

OECD Joint CSTP-GSF Workshop

**TOWARDS NEW PRINCIPLES FOR ENHANCED ACCESS
TO PUBLIC DATA FOR SCIENCE, TECHNOLOGY AND
INNOVATION**

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Bio-Book



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Introductory remarks

Mr. Andrew Wyckoff

Director - OECD Science, Technology and Innovation Directorate



Andrew W. Wyckoff is the Director of the OECD's Directorate for Science, Technology and Innovation (STI) where he oversees OECD's work on innovation, business dynamics, science and technology, information and communication technology policy as well as the statistical work associated with each of these areas.

Mr. Wyckoff was previously Head of the Information, Computer and Communications Policy (ICCP) division at the OECD which supports the organisation's work on information society as well as consumer policy issues. Before heading ICCP, he was the head of STI's Economic Analysis and Statistics Division which develops methodological guidelines, collects statistics and undertakes empirical analysis in support of science, technology and innovation policy analysis.

His experience prior to the OECD includes being a program manager of the Information, Telecommunications and Commerce program of the US Congressional Office of Technology Assessment (OTA), an economist at the US National Science Foundation (NSF) and a programmer at The Brookings Institution.

Mr. Wyckoff is a citizen of the United States, holds a BA in Economics from the University of Vermont, and a Master of Public Policy from the JFK School of Government, Harvard University.

Chairman

Mr. Dominique Guellec

Head of Science and Technology Policy Division

OECD Science, Technology and Innovation Directorate



Dominique Guellec is Head of the Science and Technology Policy (STP) Division, within the Directorate for Science, Technology and Innovation (DSTI) of the Organisation for Economic Co-operation and Development (OECD). This division covers notably: innovation policies, science policies, biotechnology and nanotechnology issues, national innovation studies, innovation for development, the STI Outlook, the Innovation Policy Platform, and the Space Forum.

Mr. Guellec joined the OECD in 1995 and has worked in the DSTI on statistics and quantitative economic analysis of science, innovation and growth. From 2004-2005, Mr. Guellec was Chief Economist of the European Patent Office (Munich). Mr. Guellec has authored several books and many articles on patents, innovation and economic growth. His (co-)publications in English include *The Economics of the European Patent System* (Oxford University Press, 2007); *From R&D to Productivity Growth: the Sources of Knowledge Spillovers and their Interaction* (Oxford Review of Economics and Statistics, 2004).

Of French nationality, Mr. Guellec is a graduate of the École Nationale de la Statistique et de l'Administration Économique (ENSAE, Paris).

Access to public data for science, technology and innovation

Summary of learnings from OECD project

Mr. Alan Paic

Senior Policy Analyst - OECD Science and Technology Policy Division



Alan Paic is senior policy analyst at the OECD's Science and Technology Policy Division with the OECD's Committee for Scientific and Technological Policy (CSTP). He is currently responsible for several projects of the CSTP, including those on Open Access to Data and International Co-operation in Science, Technology and Innovation, as well as OECD Reviews of Innovation Policy. Previously, as Head of the OECD South East Europe Programme, Alan has led comprehensive programmes to enhance competitiveness in South East Europe, including the development of national innovation strategies, and specific programmes for business-academia-government co-operation for innovation.

Before joining the OECD, Dr. Paic has worked both as a scientist in high energy particle physics at CERN, the European Organization for Nuclear Research, and in business, as a strategy consultant with Monitor Company and Stratorg, where he consulted multinational companies on their business strategy, in various geographies including more than a dozen European countries, South Africa, Algeria and GCC countries. Alan holds a Ph.D. in particle physics from Neuchatel University, Switzerland, and an MBA from INSEAD, France.

Panel 1. Data governance and trust for science, technology and innovation

Mr. Duncan McIntyre (Introductory remarks)

Assistant Secretary - Department of Prime Minister and Cabinet of Australia

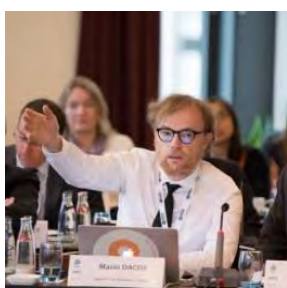


Duncan McIntyre is the Assistant Secretary responsible for the Data and Digital Branch at the Department of the Prime Minister and Cabinet. In this capacity, he advises the Prime Minister and the Minister Assisting the Prime Minister on Digital Transformation on ways to unlock the potential of digital and data to transform the Australian Government and the economy. Prior to this Duncan was the Assistant Secretary at the Department of Communications and the Arts advising on the National Broadband Network and before that, he advised on emerging technology issues, telecommunications consumer issues and Australia Post.

Earlier in his career, Duncan was an Assistant Secretary at the Department of Finance, a Director at the National Office for the Information Economy, at the Department of Industry, Science and Resources and at the Department of Employment, Workplace Relations and Small Business. Duncan holds degrees in Science, Science Communication and an Executive Masters of Public Administration from the Australia and New Zealand School of Government. He is a registered Project Management Professional and a Graduate member of the Australian Institute of Company Directors.

