15 June 2024 (presented by Emma Cavazzoni).
- 'A Philosophy of Open Science for Diverse Research Environments', Society for the Philosophy of Science in Practice 2024, South Carolina, May 2024 (presented by Emma Cavazzoni).

Collection of 9 posters at the Egenis Anniversary Celebration conference, University of Exeter, 17-19 April 2024.

Poster at Space Conference, October 2023 (presented by Paola Castano).

'How does Open Science affect research?', PSA 2022, Pittsburgh, November 2022.

'Towards an Epistemology of Data-Intensive Science' PSA 2017, Atlanta, November 2-6 2016.

'Data Integration and Translational Research in Plant Science' GARNet 2014, University of Bristol, September 9-10 2014.

'Developing the History and Philosophy of Plant Science' UK Plant Science Federation meeting, John Innes Centre, Norwich, April 18-19 2012.

'Data-intensive research in the biological and the biomedical sciences' at Launch Event of the Exeter Initiative for Statistics and Its Applications (November 28 2011, Exeter, UK).

'What Makes a Model Organism? The Case of Arabidopsis' at the Annual GARNet meeting (September 6/7 2011, Cambridge, UK).

'The Epistemic Role of Bio-Ontologies in Data-Driven Research: A Philosophical Perspective' at the International Conference on Biomedical Ontologies (24/26 July 2009, Buffalo, NY).

'Bio-Ontologies and Data-Driven Research' at the International Conference of Bio-Medical Ontologies (24/26 July 2009, Buffalo, NY).

'The Regulatory Role of Bioinformatics' at the ESRC Genomics Network Conference (26/27 October 2008, London).

'Making Small Facts Travel' at the British Academy Conference 'Enquiry, Evidence and Facts' (13/14 December 2007, London).

'Bioinformatics and Genomics' at the ESRC Genomics Network Conference 'Genomics and Society: Today's Answers, Tomorrow's Questions' (25/26 October 2007, London).