



**Quality, Honesty and Beauty**  
in Science and Technology Communication

# PCST 2012

**12th International Public Communication  
of Science and Technology Conference**



**Florence, Palazzo dei Congressi, Italy, 18-20 April, 2012**

# Under the patronage of



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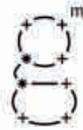


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# PROGRAMME OVERVIEW

## Wednesday, 18 April

9.00 **Meeting of researchers studying for a PhD in science communication, Sala del Capitolo, Badia Fiesolana, European University Institute** (registration needed, write to [m.c.a.vandersanden@tudelft.nl](mailto:m.c.a.vandersanden@tudelft.nl))

*Palazzo Vecchio, Salone dei Cinquecento*

15.30 **Registration open**

17.00 **Opening Ceremony and Opening Session, in collaboration with INAF - National Institute of Astrophysics**

- *Welcome addresses*

**Matteo Renzi**, *Mayor of Florence*

**Toss Gascoigne**, *President, PCST International Scientific Committee*

**Giovanni Bignami**, *President, INAF*

**Lidia Brito**, *Director, Science Policy Division, UNESCO*

**Paolo Galluzzi**, *Director, Galileo Museum*

- *Opening Lectures*

**Piero Angela**, *RAI Television: Making science a prime time TV subject*

**Semir Zeki**, *University College London: The measurement of beauty*

*Palazzo Vecchio, Sala d'Arme*

19.30 **Welcome Reception**

## Thursday, 19 April

*Palazzo dei Congressi*

8.00 **Registration open**

9.00 **Plenary session:  
*Quality, Honesty and Beauty in Science Communication***

Chair: **Masataka Watanabe**, *University of Tsukuba*

**Felice Frankel**, *MIT*: Seeing, representing, understanding

**Massimiano Bucchi**, *University of Trento*: Good, clean and fair: The "Slow PCST Manifesto"

10.30 **Speakers Corner**  
(including coffee and tea)

11.00 **Parallel Sessions 1,  
Poster session**

12.15 **Quick Lunch**

13.15 **Parallel Sessions 2,  
Poster Session**

14.30 **Parallel Session 3,  
Poster session**

15.45 **Speakers Corner**  
(including coffee and tea)

16.00 **Plenary session:  
*Past, Present and Future of PCST/PUS Publishing***

Chair: **Suzanne de Cheveigné**, *CNRS, France*

**Martin W. Bauer**, *LSE*: Science communication in a knowledge society: More on trends and risks

**John Durant**, *MIT*: The problem is the problem: What would count as a successful problem definition in "PUS Research"?



**Edna Einsiedel**, *University of Calgary*: Which publics, in what arenas, to what ends?  
**Bruce Lewenstein**, *Cornell University*: PUS, PEST, PCST, PLUS: Will our models be complementary, in competition... or simply irrelevant?

17.30 **Book Club, Performances, Screenings**

20.00 **Conference Reception at Palazzo Borghese**

**Andrew Pleasant**, *Canyon Ranch Institute*: Ethical issues in health and science communication

**Rick Borchelt**, *National Cancer Institute, USA*: Research in science communication: Trends, needs and opportunities

**Farewell/Announcement of PCST 2014**

**Toss Gascoigne**, *President, PCST International Scientific Committee*

**Germana Barata** and **Luisa Massarani**, *PCST 2014 Team, Brazil*

18.30 **End of the Conference**

**Friday, 20 April**

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*Palazzo dei Congressi*

8.30 **Parallel Sessions 1, Poster session**

9.45 **Parallel Sessions 2, Poster Session**

11.00 **Speakers Corner**  
(including coffee and tea)

11.15 **Book Club, Performances, Screenings**

12.00 **Quick Lunch**

13.00 **Parallel Session 3, Poster session**

14.15 **Parallel Session 4, Poster session**

15.30 **Parallel Session 5, Poster session**

16.45 **Plenary session:**  
***Ethics and Agendas in Science Communication***

Chair: **Brian Trench**, *Dublin City University*

**Ilaria Capua**, *Istituto Zooprofilattico Sperimentale delle Venezie*: The urge and outcome of open science



## PLENARY SPEAKERS



**Piero Angela** is a science journalist and writer. In 1981 he started *Quark*, the first scientific TV program in Italy aimed at a general public. From 1990 to 1998 he authored three innovative TV series, translated into English and sold in over forty countries in Europe, the Americas and Asia. Since 1995 he has been conducting *Superquark*, his current program on nature, science and technology. He is also author of over thirty books, many of which translated into English, German and Spanish. During his career he has received numerous recognitions in Italy and other countries, among which the Kalinga Prize of UNESCO for his contributions to public awareness of science.

**Martin W. Bauer** is Professor of Social Psychology and Research Methodology at the London School of Economics, and director of the Msc *Social & Public Communication*, a former Research Fellow



at the Science Museum London, and a regular academic visitor to Brazil since the early 1990s. He conducts research on tensions between science and common sense using comparative attitude

surveys, media monitoring and qualitative enquiries with colleagues in Europe, India, China, and Latin America. Editor of *Public Understanding of Science* since 2009. Published *The Culture of Science – How the Public Relates to Science across the Globe* (with R. Shukla and N. Allum, NY, Routledge, 2012).

**Rick Borchelt** is special assistant for public affairs to the National Cancer Institute director at the US National Institutes of Health, where he also directs the Office of Public Affairs and Research Communication, the Institute's news and public affairs enterprise.

He is the former science communications director for the US Department of Agriculture, and was director of communications for



the Pew-funded Genetics and Public Policy Center at Johns Hopkins University. His career in science communications and science public policy has included stints as media relations director for the National Academy of Sciences; press secretary for the US House of Representatives Science Committee; and special assistant for public affairs in S&T in the Executive Office of The President during the Clinton Administration.

**Massimiano Bucchi** is Professor of Science and Technology in Society at the University of Trento, Italy and has been visiting professor in several academic and research institutions in Asia, Europe and North America. His publications include



*Science in Society* (London and New York, Routledge, 2004), *Handbook of Public Communication of Science and Technology* (with B. Trench, London and New York, Routledge, 2008), *Beyond Technocracy. Citizens, Politics, Technoscience* (New York, Springer, 2009) and essays in journals such as *Nature* and *Science*. He has received several recognitions for his work, including the Mullins Prize awarded by the Society for Social Studies of Science (1997) and the Merck-Serono special jury award for science books (2007).



## PLENARY SPEAKERS



**Ilaria Capua** is Director of the Division of Comparative Biomedical Sciences at the Istituto Zooprofilattico Sperimentale delle Venezie (Italy) and of the National, FAO and OIE Reference Laboratory for avian influenza and Newcastle disease, and the OIE Collaborating Centre for

Diseases at the Human–Animal Interface. She has extensive experience in coordinating international research projects and has worked closely with FAO managing Technical Cooperation Projects. She is a member of WHO’s Scientific and Technical Advisory Group on Influenza. In 2007 she was awarded the Scientific American 50 prize and in 2008 was included among Seed Magazine’s Revolutionary Minds, for leadership in science policy.



**Edna Einsiedel** is Professor of Communication Studies at the University of Calgary. Her research interests are in the social issues around emerging controversial life science technologies. She is currently co-Principal Investigator

on a project funded by the Stem Cell Network on the social and policy challenges on Stem Cell Research. A second project investigates public and policy on synthetic biology. Her publications have appeared in diverse international journals. She recently served as editor of the journal *Public Understanding of Science*. She also completed a term as member of the Board of Governors for the Council of Canadian Academies of Science.



**John Durant** trained at the University of Cambridge. He has spent his career working to improve the public understanding of science and technology. He was Assistant Director of the Science Museum, London, between 1989

and 2000. From 2000 to 2005 he was Chief Executive of At-Bristol, a new science and natural history museum in England. In 2005, he was appointed as Director of the MIT Museum and Adjunct Professor in the Science, Technology & Society Program at MIT, where he has led the development of the MIT Museum. In 2007, he led the creation of the Cambridge Science Festival and in 2008 he was a founder Fellow of the Noyce Foundation Science Center Leadership Initiative.

**Felice Frankel** is a research scientist at MIT in the Center for Materials Science and Engineering. Working in collaboration with scientists and engineers, her images have been published in over 300 journal articles and/or covers and various other publications for general audiences. She has received many awards and grants. She was elected as a Fellow

of the American Association for the Advancement of Science and was a Loeb Fellow at Harvard University’s Graduate School of Design for her previous work. Her new book, *Visual Strategies* (with A. DePace, Yale University Press, 2012), will help spearhead new efforts to create a virtual graphical community for researchers and students in science and engineering.