Mr. Marin Dacos

Open Science Counsellor - Ministry of Education, Research and Innovation, France



Marin Dacos is Open Science Advisor to the Director-General for Research and Innovation (Ministry of Higher Education, Research and Innovation). He has founded OpenEdition, a major European infrastructure for open scholarly communication in humanities and social sciences. He received the prestigious CNRS Innovation Medal in 2016.

Mr. Andreas Ebert

National and Industry Technology Officer - Office of the CTO, Microsoft Corporation



Andreas has witnessed over many years the transformative forces of digital technologies on businesses, industries and society. This impact triggers important questions. How fast and deep will cloud computing impact existing business models? What are the core elements of digital transformation per industry? How to leverage the power of AI for improving healthcare best? Will blockchain transform the financial sector? Implementing modern data protection laws like GDPR not only for compliance, but for competitive advantage? What is the proper ethical framework for machine learning? What are the pillars of the EU Digital Single Market?

During transformative times like today, these and similar questions should be addressed, while leveraging the inherent benefits of the rapidly progressing digital revolution. This progress needs to be in line with the requirements of the respective industries, national regulations, as well as respecting the values and rights of people when using trusted digital technologies.

Over a period of 14 years, Andreas participated in his capacity as Technology Officer in many projects and discussions, advising senior stakeholders in business, government and academia in the EU and abroad. Themes ranged from the impact of Open Source, industry transformations, intellectual property rights in digital business models, national interoperability frameworks, standardization strategies, productivity dimensions, digital business transformation(s), economics of hyperscale cloud computing, economics of compliancy, risk modelling, benefits & ethics of artificial intelligence and the socio-economic impact of technology on society.

During the last 27 years, Andreas served in various roles in Microsoft. He was responsible for building the Microsoft consulting organization in Austria, led the enterprise sales unit, had the privilege to lead the Austrian subsidiary as country manager and transitioned 2004 to the newly established role as National Technology Officer.

Andreas lives in Vienna, Austria, has 2 curious children attending university, one cute & playful dog and a wonderful wife allowing him in this profession to travel frequently and experience the global diversity of the world. He is a graduate of the Technical University in Vienna, with a degree in business administration and computer science.

Ms. Eunjung Shin

Associate Research Fellow - Science and Technology Policy Institute (STePI), Korea



Eunjung Shin is an associate research fellow of Science and Technology Policy Institute (STePI) in South Korea. After joining the STePI in 2013, she has led multiple policy research projects on basic science, research infrastructure, research inputs, and open science. She was a principal investigator of the government-funded project on “Open and Inclusive Collaboration in Science” that was conducted in close collaboration with OECD during the past two years (2016-2017). The main results from the STePI-OECD project were reported in a couple of policy papers (i.e. OECD STI Policy Paper No. 49 and No. 50) early this year. She also led other projects on open science, which includes “Policy Measures to Promote Open Science in South Korea (STePI report, 2017)” and “Challenges in Expanding Access to Research Outputs (STePI report, 2016)”. She is currently leading a project on the effectiveness of open science policy, and participating in one of the Interest Group of the Research Data Alliance.

Eunjung was originally trained as an engineer at the college (Kyungbook National University, South Korea) and later moved to the policy studies program (Seoul National University, South Korea). She earned a PhD in public administration at the University of Illinois at Chicago in the United States, with specialization on science, technology and environmental policy.

Mr. Peter Elias

Professor, Institute for Employment Research - University of Warwick



Peter Elias studied chemistry before undertaking his doctoral studies in applied labour economics at the University of California at Berkeley. He is a Professor at the Institute for Employment Research, University of Warwick, where he has worked across a wide variety of research areas over the last 43 years. These have ranged from the evaluation of large-scale government programmes, statistical monitoring of the status of particular groups in the labour market, the study of occupational change and the relationship between further and higher education, vocational training and labour market outcomes. Related to these research areas, he has developed methods for the measurement and analysis of labour market dynamics and has a keen interest in the classification of labour market

activities.

From October 2004 he has acted as the Strategic Advisor for Data Resources to the UK Economic and Social Research Council (ESRC), assisting the ESRC and other research funding councils and agencies with plans to develop data resources for research across the social sciences and at the boundaries between the social sciences and other disciplines. He assisted with the foundation of the UK Administrative Data Research Network and was the chair or vice chair for two Expert Groups hosted by the OECD Global Science Forum. In June 2011 he was awarded the CBE in the Queen's Birthday Honours List for Services to the Social Sciences.

Panel 2. Data standards, interoperability and re-use

Mr. Ross Wilkinson (moderator)

Executive Director - Australian National Data Service



Ross Wilkinson is the executive director of the Australian National Data Service, helping to make data more valuable for researchers, institutions and the nation.