## PLENARY SPEAKERS

**Bruce V. Lewenstein** is Professor of Science Communication at Cornell University. He works primarily on the history of public communication of science. He has been active in international activities that contribute to education and research on public communication of science and technology, especially in the developing world. In 2009, he was co-chair of a US National Research Council study and editor of *Public Understanding of Science* from 1998 to 2003. In 2010, he was chair of the American Association for the Advancement of Science's section on Societal Implications of Science & Engineering. Currently, he is serving as the first Presidential Fellow at the Chemical Heritage Foundation.



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**Semir Zeki** is Professor of Neuroesthetics at University College London. He pioneered the study of the higher visual areas of the brain. More recently, he has expanded his work to enquire into the neural correlates of aesthetic and artistic experience. In addition to his published scientific papers, he is author of *A Vision of the Brain*, *Inner Vision: an exploration of art and the brain*, and *Splendours and Miseries of the Brain*. He is a Fellow of the Royal Society and a Foreign Member of the American Philosophical Society. He was awarded the King Faisal International Prize in Biology in 2004 for his work on the brain, and founded the Institute for Neuroesthetics in London and California.



**Andrew Pleasant** is responsible for advancing the role of health literacy across Canyon Ranch Institute activities. He has led and participated in hundreds of presentations and trainings in the United States and around the world, primarily on the topics of health literacy, and science, risk, and environmental communication. He has taught at Cornell University, Brown University, and Rutgers University and served as a temporary advisor at the World Health Organization Health InterNetwork in Geneva, Switzerland. He has published numerous peer-reviewed journal articles and technical reports, and is co-author of the book *Advancing Health Literacy: A Framework for Understanding and Action* (2006). As a journalist, he received numerous awards for his photojournalism and reporting on national and international topics.

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# PCST 2012 AT A GLANCE

Thursday, 19 <sup>th</sup> April								
PALAZZO DEI CONGRESSI	09:00 - 10:30	10:30 - 11:00	11:00 - 12:15	13:15 - 14:30	14:30 - 15:45	15:45 - 16:00	16:00 - 17:30	17.30 - 19:00
Lower Floor								
PC - Auditorium	Plenary Session		P - National Strategies...	P - Latest Developments...	P - Challenges for Science...		Plenary Session	Performances 1
PC - Catering and Poster Area		Coffee break	Poster session	Poster session	Poster session	Coffee break		
Ground Floor								
PC - Room Onice			P - Does PCST Belong in the University?	P - UNESCO session 1	P - UNESCO session 2			Book Club
PC - Room 4			P - Technology Producing Publics...	P - Between a Warm...	I - Government Programmes			
PC - Room 5			I - Communicating Astronomy	P - Debating Environmental...	I - Understanding Publics			
PC - Room 6			I - Citizenship and Democracy	STT - Dialogues and Debates	P - The Role of the Humanities...			
PC - Room 9			P - Science Centres...	P - Participatory Communication...	STT - Scientific Controversy...			Screenings
First Floor								
PC - Room 101			I - Children and Young People	I - Nanotechnology	P - Public Engagement ...			
PC - Room 104			I - Aesthetics of Science...	STT - Emerging Models...	P - Approaches to Communicating...			

PC - Room 105						STT - Evaluating Engagement			
Second Floor									
PC - Room 202		P - Quality and Responsibility...	P - Strategic Science...			I - Reflexive Challenges...			
PC - Room 203		P - Strategic Science...	I - Communicating Social Sciences			STT - New Media			
Garden		Speakers Corner*				Speakers Corner*			
G - Limonaia		I - Approaches to Evaluation	I - Communicating Uncertainty			I - Health Communication			Performances 2
PALAZZO DEGLI AFFARI									
Second Floor									
PA - Room Adua 1		STT - Working with Arts	I - Climate and Environment			P - Communicating Science...			
PA - Room Adua 2		STT - How to Educate and Train...	I - Controversies			I - Media Representations...			
	09:00 - 10:30	10:30 - 11:00	11:00 - 12:15	13:15 - 14:30	14:30 - 15:45	15:45 - 16:00	16:00 - 17:30	17:30 - 19:00	

<b>LUNCH TIME</b>	12:15 - 13:15
<b>* SPEAKERS CORNER</b>	In the garden if weather allows; otherwise inside the Congress Centre

<b>Meeting Room Legend:</b>	
PC - Palazzo dei Congressi	
PA - Palazzo degli Affari	
G - Garden	

<b>Parallel Sessions Legend:</b>	
P - Panel	
STT - Show, Tell and Talk	
I - Individual	





**Friday, 20<sup>th</sup> April**

PALAZZO DEI CONGRESSI	08:30 - 09:45	09:45 - 11:00	11:00 - 11:15	11:15 - 12:00	13:00 - 14:15	14:15 - 15:30	15:30 - 16:45	16:45 - 18:30
Lower Floor								
PC - Auditorium	P - Professionalization...	P - PCST Research Informing Practice	Coffee break	Performances	I - Science News	STT - Media Skills Courses...	P - Rationales and Audiences...	Plenary Session
PC - Catering and Poster Area	Poster Session	Poster Session			Poster Session	Poster Session	Poster Session	
Ground Floor								
PC - Room Onice	P - Working Towards Cultural...	P - Unpacking the Nature...		Book Club 1	P - From Responsibility of Communication...	P - New Perspectives on Public...	P - Working Towards Cultural...	
PC - Room 4	I - Visualising Science	STT - What Do Science and Art...		Book Club 2	P - Exploring the Scholarship...	P - Better Science...	I - Media and Communication...	
PC - Room 5	STT - Experiences with Students	I - Risk Communication			P - Social Contextualization of Neuroscience...	I - Science Events	STT - Experiences in Schools	
PC - Room 6	P - Hpv Vaccination...	STT - New Approaches to Media			P - Art + Science...	I - Social Networks	I - Media Coverage of Health...	
PC - Room 9	I - Arts Meet Sciences	I - Sounds and Visions of Science		Screenings	STT - Institutions Reach Out	P - Public Communication on...	I - Communicating Food and Crops	
First Floor								
PC - Room 101	STT - Communicating Ethics	I - Science Cafés and Informal Engagement			P - Communicating Genomes...	P - Understanding the Public...	P - Food, Science and Communication...	

PC - Room 104	I - Training and Education	P - Science in TV...			STT - Festivals and Events	I - Policy, Politics and Values	STT - Science Centres	
PC - Room 105	I - Earth and Water					STT - Audio-visual Media		
Second Floor								
PC - Room 202	P - Quality in Informal Dialogue Events...	P - Science Communication in Countries...			P - Monitoring Science in the Media	P - From Cities of Science to...	P - Science and Governance...	
PC - Room 203	P - What Journals Want...	I - Science in Culture			I - Scientists and Journalists	P - Arenas, Modalities and Pathways...	P - Materializing Science Communication...	
Garden			Speakers Corner*					
G - Limonaia	P - Evaluating Public Communication...	P - On the Meaning of...			I - Science Centres	I - Health and Medicine	I - Scientists' Views of the Public	
	08:30 - 09:45	09:45 - 11:00	11:00 - 11:15	11:15 - 12:00	13:00 - 14:15	14:15 - 15:30	15:30 - 16:45	16:45 - 18:30

<b>LUNCH TIME</b>	12:00 - 13:00
<b>* SPEAKERS CORNER</b>	In the garden if weather allows; otherwise inside the Congress Centre

<b>Meeting Room Legend:</b>	
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I - Individual	



## PARALLEL SESSIONS

PARALLEL SESSION 1  
THURSDAY, 19<sup>TH</sup> APRIL  
11.00-12.15

- PANEL SESSIONS

*Quality and Responsibility in Patient Engagement with Scientific Research Outputs*  
**Room: 202**

Media coverage of science often highlights biomedical breakthroughs. At the same time, an explosion of online content, blogging and tweeting gives publics access to apparently endless information from both reliable and untrustworthy sources across the globe. But how do patients and their families access, sift and understand this information? What formats of research information work best for patients? How can or should scientists respond to patient needs, and what is the role of science communicators?

12 In this session, we will discuss approaches to patient engagement with scientific research outputs, and ask how we can assess quality and impact. A panel will use stem cell research as an example to introduce four different perspectives: scientist, patient, science communicator and social scientist. Round table discussions will then draw on the experiences of participants to explore goals, motivations, practices and challenges in patient engagement with biomedical science. Discussions will focus particularly on: (i) the types and channels of communication or engagement that best suits patient needs; (ii) the benefits to scientists, their responsibilities and the barriers they face; (iii) how science communicators can support or facilitate effective and responsible patient engagement; (iv) how the quality and impact of different approaches can be captured and shared. The outcomes of round table discussions will be recorded and summarised in a published report.

**Emma Kemp**, *EuroStemCell*, and **Cathy Southworth**, *EuroSyStem and OptiStem*: Two examples of patient engagement from pan-European stem cell research projects OptiStem and EuroStemCell

**Gianvito Martino**, *San Raffaele Hospital*: A scientist's experience of patient engagement

**Patient representative**: What do patients want from science engagement?

**Karen Walshe**, *British Library and Patients Participate! Project*: Social science perspective: Multi-stakehol-

der research on requirements for good patient engagement

Chair/Organiser: **Emma Kemp**, *EuroStemCell*

*Strategic Science Communication in Practice*  
**Room: 203**

Science communication has reached maturity to become a professional field in its own right. Academic institutions, research-intensive firms, government branches, and many more organizations all take a professional and strategic interest in science communication. Most forms of science communication activities are embedded in institutional settings and require planning, facilitation, evaluation, and management. Science communication has gone strategic, calling approaches, tools, actors, and ways of thinking about communication processes. In this session, speakers explore practical implications of strategic science communication for new science communicators.

**Marta Agostinho**, *University of Lisbon*: Starting from scratch building up strategic communication at a research center

**Ben Carollo**, *National Institutes of Health/National Cancer Institute, USA*: Changing the conversation: A case study exploring the use of targeted science communication to influence the national dialogue about cancer research in the United States

**Nick Verouden**, *Delft University of Technology*: Ethnographic study of professional strategic science communication

**Emma Weitkamp**, *University of the West of England*: Wooing subscribers: Strategic marketing online

**Jenni Metcalfe**, *Econnect Communication*, commentator

Chair/Organiser: **Kristian Nielsen**, *Aarhus University*

*Technology Producing Publics: Theories, Practices, and Cases*

**Room: 4**

This high-density panel discussion examines how technology produces publics. We pursue this from various frameworks – rhetorical, socio-technical network analysis, discourse analysis, and cultural studies of science and technology. Our interest is to translate analysis into critical engagement.

**Deborah Dysart-Gale**, *Concordia University*: When Errors Occur: Failure Reports/Public Failures

**Beverly Gibbs**, *University of Nottingham*: Making technologies and their publics visible in science communication: The case of low-carbon technology

**Jessica Mudry**, *Concordia University*: The truth about food: Calorimetry, epistemology, and the eating public

**Jaclyn Rea**, *University of British Columbia*: Constitutive contexts and discourse ecology: Communicating risk in the aftermath of the Fukushima nuclear incident

Chair/Organiser: **Deborah Dysart-Gale**, *Concordia University*

### *Does PCST Belong in the University?*

**Room: Onice**

In this roundtable we want to bring together some important voices of the public communication of science community in order to continue a self-reflexive debate on the status of our field. The questions we will pose them are as provocative as they can be: is PCST an academic discipline or just a field of inquiry? Does PCST belong in the university? Is it safe there? What is the role of science communication departments, journals, conferences, and so on, vis-a-vis the broader world of science communication?

After more than twenty years of growth of both its theoretical framework and scholars' networks, we think those questions are still open to debate. Not only our community still needs to position itself among "sister" disciplines such as media studies and science and technology studies. It also has a low capacity to attract new people and it is hardly a reference point within the academy. The ideas developed within this system have seldom crossed its boundaries to fertilise other grounds; other disciplines have proven to have more impact on the academy. Science communication scholarship often lacks of originality and is an importer rather than an exporter of ideas.

Is this merely a problem of maturity that can be solved by working longer and better? Or should we rather challenge the very idea of considering public communication of science as to an academic discipline, and focus on the possibilities of building a stronger community outside the academy, maximizing our impact on the media, political institutions, and scientific research instead of struggling to establish more academic authority?

**Suzanne de Cheveigné**, *CNRS, France*: PCST: An object for really good research – but not a discipline

**Bruce Lewenstein**, *Cornell University*: Practice trumps theory: Why PCST will never be an academic discipline

**Brian Trench**, *Dublin City University*: Barriers to PCST in the university system

Chair/Organiser: **Alessandro Delfanti**, *University of Milano and Sissa*

### *Science Centres as Forums for Communicating Controversial Science*

**Room: 9**

Every science centre should position itself in the political arena and face the dilemma as to whether or not it should engage in debates and propose contentious subjects to its audiences. This is an important consideration in times like these when authority is under question, shared values are less apparent and debates occur daily. Genetic engineering and stem cell research, AIDS, sexuality and evolution: Attitudes and responses to these subjects depend on the culture and sub-cultures of their audiences. Responses come from the individual and the collective - adding to the complexity of assessing the publics overall reaction. Yet many studies demonstrate that the public - mostly the visiting public - wants science centres and museums to engage in controversial topics by presenting different points of view, and most of all, by giving visitors the opportunity to reach their own conclusions. Science centres and museums deal with a composite set of stakeholders: Trustees, donors, management and staff, interest groups, non-visitors, and media. How can science centres accommodate all these different views in their planning processes? What added value will a science centre bring to a sensitive topic in comparison with other public media? From providing information and facts, all the way up to advocating a stance: in which zones can science centres and other types of actors play and how? Can science centres really avoid the question? Don't they risk losing some of their adult audiences? This session will discuss the strategic value and risks of presenting exhibitions and developing activities about controversial topics, both in a science centre context and in outreach activities performed by a National Agency. Success factors and their potential transferability from one context to another will provide the audience with food for thought and new perspectives.

**Sharon Ament**, *Natural History Museum, London*

**Craig Cormick**, *Australian Department of Innovation*

**Catherine Franche**, *ECSITE*

**Morgan Meyer**, *École des Mines de Paris*

Chair/Organiser: **Catherine Franche**, *ECSITE*



### *National Strategies Towards Science Communication*

**Room: Auditorium**

One of the successful sessions at the Delhi Conference was a comparison of national strategies towards science communication. This time, though, the central discussion point will be a document which came out of the recent 1<sup>st</sup> Places Conference (organised by the European Regions Research and Innovation Network (ERRIN) in collaboration with ECSITE, the European network of science centres and museums).

The meeting drew up a document "Nine key points for science communication policy making", and this would be the focus for the discussion. How do these points compare with what is happening in countries which have clearly defined strategies to promote science communication? Does PCST have any ideas to add, or points to change?

**Karen Bultitude**, *University of the West of England*

**Donghong Cheng**, *CAST, China*

**Antonio Gomes da Costa**, *ECSITE*

**Marcela Lozano Borda**, *Colciencias*

Chair/Organiser: **Toss Gascoigne**, *Toss Gascoigne and Associates*



14

- INDIVIDUAL PAPERS SESSIONS

#### *Aesthetics of Science Communication*

**Room: 104**

**Silvia Casini**, *Ca' Foscari University of Venice*: Performing the aesthetics of science: Visitors talks, movements and gestures in the Natural History Museum in Venice

**Marie-Nathalie Jauffret-Cervetti**, *IUM, Monaco*: "Mirror, mirror, tell me if the scientific communication is aesthetic..."

**Toni Pou**, *Science writer*: Beauty in science writing

**Patricia Rios Cabello**, *Instituto Tecnológico de Estudios Superiores de Monterrey*: Architecture and public science communication. The role of aesthetics and design in science and technology museums

Chair: **Luisa Massarani**, *Museum of Life, House of Oswaldo Cruz*

### *Approaches to Evaluation*

**Room: Limonaia**

**Giulia Dal Bò**, *EURAC*: Could applied research become tangible? First results of a survey conducted on the EURAC science café

**Emily Dawson**, *King's College London*, and **Eric Jensen**, *University of Warwick*: Evaluating the impacts of public engagement: Developing evidence, developing practice

**Julia Gantenberg**, *University of Bremen*: Between ivory tower and spotlight. A case study on the status quo of PCST in publicly funded research centers

**Torsten Heinemann**, *Goethe University*: The impact of science communication on the scientific field: The case of neuroscience

**Bettina Oppermann**, *Leibniz Universität Hannover*, Science communication without a sounding board? Approaching the evaluation of EURAC science communication

Chair: **Hans Peter Peters**, *Research Centre Jülich*

### *Children and Young People*

**Room: 101**

**Sophia Bickford**, *University of Western Australia*: Research-based evaluation to improve science outreach in schools

**Cissi Billgren Askwall**, *Public & Science, VA*: Engaging young people in mass experiments. Experiences from Sweden

**Matteo Merzagora**, *Traces*: Children as change agents for science in society. Ergonomics of listening to young people during the design, the execution and the follow up of science in society activities

**Elizabeth Whitelegg**, *The Open University*: Investigating and creating STEM identities of scientists for children and young people through Tv

Chair: **Jan Riise**, *Agadem AB*

### *Citizenship and Democracy*

**Room: 6**

**Reginald Boersma**, *Wageningen University*: The effects of differences between public and expertise knowledge on public communication of science

**Pieter Maesele**, *University of Antwerp*: Science communication and democratic debate: Friends or foes?

**Jennifer Medlock**, *University of Calgary*: Enacting Citizenship through public engagement: The case of WWViews Canada

**Padraig Murphy**, *Dublin City University*: Selling Irish science and technology: Can public engagement escape a new kind of greenwash?