His research career commenced with his Ph. D. in mathematics at Monash University before researching in computer science at La Trobe University, R.M.I.T. and at CSIRO. Some of his areas of research have been document retrieval effectiveness, structured documents retrieval, and most recently on technologies that support people to interact with their information environments. He has published over 90 research papers, has served on many program committees and was a program co-chair for both SIGIR'96 and SIGIR'98.

He is a Council Member of the Research Data Alliance and is leading the Australian National Data Service helping to make Australia's research data more valuable to enable Australia's researchers to more effectively use and re-use research data, wherever it comes from, and in partnership with researchers around the world.

The Australian National Data Service is a program funded by the Australian Government since 2008 to develop the research data infrastructure at all levels of the research system to enable more effective use of Australia's research data assets. This has required data technology, data management and data policy to be combined in a nationally coherent approach that integrates with institutional and domain investments in research data.

Mr. Simon Hodson

Executive Director - CODATA



Simon Hodson has been Executive Director of CODATA since August 2013. Simon is an expert on data policy issues and research data management. He has contributed to influential reports on Current Best Practice for Research Data Management Policies and to the Science International Accord on Open Data in a Big Data World. As part of his CODATA role, Simon is closely involved in a CODATA initiative to improve the coordination of standards for data integration and interoperability for interdisciplinary research and in the coordination of the CODATA Data Policy Committee.

Additionally, Simon leads or participates in numerous projects, Working Groups and Steering Groups. Currently (February 2017), this includes the following roles:

- Project Director, African Open Science Platform Project;
- Chair, European Commission's Expert Group on FAIR Data, which is preparing a report and guidelines on how to make FAIR data a reality;
- Co-chair, GEO Data Sharing Working Group, to which CODATA has made a longterm contribution;

Simon is also a member of the Board of Directors of the Dryad Data Repository, a not-for-profit initiative to make the data underlying scientific publications discoverable, freely reusable, and citable; and he sits on the Scientific Advisory Board of CESSDA ERIC, the European data infrastructure for the social sciences.

He was co-chair of the OECD Global Science Forum and CODATA Project on Sustainable Business Models for Research Data Repositories. Simon has a strong research background, as well as considerable project and programme management experience: from 2009 to 2013, as Programme Manager, he led two successful phases of Jisc's innovative Managing Research Data programme in the UK.

Mr. Tyler Walters

Dean, University Libraries and Professor - Virginia Tech



Tyler Walters is Dean, University Libraries and Professor, Virginia Tech where he is responsible for a diverse set of data and information services and repositories. He is a member of the AAU-APLU Public Access Working Group that has recently produced a report and recommendations to U.S. Federal agencies and research universities on public access to research data.

He currently serves as the Board President of DuraSpace, a nonprofit organization supporting open source software communities that foster long-term access and discovery of digital assets related to research and scholarship. He is a past member of the Coalition of Networked Information (CNI) steering committee and is a member of the editorial board of the International Journal of Digital Curation. Walters finished his term in 2017 as the founding director of SHARE, the Shared Access Research Ecosystem initiative, a joint undertaking of the Center for Open Science and the Association of Research Libraries and sponsored by the AAU and APLU. SHARE is building a free, open, data set about research and scholarly activities across their life cycle. In 2013, Walters completed a Ph.D. with a research focus on the development of university research programs and its impact on knowledge creation and production. He is the lead author of the 2011 Association of Research Libraries report, *New Roles for New Times: Digital Curation for Preservation*.

Ms. Thordis Sveinsdottir

Senior Research Analyst - Trilateral Research



Thordis Sveinsdottir is Senior Research Analyst at Trilateral Research Ltd, in the UK. Her work has broadly focused on the impact of new Information and Communications Technology (ICT) on contemporary culture and society, especially with regard to the practice of (open) science, data technologies, practices and ethics. Her areas of expertise include open science, open access to research data, open eGovernment and the use of data analytics for security monitoring purposes. Thordis worked on the EU FP7 funded RECODE project (Policy Recommendations for Open Access to Research Data in Europe) which produced detailed stakeholder specific, as well as general, policy recommendations for advancing open access to research data in Europe.

She co-authored the book *Open Data and the Knowledge Society*, published by Amsterdam University Press in 2017 and the forthcoming book-chapter *Understanding the 'open' in making research data open: Policy rhetoric and research practice in Big Data Brother*, published by Routledge in 2018. Thordis holds a PhD in Sociology from the University of Surrey, UK and has previously worked at The University of Manchester, The University of Sheffield and Sheffield Hallam University, UK in a research and teaching capacity.

Mr. Jean-Francois Abramatic

Consultant - INRIA and IBM (formerly)



Jean-François Abramatic's career has been shared between research and industry in the area of Information & Communications Technology.

He started his career as a research scientist in differential games (Ecole des Mines de Paris 1972-1974) and image processing (IRIA 1974-1983). After managing a research and development programme (1984-1988) aimed at designing scientific workstations, he became chairman and CEO of a start-up company selling graphics terminals (1988-1991) which merged with a US partner (1992).

In 1993, he returned to Inria as Director of Development and Industrial Relations (1993-1996). Among various development partnerships, he launched the European host of the World Wide Web Consortium (W3C) in 1995. In 1996, he moved to MIT to become Chairman of W3C (1996-2001).

He then joined ILOG as Vice President of Research and Development and became Chief Product Officer in 2004. After the acquisition of ILOG by IBM in 2008, he became Director of ILOG Research and Development within IBM Software Group. In 2011, he moved to IBM headquarters as Director Development Productivity & Innovation in the Enterprise Transformation division. He retired from IBM in 2014 and returned to Inria in the Transfer & Innovation division as Research Director.

Since January 2017, Jean-François Abramatic is Inria Senior Scientist Emeritus. He is the current Chair of the Advisory Board of the Software Heritage initiative.

Jean-François Abramatic received his engineering degree from Ecole des Mines de Nancy (1971) and his PhD from University of Paris (1980).

Panel 3. Definition of responsibility and ownership

Ms. Ingrid Dillo (moderator)

Deputy Director - Data Archiving and Networked Services - RDA & Leiden University



Ingrid Dillo holds a PhD in history and has worked in the field of policy development for the last 30 years, including as senior policy advisor at the Dutch Ministry of Education, Culture and Science and the National Library of the Netherlands (KB). Ingrid is now deputy director at DANS. Among her areas of expertise are research data management and the certification of digital repositories.

She is Treasurer of the Board of the CoreTrustSeal (CTS) and a member of the Board of Directors of the DRYAD repository. She also is vice chair of the Scientific Committee of the ICSU/World Data System (WDS).

For many years Ingrid participated in the Research Data Expert Group of the Knowledge Exchange. She is one of the authors of the article “The FAIR Guiding Principles for scientific data management and stewardship”, in which the FAIR-principles were originally stated. Over the last two years Ingrid co-chaired the OECD/GSF Expert Group on Sustainable Business Models for Data Repositories.

Ingrid has been active in the Research Data Alliance (RDA) right from the start. She is a member of the Technical Advisory Board of RDA and co-chairs the RDA/WDS Interest Group on Certification of Digital Repositories. She has been co-chair of the RDA/WDS Interest Group on Cost Recovery for Data Centers and an active member of the former RDA/WDS Repository Audit and Certification DSA-WDS Partnership. From July 2017 until February 2018 Ingrid has been interim Secretary-General of RDA.

Mr. Stan Matwin

Director - Institute for Big Data Analytics, Dalhousie University



Stan Matwin is the Director of the Institute for Big Data Analytics at Dalhousie University, Halifax, Canada, where he is a Professor and Canada Research Chair (Tier 1) at the Faculty of Computer Science. He is also a Distinguished Professor at the University of Ottawa, a State Professor at the Institute for Computer Science of the Polish Academy of Sciences, and member of the PhD Board of the PhD@SNS, the Data Science PhD program at the University of Pisa (Italy).

He holds the titles of Fellow of the European Coordinating Committee on AI, and Fellow of the Canadian AI Association (CAIAC). Stan is internationally recognized for his work in text mining, machine learning, big data and data privacy. Author and co-author of more than 250 refereed papers, and a supervisor of more than 70 graduate students, Stan Matwin has extensive experience and interest in innovation and technology transfer. In 2017, Stan was the General Chair of the ACM Knowledge Discovery and Data Mining, world's premier data science conference.

Mr. Paul Uhler

Consultant & Ex Officio Member - Board on Research Data and Information, NAS



Paul F. Uhler, J.D., is a consultant in information policy and management. He was Scholar at the National Academy of Sciences (NAS) in Washington, DC (2015-2016), and Director of the NAS Board on Research Data and Information (2008-2015). He was employed at the NAS in various capacities from 1985-2016, and at the Department of Commerce in 1984-1985. Paul has written or edited 27 books and over 70 articles, mostly in scientific data law, policy, and management. He speaks worldwide on these topics and consults governments, professional organizations, and universities. In 1997 he won the National Research Council's Special Achievement Award and in 2010 the CODATA International Prize, both in the field

of data policy.

Paul has a B.A. degree in world history from the University of Oregon (1977), and a Master's degree in foreign relations and a Juris Doctor degree from the University of San Diego (1983, 1984). For more detailed information about his professional activities, see his website at: www.paulfuhler.com.