**Erwin van Rijswoud**, *University of Twente/Radboud University Nijmegen*: Making communication (not) work: Science based advice as contested boundary objects in society an politics

Chair: **Marina Joubert**, *Southern Science and University of Pretoria*

### *Communicating Astronomy*

**Room: 5**

**Leopoldo Benacchio**, *INAF, Italy*: Flat Earth and the planet Sun

**Vickie Curtis**, *The Open University*: Reassessing dialogue: Reflections from an amateur astronomy event

**Wiebke Ebeling**, *Curtin University*: The Diamond Planet – With great power comes great responsibility

Chair: **Steve Miller**, *University College London*

- **SHOW, TELL AND TALK SESSIONS**

### *Working with Arts*

**Room: Adua 1**

**Giorgia Bellentani**, *Fondazione Marino Golinelli*: Connecting the dots for children education: Art, science and creativity

**Caterina Boccato**, *INAF, Italy*: From Art to Astrophysics: How art inspires science communication. A show for Planetariums to convey astronomical concepts throughout images, dialogue and art exhibition

**Michele Emmer**, *Sapienza University of Rome*: Communicating math using soap bubbles in art and science

**Sofia Guedes Vaz**, *New University of Lisbon*: Communicating science through laughter. A project on Stand-up comedy on science

**Susanne Sleenhoff**, *Delft University of Technology*: Public engagement with systems synthetic

Chair: **Dominique Brossard**, *University of Winsconsin-Madison*

### *How to Educate and Train Scientists and Science Communication Students to Perform Well in Science Communication Activities*

**Room: Adua 2**

A basic requirement to professionalize is to provide educational or training programs. In this session we focus on these programs, but each paper emphasizes a different aspect. The following four main questions are addressed: who is involved in professionalization, which educational approaches are used, how to design the programs, and what are the challenges in educating science communication practitioners. In science communication education programs, students, scientists and science communication professionals are generally considered to be the main target groups. However, the first paper focuses on the training of a different target group: representatives from the lay public. In the second paper the educational approach to reach the teaching objectives will be described and evaluated explicitly. In a third contribution, focus is on the design of a dialogue training. The session will be completed by a paper that will provide us with an overview of developments and challenges in science communication education.

**Liesbeth de Bakker**, *Utrecht University*: Empowering science PhD students for engagement-oriented science communication

**Rod Lamberts**, *Australian National Centre for Public Awareness of Science*: Developments and challenges in educating science communication students, PhD students and scientists

**Midori Takahashi**, *Shizuoka Science Museum*: Training local citizens as science communicators in a science museum as a mean of cultivation of science and technology

**Ann van der Auweraert**, *Delft University of Technology*: Science in dialogue, training on multi-stakeholder communication in the field of science and technology

Chair/Organiser: **Caroline Wehrmann**, *Delft University of Technology*



PARALLEL SESSION 2  
THURSDAY, 19<sup>TH</sup> APRIL  
13.15-14.30

• PANEL SESSIONS

*Strategic Science Communication in Context*

Room: 202

The emergence of strategic science communication raises many new questions and challenges for academic researchers who study the public communication of science and technology (PCST). Whereas much effort has gone into situating the production of PCST in social contexts, into the public authority and credibility of science, and into different publics uptake of science, little research on the institutionalization, commercialization, and strategic performances of PCST has been conducted. Understanding PCST in strategic contexts is important to understanding contemporary and future challenges to PCST. In this session, the speakers present both theoretical and empirical studies of strategic science communication.



16 **Catherine Naum**, *James Cook University*: Can words save us? An exploratory investigation of climate change communication in Australia

**Kristian Nielsen**, *Aarhus University*: Contextualizing strategic science communication

**Caroline Wehrmann**, *Delft University of Technology*: Various types of strategic communication

**Dominique Brossard**, *University of Wisconsin-Madison*, commentator

Chair/Organiser: **Kristian Nielsen**, *Aarhus University*

*Debating Environmental Controversies*

Room: 5

In the last few decades, technoscientific controversies have left academic laboratories and R&D workrooms to invest larger public arena. Scientific debates, once confined to experts, are increasingly discussed in parliaments, newspapers, blogs and citizens forums. This transformation was set into motion and is still largely driven by ecological concerns. Sciences and technologies networks extended so far that and penetrated collective existence so deeply, that they can no longer be considered to be separated from public life. Their impact on natural and social environments is so tangible that their issues can no longer be discussed behind close doors. This opening of scientific debate on

environmental question is now irreversible, but it does not necessarily lead to a more democratic and effective management of natural and human resources. The rise of ecological controversies calls for a new set of debate tools and forums where public concerns can express and issues be discussed and decided. This session will host contributions aimed at discussing different examples of environmental controversies and at reflecting about their public communication.

**Andrea Lorenzet**, *University of Padova*, and **Giuseppe Tipaldo**, *University of Torino*: The communication of technoscientific controversies on the environment in the Web 2.0

**Marta Severo**, *GIS-CIST Université Paris 1*: Media representations of the Solar Mediterranean Plan: A techno-political controversy

**Tommaso Venturini**, *médialab Sciences-Po*: From attenuation to adaptation, the evolution of climate change debate

**Esther Weltevrede** and **Erik Borra**, *Digital Methods Initiative*: Controversy mapping with Wikipedia; the case of global warming controversy

Chair/Organiser: **Andrea Lorenzet**, *University of Padova*, and **Tommaso Venturini**, *médialab Sciences-Po*

*Science Communication in the South East European Region: Overview of the Current Situation*

in collaboration with Unesco Venice Office

Room: Onice

Within the PCST 2012 programme, the UNESCO Venice Office (UVO) would like to organize a special working session focused on the quality of science communication in the South East European (SEE) Region. It is expected that this session will shed light on the current state-of-the-arts on science communication within the SEE Region and possibly lead to the creation of a network of science journalists of the Region. This is also an occasion for sharing and exchanging information and identifying promising practices as well as an opportunity for science communicators to brainstorm together on common needs to improve the divulgation of science in SEE.

Recipients of the Uvo travel grant will be directly involved in this session and will be asked to intervene by reporting briefly about the science communication situation in their respective countries.

**Milena Milunovic**, *Montenegro*

**Fabio Pagan**, *SISSA, Italy*

**Julianna Photopoulos**, *Greece*

**Tatjana Stojceska**, *Former Yugoslav Republic of Macedonia*

**Mico Tatalovic**, *Croatia*

Chair: **Rosanna Santesso**, *UNESCO Venice Office*

*Participatory Communication on Knowledge Production – Linking Science Shops and Knowledge Debates*

**Room: 9**

This panel will present perspectives on how participatory communication on knowledge and research agenda setting can be promoted through science shops and interactions of civil society organisations and researchers. The panel members have been engaged with science shops and other participatory communication projects in their institutes, and are developing new techniques in the EU-funded PERARES-project (Public Engagement with Research and Research Engagement with Society).

This synergetic approach will advance the current role of science shops in interactive science communication.

**Nicola Buckley**, *University of Cambridge*: Setting up an international dialogue on research through the web

**Ils De Bal**, *Free University Brussels*: Jointly setting research agendas on a European level: The case of Domestic Violence & Pregnant Women

**Lotte Krabbenborg**, *University of Groningen*: Facilitating face to face and online interaction of stakeholders within the development of nanotechnology

**Henk Mulder**, *University of Groningen*: How PERARES connects the world of Science Shops with that of public dialogues on science

**Andrea Vargiu**, *University of Sassari*: Approaches to evaluation of science shop and similar public engagement projects

Chair/Organiser: **Henk Mulder**, *University of Groningen*

*Between a Warm, Fuzzy Feeling, Greenwashing and Saving the World: Sustainability, Honesty and Responsibility*

**Room: 4**

While sustainability as a term was especially put on the agenda with and after the Brundtland report, the definition remains unclear, with many different stakeholders trying to push for their own concepts and priorities. This is a problem as it leads to uncertainty for both the public and for designing sustainability criteria. While some scientists see a new discipline of sustainability science evolving, engagement processes with sustainability remain on a policy level. Sustainability communication however is getting more and more prominent: Corporate Social Responsibility or Environmental-reports, labelling initiatives and many advertisements use and abuse the term which has become a powerful incentive for many stakeholders, particularly in the field of food production and agriculture. This panel shall discuss the following lead questions:

What kind of public engagement with sustainability does and should take place? Which kind of science and sustainability information can and should industry, food labels and retailers communicate within the production chain, to peers and to consumers and how? Where are the lines between credible, sincere efforts and greenwashing? How to communicate scientific uncertainty, how to deal with the trustworthiness of industrial messages and reports?