Mr. Ben White

Head of Intellectual Property - British Library



Benjamin White is the Head of Intellectual Property at the British Library. He has a background in publishing having worked for Pearson Education internationally, as well as for Ordnance Survey, the national mapping agency of the United Kingdom. He is active in the Intellectual Property field within the UK having sat on a number of bodies including the BBC's Creative Archive Advisory Board, the UK Government's Creative Economy Programme (Competition and Intellectual Property), as well as the the Copyright Hub's Partners Board, and Institute of Public Policy Research's Advisory Board on Intellectual Property and the Public Sphere. He currently chairs the copyright group of the Council for

European National Librarians and sits on the UK Intellectual Property Office's Unregistered Intellectual Properties Research Expert Advisory Group. He has a strong professional interest in the legal aspects of Big Data, and recently participated in a 2 year European Commission funded project called Future TDM, looking at the barriers to further uptake in Europe of data analytics and AI technologies.

He has spoken widely on copyright law and database rights in the UK as well as internationally, including at the Internet Governance Forum and WIPO. He has also been called as an expert witness to speak to the Legal Affairs Committee (JURI) of the European Parliament, as well as the Business Industry and Skills Select Committee the UK Parliament.

Ms. Marie Timmermann

EU Legislation & Regulatory Affairs - Science Europe



Marie Timmermann joined Science Europe in 2016. She is on the one hand responsible for EU legislation and regulatory affairs having an influence on research. On the other hand, she is managing Science Europe's work on research data management in the wider context of open science. Marie has a background in political sciences and economics (Germany and France) and has more than 10 years of experience in policy analysis, following legislative processes and advocacy on European level.

Panel 4. Recognition and reward systems for data providers and stewards

Mr. Simon Hodson (moderator)

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Simon has a strong research background, as well as considerable project and programme management experience: from 2009 to 2013, as Programme Manager, he led two successful phases of Jisc's innovative Managing Research Data programme in the UK.

Ms. Vanessa Proudman

Director - SPARC Europe



Vanessa Proudman is Director of SPARC Europe; she is working to make Open the default in Europe. Vanessa has 20 years' international experience working with many leading university libraries worldwide, with research institutions, international policy makers, together with information and IT professionals and designers from many countries. She also headed information and IT at a UN-affiliated international research institution in Vienna for 10 years. She has also been programme and project manager to Europeana. She is also the owner of Proud2Know, a consultancy that supports the development of Europe's academic libraries.

Mr. Brian Nosek

Executive Director and Co-founder - Center for Open Science



Brian Nosek is co-Founder and Executive Director of the Center for Open Science (<http://cos.io/>) that operates the Open Science Framework (<http://osf.io/>). COS is enabling open and reproducible research practices worldwide. Brian is also a Professor in the Department of Psychology at the University of Virginia.

He received his Ph.D. from Yale University in 2002. He co-founded Project Implicit (<http://projectimplicit.net/>), a multi-university collaboration for research and education investigating implicit cognition--thoughts and feelings that occur outside of awareness or control. Brian investigates the gap between values and practices, such as when behavior is influenced by factors other than one's intentions and goals. Research applications of this interest include implicit bias, decision-making, attitudes, ideology, morality, innovation, barriers to change, open science, and reproducibility. In 2015, he was named one of Nature's 10 and to the Chronicle for Higher Education Influence list.

Mr. Mustapha Mokrane

Executive Director - World Data System



Since March 2012, Mustapha Mokrane is the first Executive Director of the International Council for Science's World Data System International Programme Office. In this role, he is responsible for promoting WDS' Open Data Sharing Principles and in charge of coordinating several activities and working groups in support of research data stewardship and data management. He is the Chair of the CoreTrustSeal Standards and Certification Board and Lead of the Belmont Forum e-Infrastructure and Data Management project and on behalf of ICSU-WDS.

Previously, he worked at the International Council for Science (ICSU) between 2009 and 2012 as Science and Information Technology Officer in charge of the coordination of ICSU's Scientific Data and Information activities and the liaison with its partners. He was also responsible for the information technology related activities within ICSU before 2003 and 2009. After moving from Algeria, his home country, he trained as molecular biologist in Marseille, France. Using transgenesis and microarrays technologies, he developed a drosophila model to elucidate the role of a gene involved in human cardiomyopathies. His scientific background covers genetics and bioinformatics and he developed a strong interest for scientific data and information. He holds a Ph.D. in Molecular Biology from the Aix-Marseille University.

Mr. Samuel Goeta

Co-founder - Dataactivi.st



Samuel Goëta is a researcher, an open data activist and the co-founder of dataactivist, a cooperative company whose mission is to open data and make them used and useful. With a background in social science, he advocates for open data and has helped several organisations to open their data. His PhD dissertation in sociology looks at the hidden aspects of the emergence of the open data movement and analyses the invisible work and the frictions which forgoes the release of open data. A founding member of Open Knowledge France, he is a major contributor to the School of Data and Open Data Index projects.

Ms. Beth A. Plale

Science Advisor for Public Access - National Science Foundation



Beth A. Plale is currently on assignment at the National Science Foundation where she is serving as Science Advisor for Public Access. In this capacity Dr. Plale works with the scientific community, across the directorates of NSF, and nationally and internationally to advance access to data from public research. Dr. Plale is a Full Professor of Informatics and Computing at Indiana University. She has authored over 150 peer-reviewed publications, and been PI or co-PI on over \$50 million in extramural funding from the National Science Foundation, Alfred P. Sloan Foundation, Andrew W. Mellon Foundation, NASA, DOE, IMLS, and Microsoft. She is the founding director of the Data To Insight Center at Indiana University and founder of the HathiTrust Research Center.

Professor Plale's postdoctoral studies were at Georgia Institute of Technology and PhD in computer science from State University of New York Binghamton. She has an MBA, a MSc in Computer and Information Science and a BSc in computer science with a minor in math.

Dr. Plale is a founding member of the Research Data Alliance (RDA) where she served as inaugural chair of the RDA Technical Advisory Board (TAB). She is Department of Energy (DOE) Early Career Awardee and past Fellow of the Midwest university consortium CIC's Academic Leadership Program. Plale is a senior member of ACM and IEEE and member of AAAS.

Panel 5. Business models for open data provision

Mr. Carthage Smith (moderator)

Senior Policy Analyst & Lead co-ordinator - OECD Global Science Forum



Carthage Smith joined the OECD as head of the Global Science Forum (GSF) Secretariat in June 2014. He is responsible for working with national members to define the overall strategy and priorities for the Forum. This includes policy work on research infrastructures, Open Science, research funding mechanisms and science advisory processes.

Carthage was originally trained as a biochemist, with a PhD in neuroscience (Newcastle University, UK). Prior to joining the GSF secretariat, he was Deputy Executive Director of the International Council for Science (ICSU, Paris) for twelve years. In this position he led the strategic development of a number of major global science initiatives. Before moving to France, he spent six years at the UK Medical Research Council, where he was Head of International Cooperation.

Mr. Barend Mons

Professor of BioSemantics - Leiden University



Prof. Dr. Barend Mons is a molecular biologist by training (PhD, Leiden University, 1986) and spent over 15 years in malaria research. After that he gained two decades of experience in computer-assisted knowledge discovery. He spent time with the European Commission (1993-1996) and with the Netherlands Organisation for Scientific Research (NWO 1996-1999). Dr. Mons also co-founded several spin-off companies in the field of semantic technologies and data curation. Currently, Dr. Mons is professor of biosemantics in the Human Genetics department of Leiden University Medical Centre. He was the first head of node for ELIXIR-NL at the Dutch Techcentre for Life Sciences, he is integrator for life sciences at the Netherlands eScience Centre, and board member of the Leiden Centre of Data Science. He coined the Knowlet concept in 2008 and the concept of

nanopublication, together with Jan Velterop, in 2009. Both are used in machine-assisted knowledge discovery. In 2014, Dr. Mons initiated the Lorentz Conference, which led to the FAIR data principles. In 2015, he was appointed chair of the European Commission's High Level Expert Group for the "European Open Science Cloud" (EOSC), DG Research and Innovation. He resigned from that group after completion of the EOSC recommendations and is currently leading the Global Open FAIR initiative; www.go-fair.org.

Mr. Jean-Marc Lazard

Chief Executive Officer - Opendatasoft



Jean-Marc Lazard is the co-founder and CEO of OpenDataSoft, an online platform for advanced data publishing and sharing. 130+ public & private organisations in 17 countries entrust it to make their data easily reusable and a lever for research and innovation. A graduate of EDHEC Business School, Jean-Marc Lazard was previously the Head of Innovation and Strategic Projects at Exalead (Dassault Systèmes Group).

Ms. Ingrid Dillo

Deputy Director - Data Archiving and Networked Services - RDA & Leiden University



Ingrid Dillo holds a PhD in history and has worked in the field of policy development for the last 30 years, including as senior policy advisor at the Dutch Ministry of Education, Culture and Science and the National Library of the Netherlands (KB). Ingrid is now deputy director at DANS. Among her areas of expertise are research data management and the certification of digital repositories.

She is Treasurer of the Board of the CoreTrustSeal (CTS) and a member of the Board of Directors of the DRYAD repository. She also is vice chair of the Scientific Committee of the ICSU/World Data System (WDS).

For many years Ingrid participated in the Research Data Expert Group of the Knowledge Exchange. She is one of the authors of the article “The FAIR Guiding Principles for scientific data management and stewardship”, in which the FAIR-principles were originally stated. Over the last two years Ingrid co-chaired the OECD/GSF Expert Group on Sustainable Business Models for Data Repositories.

Ingrid has been active in the Research Data Alliance (RDA) right from the start. She is a member of the Technical Advisory Board of RDA and co-chairs the RDA/WDS Interest Group on Certification of Digital Repositories. She has been co-chair of the RDA/WDS Interest Group on Cost Recovery for Data Centers and an active member of the former RDA/WDS Repository Audit and Certification DSA-WDS Partnership. From July 2017 until February 2018 Ingrid has been interim Secretary-General of RDA.