**Nina Haase**, *WWF International*

**Elise Kissling**, *BASF Agricultural Solutions*

**Patricia Osseweijer**, *Delft University of Technology*

Chair/Organiser: **Sebastian Olényi**, *Delft University of Technology*

*Latest Developments in Evaluation Practice*

**Room: Auditorium**

Evaluation plays a positive role in improving projects, specifically, in identifying problems, digging out reasons, providing solutions, learning during the process, and finally enhancing pertinence and effectiveness of projects. In this panel session, speakers from the UK, China and other countries will share their experiences and research in evaluation of science communication initiatives mainly from two angles: specific evaluation analysis based on case studies, contrasted with a broader overview of key issues in evaluation methodology.

**Karen Bultitude**, *University College London*: Creating the 'hive mind' – Challenges and opportunities in sharing evaluation findings



**Ren Fujun**, *CRISP, China*: Evaluation practices on science communication activities: Importance and findings

**Marcela Lozano Borda**, *Colciencias*: Evaluating the National Science Week in Colombia. New methodologies, new questions, new indicators

**Cobi Smith**, *Australian National University*: Evaluation within the Inspiring Australia initiative

Chair/Organiser: **Donghong Cheng**, *CAST, China*

- INDIVIDUAL PAPERS SESSIONS

### *Climate and Environment*

**Room: Adua 1**

**Alexandra Klimek**, *NTNU – Department of interdisciplinary studies of culture / CenSes*: Imagine lay people in the case of CCS in Norway

**Bienvenido León**, *University of Navarra*: Interaction between science communication and journalistic values. A study of the coverage of climate change in the Spanish media

**Elaine McKewon**, *University of Technology, Sydney*: From experts to exiles: Portrayals of the IPCC and the scientific consensus on climate change in the Australian new media

**Claudia Nepote**, *Universidad Nacional Autónoma de México*: Communicating environmental issues through the press in Mexico: An overview

**Robin Pierce**, *Delft University of Technology*: The ethics of reframing: The case of biofuels

Chair: **Suzanne de Cheveigné**, *CNRS, France*

### *Communicating Social Sciences*

**Room: 203**

**Hester Du Plessis**, *University of Johannesburg*: Building a relationship between transdisciplinarity and the Public Understanding of Science (Pus)

**Cristoph Klimmt**, *Hanover University of Music, Drama, and Media*: Social science speaking with one voice: Producing policy statements should become a routine task for social-scientific associations

**Pierluigi Parcu**, *European University Institute*: The Centre for Media Pluralism and Media Freedom

**Alice Ruddigkeit**, *University of Mannheim*: Science is in the eye of the beholder. Journalistic contextualization of social sciences compared to other research fields

**Clare Wilkinson**, *University of the West of England*: Re-awakening, relevance and research: Longer term

impacts of engagement with a social science festival in the UK

Chair: **Toss Gascoigne**, *Toss Gascoigne and Associates*

### *Controversies*

**Room: Adua 2**

**Trish Campbell**, *University of Calgary*: The public negotiation of RU486 in Canada: A historical case study and socio-technical analysis

**Miquel Carandell**, *Universitat Autònoma de Barcelona*: Getting a different dimension: The orce man controversy in Spanish newspapers

**Cristina Rodriguez Luque**, *Cardinal Herrera University*: Framing controversy: Mass media's ethics and responsibility in life sciences. Media coverage of the the law of sexual and reproductive health and voluntary interruption of pregnancy. *El País* and *ABC* (2009-2010)

**Zhi'an Zhang**, *Sun-Yet-Sun University*: Who is telling the truth? An empirical study on the tension between scientists and media in selected hot controversies in China

Chair: **Hak-Soo Kim**, *Sogang University*

### *Communicating Uncertainty*

**Room: Limonaia**

**Angela Cassidy**, *Imperial College London*: Science, farming, wildlife and media: Evidence, uncertainty and politics in the badger/bovine TB controversy

**Dorothe Kienhues**, *University of Münster*: Communicating uncertainty in scientific information: The impact of affect-laden discourse

**Laura Maxim**, *Institut des Sciences de la Communication, CNRS*: Public reception of scientific uncertainty. The case of the controversy on endocrine disrupters

**Daniel Noelleke**, *University of Münster*: "If you doubt leave it out." Communicating scientific uncertainty in German mass media

**Andrea Retzbach**, *University of Koblenz-Landau*: Effects of exposure to certain or uncertain scientific evidence in science TV shows

Chair: **Julia Tagüeña**, *Universidad Nacional Autónoma de México*



*Nanotechnology*

**Room: 101**

**Jose Manuel de Cozar-Escalante** and **Javier Gòmez-Ferri**, *University of Valencia*: Expert knowledge and social communication of nanotechnology

**Luisa Filippini**, *Scientific consultant to ORT*: Nano-channels: Public engagement on nanotechnologies through online press, radio, roundtables and social media

**Lin Pei Ling**, *National Taiwan Normal University*: What the media wants us to believe: Investigating Taiwan media attitudes towards nanotechnology

**Dietram Scheufele**, *University of Wisconsin-Madison*: Practicing what they preach? Comparing the self-reported attitudes of nanoscientists with their EHS publication records

Chair: **Brian Trench**, *Dublin City University*

- **SHOW, TELL AND TALK SESSIONS**

*Dialogues and Debates*

**Room: 6**

**Cissi Billgren Askwall**, *Public & Science, VA*: Science dialogue toolbox - best practices of science communication

**Valentina Grasso**, *CNR Ibimet – Consorzio LaMMA*: Climate Scope: Using the Google Earth virtual globe for a visual storytelling of climate change

**Finarya Legoh**, *Agency for Assessment & Application of Technology, Indonesia*, and **Dyah Ratna Permatasari**, *DoctoRabbit Science Inc.*: DigiMoM: Café Scientifique and workshop to empower women in information technology

**Giovanna Pacini**, *University of Florence and Associazione Culturale “Caffé Scienza Firenze”*: Science is ready, serve it! Dissemination of science through Science Café

Chair: **Andrew Pleasant**, *Canyon Ranch Institute*

*Emerging Models of Engaging Children in Science*

**Room: 104**

**Toby Parkin**, *Science Museum, London*: Face to Face Science Outreach – UK, Ireland, Gibraltar, South Africa and Abu Dhabi

**Stephen Roberts**, *Natural History Museum, London*: Developing Innovative Partnerships with schools

**Pedro Russo**, *Leiden University / IAU, Leiden Observatory*: Communicating Science with Children around the World - Germany, Italy, the Netherlands, UK, South Africa and Spain

**Alessandra Zanazzi**, *Osservatorio Astrofisico di Arcetri*: EU - UNAWE Italy: Experimenting Astronomy with nursery and primary school children, within multi-cultural contexts using different and also not verbal languages

Chair/Organiser: **Pedro Russo**, *Leiden University / IAU, Leiden Observatory*



PARALLEL SESSION 3  
THURSDAY, 19<sup>TH</sup> APRIL  
14.30-15.45

• PANEL SESSIONS

*Challenges for Science Journalism*

**Room: Auditorium**

The objective of this session is to put in discussion the relation of science and mass media, under the perspective of thinking critically the main challenges for science journalism. The role of science journalism and the profile and perspectives of the science journalists.

**Michel Claessens**, *ITER Organization*

**Suzanne de Cheveigné**, *CNRS, France*

**Luisa Massarani**, *Museum of Life, House of Oswaldo Cruz*

**Hans Peter Peters**, *Research Centre Jülich*

Chair/Organiser: **Luisa Massarani**, *Museum of Life, House of Oswaldo Cruz*

*Approaches to Communicating Accurate and Motivating Health Information to Target Disadvantaged International Communities*

**Room: 104**

Despite an overall increase in life expectancy, there are many populations throughout the world who do not yet share in this improved health status. In order to achieve positive change, information needs to be presented in novel ways that reach target groups and convey messages in ways that are shown to be effective.

**Federica Bizzocchi**, *University of Buenos Aires*

**Ankuran Dutta**, *KKH State Open University*

**Amy Fletcher**, *University of Canterbury*

**Judy Ford**, *University of South Australia*

Chair/Organiser: **Judy Ford**, *University of South Australia*

*Communicating Science Futures*

**Room: Adua 1**

This panel will examine ways in which scientists and others communicating about science represent possible futures and the roles and responsibilities of science

in these futures. The panel participants draw on their own research and direct engagement with experts in discussions of possible futures. Their contributions will focus on ethical issues in making claims about futures based on developments in science.