Mr. Duncan Campbell

Director - Global Sales Partnerships - John Wiley & Sons



Duncan Campbell is Director, Global Sales Partnerships, with John Wiley & Sons, where he is responsible for licensing, business development & agent relations for Wiley's academic journal and database content. He is also engaged in developing Wiley's strategies and policies with regard to government affairs, content sharing, and text and data mining. He is co-chair of the CLOCKSS digital archive, a not-for-profit joint venture between the world's leading academic publishers and research libraries, and represents Wiley on the Crossref and IPRO boards, as well as several other STM industry committees related to intellectual property and legal affairs. Prior to joining Wiley, he worked in product management at ProQuest and as a commissioning editor at the University of Wales Press. He has an MA from the University of Cambridge and an MA and PhD from Cardiff University.

Panel 6. Building human capital and institutional capabilities

Mr. Bart Dumolyn (moderator)

Assistant to the Director

Department of Economy, Science and Innovation, Flemish Government



Bart Dumolyn is a policy advisor for the Flemish Authorities, Department of Economy, Science and Innovation. His main topics are Open Science, Responsible Research and Innovation, and science policy in European and international context. He is a delegate for the OECD Global Science Forum, the Erac Standing Working Group on Open Science and Open Innovation, and the ERC-FET-MSCA Specific Configuration of the H2020 Programme Committee. He coordinates the implementation of the high performance broadband glass fiber network of the Flemish research performing organizations, universities and higher education institutes. Bart is a clinical psychologist by training and has a strong interest in science communication and science with and for society.

Mr. Kazuhiro Hayashi

Research Fellow - National Institute of Science and Technology Policy, Japan



Kazuhiro Hayashi has been in scholarly publishing and communication, in a wide variety of roles, for more than 20 years, since he majored in Chemistry at the University of Tokyo graduate school and also www started. At Chemical Society of Japan, he was focused on scholarly communication through E-journals and Open Access, and he reconstructed and improved the way publishing is managed through his skills involving information technology. He worked successively as an Editor, a Production Manager, an E-journal Manager, and a Promotions Manager. Covering a broad range of roles in publishing, he got a bird-eye view of scholarly communication and found the importance of policy making triggered by Open Access. After moving to NISTEP, his study is to foresee the future of research with his unique experiences and to transfer to the new paradigm through dialogues with various stakeholders. Some of them are with

libraries (SPARC Japan steering committee member), with Chemists (IUPAC titular member), and Administrators (JST (Japan Science and Technology agency) advisor). His current task is policy development and implication of Open Science, together with developing a new way of foresight for Science and Technology trends. He is also an expert member of Open Science working parties such as the G7 Science and Technology Ministry meeting, the OECD/GSF project, and the Cabinet Office of Japan.

Ms. Michelle Barker

Deputy Director, Research Software Infrastructure - Nectar & University of Melbourne



Michelle Barker leads the development of strategic research data and eInfrastructure programs across the Australian National Data Service, National eResearch Collaboration Tools and Projects, and Research Data Services. This includes development of a workforce strategy that will provide the human capital base needed to maximise the gains of enhanced access to open data, enabling increased research impact.

Michelle's academic career focused on social and organisational change, providing particular expertise in building collaborative partnerships to achieve system-wide transformation in the research sector. Michelle is an international leader of the science gateways (or Virtual Research Environments) community, and co-founded the International Coalition on Science Gateways.

Michelle brings her expertise in enabling disparate stakeholders to unite around a common vision to achieve bigger impact, to her collaborations with a range of human capital initiatives focused on research software skills for both researchers and research software developers, including the Workshop on Sustainable Software for Science: Practice and Experiences, Research Software Engineers Association, and US Research Software Sustainability Institute. These programs share commonalities in advocating for changes in the culture around digital research education and training, career paths, credit and attribution, workforce diversity, and provision of lifelong training,

Michelle is also a member of the OECD GSF expert group on the Socio-Economic Impact of Research Infrastructures, and leads impact conversations across Australia's National Collaborative Research Infrastructure Strategy community.

Ms. Michelle Willmers

Curation and Dissemination Manager - University of Capetown



Michelle Willmers is the Publishing & Curation Manager of the Research on Open Educational Resources for Development (ROER4D) project, a large-scale networked initiative engaging over 100 researchers in South America, Sub-Saharan Africa and South and Southeast Asia. She has a background in academic and scholarly publishing and has worked as a consultant and institutional project manager in scholarly communication since 2008. Prior to that, she worked as an academic journal editor and publishing manager. She was a senior team member in the Shuttleworth Foundation University of Cape Town (UCT) Open Educational Resources initiative, Programme Manager of the IDRC Scholarly Communication in Africa Programme, and Project Manager of the OpenUCT Initiative. Most recently, she has served as Project Manager and Researcher in the UCT project component of the World Wide Web Foundation's Open Data in Developing Countries (ODDC)

initiative. She is based in the Centre for Innovation in Learning & Teaching at UCT.