**Maureen Burns**, *University of Queensland*

**Padraig Murphy**, *Dublin City University*

**Brian Trench**, *Dublin City University*

**Jon Turney**, *Science writer*

Chair/Organiser: **Brian Trench**, *Dublin City University*

*Public Engagement Activities by Scientific Institutions: Perspectives of Analysis and Methodological Issues*

**Room: 101**

The session will be devoted to discuss theoretical and methodological issues concerning the measurement of public engagement activities realized by the scientific institutions.

The idea is to confront different perspectives about the role, the resources and the constraints which scientific institutions have to face in order to design, realized and evaluate their activities of public communication and public engagement.

This session is connected with the sessions organised by Luisa Massarani (monitoring the science coverage by the mass-media) and by Martin Bauer (how to survey public attitudes toward science) with a view to assess the feasibility of an integrated system of indicators for monitoring science in society under various points of view.

**Heidi Armbruster-Domeyer**, *Project Manager, Vetenskap & Allmänhet*

**Federico Neresini**, *University of Padova*

**Cristóbal Torres-Albero**, *UAM, Spain*, with **Jesús Rey-Rocha**, *CCHS, CSIC, Spain*, and **Manuel Fernández-Esquinas**, *IESA, CSIC, Spain*

Chair/Organiser: **Federico Neresini**, *University of Padova*

*The Role of the Humanities in Science Communication: Epistemology, Aesthetics, Axiology*

**Room: 6**

The theme for PCST-12 Beauty, Quality, Truth is an invitation to discuss the role of humanities scholarship and criticism in science communication. We focus on axiology (quality), epistemology (truth), and aesthetics (beauty) as particular contributions.



**Alice Bell**, *Imperial College London*: In the business of awesomeness: Considering the politics of wonder in popular science

**Joan Leach**, *University of Queensland*: Our own contingencies of value: Why value science communication at all?

**Thomas Söderqvist**, *University of Copenhagen*: Mundane design vs. fine sci-art: Two realms of aesthetic practice in science communication

Chair/Organiser: **Joan Leach**, *University of Queensland*

*Quality and Accountability of Science Communication – UNESCO’s Perspectives/Strategies for South East European Region*

in collaboration with UNESCO Venice Office

**Room: Onice**

Within the PCST 2012 programme, the UNESCO Venice Office (UVO) would like to organize a special working session focused on the quality of science communication in the South East European (SEE) Region. It is expected that this session will shed light on the current state-of-the-arts on science communication within the SEE Region and possibly lead to the creation of a network of science journalists of the Region. This is also an occasion for sharing and exchanging information and identifying promising practices as well as an opportunity for science communicators to brain storm together on common needs to improve the divulgation of science in SEE.

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**E. Baris Altintas**, *Turkey*

**Dario Carella**, *RAI, Italy*

**Maria Grigorova Tcherneva**, *Bulgaria*

**Susan Schneegans**, *UNESCO*

Chair: **Mario Scalet**, *UNESCO Venice Office*

• INDIVIDUAL PAPERS SESSIONS

*Reflexive Challenges: Communicating PCST*

**Room: 202**

**Angela Cassidy**, *Imperial College London*: About, with and to? Researching and communicating with STEM people

**Martina Franzen** and **Simone Rödder**, *University of Bielefeld*: Media attention and its repercussions on science: Results of a cross-disciplinary analysis

**Hu Junping**, *CRISP, China*: Focusing on the organizers of science communication activities

**Alexandra Plows**, *Bangor University*: Communicating science communication: Reflections on creating a science communication strategy from scratch

Chair: **Bernard Schiele**, *Université du Québec à Montréal*

*Health Communication*

**Room: Limonaia**

**Liliana Abreu**, *Universidade do Porto*: Public drawings on sources of information: The adaptation methodological tool

**Giuseppe Pellegrini**, *Observa Science in Society*, and **Gloria Pravatà**, *Centro Nazionale Sangue*: Tracking health communication across digital media: Youth and blood donation

**Carlos Antonio Teixeira**, *São Paulo University*: The public communication of science in public health graduate programs in Brazil

**Esa Väliverronen**, *University of Helsinki*: Fighting fat: The role of ‘field experts’ in mediating science in health communication

Chair: **Andrew Pleasant**, *Canyon Ranch Institute*



*Government Programmes*

**Room: 4**

**Carolina Moreno**, *University of Valencia*, and **Oliver Todt**, *University of the Balearic Islands*: Science and technology governance, and public acceptance

**Liang Qi**, *CRISP, China*: How scientists communicate with public in China: Policies, status and characteristics

**Subhasis Sahoo**, *NCAER, India*: The mobilization of resources for science communication movement: evidence from India

**Renato Schibeci**, *Murdoch University*: Inspiring a nation to lead the world in science through public engagement? The role of STEM centres

**Dana Topousis**, *U.S. National Science Foundation*: The ever-changing U.S. science communications landscape: How one federal agency is setting the pace

Chair: **Manoj Patariya**, *National Council for Science and Technology Communication, India*

*Understanding Publics***Room: 5**

**Jörg Hilpert**, *Dialogik*: Focusgroup exercises: Perception of fusion power among journalists, students and citizens

**Anne-Lotte Masson**, *Delft University of Technology*: Imagine: engaging students in science

**Hedwig te Molder**, *University of Twente/Wageningen University*: Discourse communities as catalysts for science and technology communication

**Gema Revuelta**, *Pompeu Fabra University*: Active search and passive reception of information on science and technology

Chair: **Rick Borchelt**, *Johns Hopkins University*

*Media Representations of Science and Technology***Room: Adua 2**

**Lorenzo Beltrame**, *University of Trento*: The framing of pluripotency and its political use. The public communication of stem cell science and the regulation of stem cell research in Italy

**Clara Florensa**, *CEHC and UABDivulga*: Communicating evolutionary theory in Francoist Spain. The case of *La Vanguardia Española* (1939-1978)

**Per Hetland**, *University of Oslo*: Exploring the pro-innovation bias in technology communication: Internet in the mass media

**Chun-Ju Huang**, *National Chung Cheng University*: Double media disasters in non-Western societies? An analysis of compiled science news in Taiwan

**Constantinos Morfakis** and **Katerina Vlantoni**, *National and Kapodistrian University of Athens*: Between the regenerative and the renewable: Patterns in the media beautification of technology and science, from stem cells to wind farms

Chair: **Vladimir de Semir**, *Pompeu Fabra University*

- **SHOW, TELL AND TALK SESSIONS**

*New Media***Room: 203**

**Joachim Allgaier**, *Research Center Jülich*: When science and popular culture meet on YouTube: Science in music videos

**Marco Galliani** and **Francesco Rea**, *INAF, Italy*: Science communication in the 2.0 era: Media.inaf case history

**Susanne Paech**, *HYPERRAUM.TV*: From text culture to visual culture: Simulation – interactivity – virtuality

**Ira van Keulen**, *Rathenau Institute*: A social game for the iPhone: Communicating dilemmas on human enhancement

Chair: **Jan Riise**, *Agadem AB*

*Evaluating Engagement***Room: 105**

**Nora Sofia Mohamed Yuran**, *Universiti Teknologi MARA, Malaysia*: Microbiology in Malaysia: The art of communicating science through visual arts

**Cristina Palma Conceição**, *University Institute of Lisbon*: Meeting scientists halfway between the lab and the seaside: Some cases to think about “deficits” and “dialogues”

**Cobi Smith**, *Australian National University*: Participatory evaluation of science communication

**Elizabeth Stevenson**, *University of Edinburgh*: What does quality mean in public engagement with science?

Chair: **Jenni Metcalfe**, *Econnect Communication*

*Scientific Controversy in the Headlines: How the Science Media Centres are Helping the Media to Set the Record Straight Fast***Room: 9**

Mad Cow Disease, Franken-Food and Killer Vaccines: this sensationalistic approach to scientific controversies typical of British tabloids but often a prerogative also of more serious and respected media caused in recent years a long-term damage not only to the image of science, but also to health policy and science research itself.

The first ten years of activity of the UK Science Media Centre have shown that authoritative and independent scientific sources can be helped not to shy away from media storms, so that they can timely and effectively intervene in the debate about sensitive issues by establishing a relationship with representatives of the media in an open and collaborative climate during and especially between media crises.

Now an international network of such centres has taken impulse from the successful British experience and has started operating to build trust and dialogue between the scientific community and the media, knowing that each country will pose specific challenges but a coordinated network can be useful on several accounts, as it was the case with the emergency following the nuclear



accident at the Fukushima plant, in Japan.

The panel will discuss the Science Media Centres model, its strengths and its weaknesses from the point of view of the proponents and of the professionals working in science communication and in the media.

**Morten Busch**, *Experimentarium, Copenhagen*

**Fiona Fox**, *UK Science Media Centre*

**Charlotte Wien**, *University of Southern Denmark*

Chair/Organiser: **Fabio Turone**, *Agency Zoe of Scientific Information*

## PARALLEL SESSION 1

FRIDAY, 20<sup>TH</sup> APRIL

8.30-9.45

### • PANEL SESSIONS

*Working Towards Cultural Indicators of Science I*

**Room: Onice**

Surveys of public understanding of science have had international momentum since the 1990s and into the 2000s, mainly focussed on the measurement of science literacy and often taking the lead from NSF (i.e. the Miller Model). The proposal will revisit this survey tradition and ask the question: is it possible to re-examine this emerging international database with a different framework and offer a re-interpretation of this data as 'indicators of science culture'? The symposium will take forward questions raised as an international workshop of the Royal Society in London back in November 2007.

**Sook-Kyoung Cho**, *Korea Foundation for the Advancement of Science & Creativity*: A longitudinal analysis of Public Understanding of Science and Technology Surveys in Korea

**Ren Fujun**, *CRISP, China*: What can we learn from 20-years civic science literacy survey in China?

**Paichi Pat Shein**, *National Sun Yat-sen University*: Taiwan's Survey of Civic Scientific Literacy – Past, Present, and Future

**He Wei**, *CRISP, China*: Constructing the database of Chinese Civic Scientific Literacy Survey

**Liu Xuan**, *CRISP, China*: Science Culture in China: An empirical study on Chinese Public Understanding of Science survey

Chair/Organiser: **Martin W. Bauer**, *LSE*

*What Journals Want and What Journalists Need – Making Them Work in Harmony*

**Room: 203**

**What:** This panel session will thrash out some solutions to the conflict that arises between open access and early view publication of papers online and the needs of press offices and journalists when generating media coverage for science.

**Why:** Scientists naturally want to publish their findings as quickly as possible so they can be cited while they are still novel. Open access can reduce publication delays and increase citation rates. However, the drive



towards open access has presented new problems for science press officers. Journalists need to receive notification of a story prior to publication so they can interview scientists and prepare their copy under embargo. However, there are often only a couple of days (or even less) between acceptance of a paper and publication online. Protagonists in the art of communicating science, press officers cannot make a non-newsworthy story newsworthy, but if it is newsworthy they can make it news, given some time to plan. Publicity and media management can help journals achieve key marketing objectives so it is in everyone's interests to find a workable solution.

If the story is big enough, the press office may want to do more than write a press release. The more time they are given, the more chance they have of thinking strategically of how to make the best of the findings and distribute them to as wide and influential an audience as possible.

The experience of press officers is that open access can be an obstacle to wider access to research findings to the public through the media. This panel session will help find ways to halt that trend.



**Ruth Francis**, *Nature*

**Cathie Martin**, *John Innes Centre*

**Eric Merkel-Sobotta**, *Springer Science and Business Media*

**Tom Reller**, *Elsevier*

**Fabio Turone**, *Agency Zoe of Scientific Information*

Chair/Organiser: **Zoe Dunford**, *Norwich Biosciences Institutes*

*Quality in Informal Dialogue Events. What Does It Mean and How Do We Assess It?*

**Room: 202**

Notions and modes of science communication have regularly shifted focus over the past decades. In the theoretical realm, models of one-way information have been complemented by frames that stress public engagement and public participation in science and technology. Dialogue has been a buzzword since the early nineties; it has often been presented as a target in itself juxtaposed to e.g. public understanding or awareness of science rather than as a specific mode of communication.

This session aims to discuss how the turn towards two-way public dialogue in the field of science and technology has affected practices of public communication of science and technology. The focus is on non-policy oriented dialogue events, which aim primarily to contribute to deliberation and learning among participants, i.e. publics as well as scientists. Such in-

formal events have been described as building blocks for step by step change in the relation of science and society. However, the quality of such dialogue events in light of objectives for mutual or collective learning by participants is difficult to assess because concrete indicators are lacking. Drawing from the literature and experiences of the participants, this session (chaired by a professional moderator) aims to explore new ways of assessing (and improving) the quality of dialogue in practice in terms of its learning effects.

**Koen Dortmans**, *Centre for Society and Genomics*, moderator

**Will Grant**, *Australian National Centre for the Public Awareness of Science*

**Bruce Lewenstein**, *Cornell University*

Chair/Organiser: **Roald Verhoeff**, *Radboud University of Nijmegen*

*Professionalization. Working Towards Competence-based Science Communication Career Models for Science Communication Students and Curriculum Developers*

**Room: Auditorium**

The session aims at developing a list of competences for working in the Science Communication field with all attenders. The results will function as inspirations for Science Communication students and Science Communication curriculum developers.

Speakers will illustrate the competences required for each professional role in science communication.

The discussion will provide an overview of clusters of competences needed in the Sc roles, based on the following questions: Which other professional roles should we distinguish in the Sc field besides Consultancy, Research and Executive Science Communication? What are the necessary competences for each role? Which competences are required in general for Sc professionals? Can the audience derive/illustrate competences with examples from (personal) practice? Which competences should be facilitated by the educational programs (how?) and which should be left to be acquired in practice?

**Fred Balvert**, *Erasmus University Medical Center Rotterdam*

**Robby Berloznik**, *Institute Society and Technology Flemish Parliament, Brussels, Belgium*

**Chao-Ping Hong**, *Dublin City University*

**Ammeret Rossouw**, *Delft University of Technology*

Chair/Organiser: **Marjoleine van der Meij**, *University Amsterdam*

*Evaluating Public Communication of Science at the Individual, Workshop and Regional Level*

**Room: Limonaia**

Although much effort is being invested in science communication training, the efforts are rarely accompanied by systematic evaluation of learning outcomes. Yet assessing specific learning outcomes is widely recognized in the education community as an essential component of judging the effectiveness of teaching. Existing evaluations are mainly anecdotal, or specific to a particular program, therefore missing the opportunity for comparisons across programs and identification of best practices.

This panel session explores evaluation of public communication of science at the individual, workshop and regional level, attempting to contribute to the creation of systematic and generalizable assessments in the field.

**Judy Ford**, *University of South Australia*

**Tiffany Lohwater**, *AAAS*

**Michael Schanne**, *ZHAW Zurich University of Applied Sciences*

**Shi Shunke**, *CRISP, China*

**Martin Storksdieck**, *The National Academies, United States*

Chair/Organiser: **Ayelet Baram-Tsabari**, *Technion Israel Institute of Technology*

*HPV Vaccine: To Vaccinate or Not – How the Media Covered the Issue*

**Room: 6**

Medicine is not mathematics. It is about making judgments and taking decisions under uncertainty. The message conveyed by the media regarding the HPV vaccine did or didn't take into account the fact that we still do not have a definitive knowledge of its efficacy and safety? Did the media contribute to understand the complexity of the natural history of this disease (the cervical cancer that HPV vaccine is meant to prevent) and to establish the difficulty of assessing the vaccine side effects? The importance of communicating correct and complete data is essential when decisions are taken under uncertainty, and the media must be able to appropriately communicate risks compared with benefits, hope and expectations to the public.

Effective vaccines do a lot of good, but why not to mention that the much less expensive Pap Test, especially in the Western countries, has contributed and is still contributing to reduce the number of cervical cancers? A

lot of enthusiasm and intense marketing, despite relatively short follow-up and many unanswered questions, contributed to have media presenting HPV vaccine as "the solution" for cervical cancer. The pounding campaign pro the HPV vaccine in the Italian newspapers did not focus on uncertainty and doubts. Even though the scientific debate is still open, the HPV vaccine has been presented in the media as efficacious and safe. Is the problem to be found in the lack of "honesty" or transparency of the experts interviewed by journalists? Or in the complexity of an issue that many journalists are not well equipped to deal with? Why the questions raised in the scientific magazines did not produce correct information by the media?

**Carla Cogo**, *Istituto Oncologico Veneto*

**Michele Grandolfo**, *Istituto Superiore di Sanità, Italy*

**Daniela Ovidia**, *Agency Zoe of Scientific Information*

**Chiara Palmerini**, *Panorama magazine*

Chair/Organiser: **Gianna Milano**, *SISSA, Italy*

• INDIVIDUAL PAPERS SESSIONS

*Earth and Water*

**Room: 105**

**Massimo Crescimbeni**, *INGV, Italy*: 150 years of earthquakes in Italy between memory and oblivion. Which communication strategies?