Mr. Pedro Fernandes

Training Coordinator, Elixir Project - Instituto Gulbenkian



Pedro Fernandes graduated in Electronics and Telecommunications Engineering at IST (U.T. Lisboa). He worked in Biomedical Engineering, Biophysics and Physiology and changed to Bioinformatics in 1990. He established the first user community in Portugal around the national service provided by the IGC as the portuguese node of EMBnet. In 1998 he created the Gulbenkian Training Programme in Bioinformatics, that provided user skills to more than 5150 course attendees throughout its nineteen years of existence. In 2002, in cooperation with Mario Silva from FCUL, he designed a graduate Programme in Bioinformatics. He currently teaches Bioinformatics both in graduate and undergraduate programmes. Pedro Fernandes is the Training Coordinator of Elixir-PT, now superimposed with Biodata.PT, the national infrastructure for bio-medical data resources. He also represents IGC in GOBLET, the Global Organisation for Bioinformatics Learning, Education and Training.

Ms. Victoria Stodden

Associate Professor, School of Information Sciences - University of Illinois



Victoria Stodden is an associate professor in the School of Information Sciences at the University of Illinois at Urbana-Champaign, with affiliate appointments in the School of Law, the Department of Computer Science, the Department of Statistics, the Coordinated Science Laboratory, and the National Center for Supercomputing Applications. She is also a faculty affiliate of the Center for Informatics Research in Science and Scholarship (CIRSS) in the School of Information Sciences at the University of Illinois. Victoria completed both her PhD in statistics and a law degree at Stanford University, and graduated magna cum laude from the University of Ottawa.

She is a data scientist working on open data and its implications. My group focuses on understanding the effect of big data and computation on scientific inference, for example studying adequacy and robustness in replicated results, designing and implementing validation systems, developing standards of openness for data and code sharing, and resolving legal and policy barriers to disseminating reproducible research.

Mr. Steve Brewer

Research Staff, Electronics and Computer Science - University of Southampton



I am currently engaged in doctoral research at the University of Southampton looking at data-driven digital transformation, comparing different economic sectors including various scientific domains. I am interested in the disruptive nature of data science for transformational models across the digital economy. With a background in computing and IT, my recent background over the last ten years or so is in engagement and dissemination for various EU and UK projects that have covered Data Science skills, and distributed and utility computing.

These include the EU-funded EDISON project and the RCUK-funded IT as a Utility Network+ in the UK. For the ITaaU Network+ I helped create a programme of workshops and conferences that brought an interdisciplinary community of academics, policy-makers and business leaders together to share insights into the trend towards IT as a Service across many domains. The EDISON project was established to build the Data Science profession, this was achieved in part by reducing the gap between what teaching and training establishments deliver and the requirements that employers demand. Over the course of the two-year project I helped orchestrate a broad and diverse community passionate about the potential of data science to change careers, organisations and domains. We ran successful conferences in the UK, Spain and Poland and are now building on that legacy with a forthcoming data science conference in Edinburgh in May.

I have also recently founded a start-up which is focused on supporting organisations, teams and leaders achieve successful data-driven transformation.

Concluding remarks

Mr. Christian Reimsbach-Kounatze

*Internet Economist and Policy Analyst, Digital Economy Policy
OECD Science, Technology and Innovation Directorate*



Christian has been working at the OECD on topics related to the Internet and digital economy since 2008. This includes work on the social and economic impact of the ICT sector and on digital innovation, including more recent work on data-driven innovation (DDI). His current work focuses on data governance including analysing the opportunities and challenges of enhanced access to data and on national privacy strategies.

Before joining the OECD, Christian worked as a researcher at the Institute for Information and Market Engineering of the Karlsruhe Institute of Technology (KIT) and at SAP Research in Germany on topics related to information markets and distributed incentive mechanisms. Christian holds a Diploma (Master of Science) in Information Science, Engineering and Management and a Diploma in Economics, both granted by the KIT.

Mr. Barbara Ubaldi

*Senior Project Manager, Digital Government & Open Data
OECD Public Governance and Territorial Development Directorate*



Barbara Ubaldi heads the OECD Unit responsible for the work on Digital Government, Open Data and Data-driven Public Sector. Barbara leads thematic reviews on digital government and open data, and co-ordinates the work on the use of new technologies, social media and Open Data in governments (OGD) to enhance public sector's openness, efficiency and innovation. She is also responsible for working with adherent countries on the implementation of the OECD Recommendation on Digital Government Strategies.

Prior to the OECD she served for over seven years as Programme Officer for E-Government and Knowledge Management at the United Nations Department of Economic and Social Affairs in New York. She gathered extensive experience working with developing countries on digital government, ICT and knowledge management for development.