**Tiziana Lanza**, *INGV, Italy*: Hunting rumours in Earth sciences: Understanding their origin for debunking and turning them into something useful

**Tyrone Ridgway**, *Australian Institute of Marine Science*: The Ningaloo Atlas: Listening to the people to communicate the science

**Alison Stokes**, *University of Oxford*: Communicating flood science across the researcher-practitioner interface

Chair: **Jenni Metcalfe**, *Econnect Communication*

*Visualising Science*

**Room: 4**

**Meaghan Brierley**, *University of Calgary*: "We decided to change the visual vocabulary": Medical illustrators navigate their clientele

**Aquiles Negrete**, *Universidad Nacional Autónoma de México*: Popular comic strips for science communication: Their roll in disseminating information about sustainable development and natural resources among low scholarship communities in Mexico and Central America



**Rolando Riley Corzo**, *Universidad Autónoma de Chiapas*: The visual rhetoric in the science communication. A proposal for Chiapas's rural communities

**Mico Tatalovic**, *SciDev.Net*: Communicating science through graphic art of comics books

Chair: **Luisa Massarani**, *Museum of Life, House of Oswaldo Cruz*

### Arts Meet Sciences

**Room: 9**

**Siân Ede**, *Calouste Gulbenkian Foundation*: Artists on the Galapagos Islands – how can artists communicate the challenges facing a world heritage conservation site, the conflicting interests of scientists, the local population and eco-tourists, and make connections with environmental matters nearer home?

**Martina Gröschl**, *University of Klagenfurt and Austrian Academy of Sciences*: No place for ugly mathematics – Communicating mathematics through literature

**Peter Kastberg**, *Aarhus University*: Communicating Science through Drama – A typology of science theatre performances

**Linda Merman**, *The Graduate Center of the City University of New York*: Partnering with science facilities to promote science communication through the performing arts

Chair: **Bernard Schiele**, *Université du Québec à Montréal*

### Training and Education

**Room: 104**

**Miguel Garcia**, *Universidad Autonoma de Zacatecas*: Training and education for science popularization: From the recreational to the professional perspective

**Steve Miller**, *University College London*: Training for science communication – does it make any difference?

**Paola Rodari**, *SISSA Medialab*: The professionalization of the explainers. A European perspective

Chair: **Steve Miller**, *University College London*

## • SHOW, TELL AND TALK SESSIONS

### *Experiences with Students*

**Room: 5**

**Andrea Horvath**, *Museum Victoria*: Science Communication Postcards

**Angela Simone**, *formicablu*: MedClimateChange-CIRCE PlayDecide. From climate change research to schools

**Miriam Sullivan**, *University of Western Australia*: Creating a community of learners: Class blogs as a teaching tool in science communication

Chair: **Hak-Soo Kim**, *Sogang University*

### *Communicating Ethics*

**Room: 101**

**Annely Allik**, *University of Tartu*: How to win friends and raise awareness? The best practice of the Estonian Genome Center, University of Tartu

**Monica Carvalho**, *Portuguese Catholic University*: Science communication and ethical decision-making on MAR

**Brigitte Gschmeidler**, *dialog gentechnik*: Value-sensitive public engagement with science and technology

**Petra Nieckchen**, *European Fusion Development Agreement*: Dishonesty and trust in the nuclear fusion debate

Chair: **Brian Trench**, *Dublin City University*



FRIDAY, 20<sup>TH</sup> APRIL  
PARALLEL SESSION 2  
9.45-11.00

• PANEL SESSIONS

*Unpacking the Nature of Scientist-Journalist Relationships Over Time and Into the Future*

**Room: Onice**

Public narratives about science stem largely from relational processes, principally the interactions between scientists and journalists. Science communication scholars have studied this particular relationship intensively for decades to both decipher its dynamics and determine how to maximize the quality of the resulting stories. But 21<sup>st</sup> century communication developments – technologies that permit direct rather than mediated interactions with audiences, for example – call into question the role and influence of this relationship into the future. The presentations in this session will provide a context for considering these relationships, then will move to recent data from several countries and from several academic disciplines. All speakers will offer educated guesses about the future.

**Massimiano Bucchi** and **Barbara Saracino**, *University of Trento*: How do Italian researchers relate to the media and the public? An exploratory study

**Sharon Dunwoody**, *University of Wisconsin-Madison*: The evolution of relationships between scientists and journalists

**Hans Peter Peters**, *Research Center Jülich*: Variations of scientist-journalist interactions across academic fields

Chair/Organiser: **Sharon Dunwoody**, *University of Wisconsin-Madison*

*PCST Research Informing Practice*

**Room: Auditorium**

This session will use some case studies to look at how research into the public communication of science and technology (PCST) has informed the practice of PCST, and also how the practice is influencing PCST research.

**Lauren Chambliss**, *Cornell University*: Establishing a climate change information source

**Craig Cormick**, *Australian Department of Innovation*: Who are we really engaging with?

**Joan Leach**, *University of Queensland*: Who gets to engage?

**Melanie McKenzie**, *University of Queensland and Econnect Communication*: Understanding best practice evaluation of science communication

Chair/Organiser: **Jenni Metcalfe**, *Econnect Communication*

*Science in Tv: Production and Perception in Europe*

**Room: 104**

TV provides a varied picture of science, its contents reach millions. However, to date it is largely unknown why TV reconstructs science as it does and how audiences judge what is provided. The panel will address these questions from four different perspectives. It targets a comprehensive description of today's science TV.

**Matthias Kohring**, *University of Mannheim*: How to analyse science in media?

**Markus Lehmkuhl**, *Free University Berlin and Research Centre Jülich*: Determinants on production of science contents in TV

**Tuomo Mörä**, *University Helsinki*: Determinants on the reach of science programmes in Europe

Chair/Organiser: **Markus Lehmkuhl**, *Free University Berlin and Research Centre Jülich*

*On the Meaning of Participation and Democracy in Different Cultural and Social Contexts*

**Room: Limonaia**

The divulgation of the sciences has always been associated with the idea of the participation of the public. As such it was believed that participation naturally led to a more democratic society, because enlightened citizens are better equipped to gauge the scope and the issues raised by the impact of the development of the sciences on society. This is why most of the research on PCST was about the conditions of publicizing science and its resulting effects. Effects on the competence and performance of targeted publics, effects on their perception of science, and the effects on their interest in science and mobilization.

Nonetheless, these general questions only find their true answers in specific cultural and social contexts. In each, the concepts of "public", "divulgation", "participation", "perception", "competence" and "mobilization" must be rephrased in relation with the situations in which we try to apply them. This raises the question of the applicability of "universal" models to different contexts.

Thus, the aim of this session is to examine how are for-



mulated and tackled with these questions in different socio-cultural contexts: Canada, China, South Africa, Argentina, France and India.

**Hester Du Plessis**, *University of Johannesburg*

**Yves Jeanneret**, *Paris Sorbonne University (CELSA)*

**Joëlle Le Marec**, *Université Paris Diderot*

**Carmelo Polino**, *REDES, CONICET*

**Shi Shunke**, *CRISP, China*

Chair/Organiser: **Bernard Schiele**, *Université du Québec à Montréal*

### *Science Communication in Countries in the Asia-Pacific Rim*

**Room: 202**

This would be a discussion of science communication in countries in the Asia-Pacific rim. We are currently preparing a book on this topic, and authors from 10 countries are working on their chapters. The authors of the chapters plan to meet in Florence prior to the Conference, to discuss progress on the chapters.

The session we propose is a discussion where each of the authors will initially talk for 5 minutes. This would be followed by a discussion involving the audience. The focus of the discussion will be on issues and solutions, with the aim of sharing experiences and in particular looking at the solutions to challenging issues in science communication at a national and international level. The questions the authors have been asked to address are: i) the biggest challenge facing science communication in their country, and ii) the actions that are proposed to overcome this challenge.

**Sook-Kyoung Cho**, *Korea Foundation for the Advancement of Science & Creativity*

**Lloyd Davis**, *University of Otago*

**Anik Landry**, *Université du Québec à Montréal*

**Yin Lin**, *CAST, China*

**Julia Tagüenia**, *Universidad Nacional Autónoma de México*

Chair/Organiser: **Toss Gascoigne**, *Toss Gascoigne and Associates*

## • INDIVIDUAL PAPERS SESSIONS

### *Risk Communication*

**Room: 5**

**Ilaria Ampollini**, *University of Bologna*: Communicating risk in Enlightenment Europe: Lalande and the comets approaching the Earth

**Adriana Angel**, *Ohio University*: Risk and rhetoric: The role of rhetoric in the presentation, definition, and construction of risk

**Paolo Giardullo**, *University of Urbino*: Actors in public representation of risk

**Satoko Oki**, *University of Tokyo*: Risk communication on earthquake prediction studies: Possible pitfalls of science communication

Chair: **Andrew Pleasant**, *Canyon Ranch Institute*

### *Sounds and Visions of Science*

**Room: 9**

**Catherine Crawley**, *University of Tennessee*: Just can't get you out of my head: Communicating science through music

**Ildu de Castro Moreira**, *Federal University of Rio de Janeiro*: Science and Brazilian popular music

**Maria Leão**, *Instituto Gulbenkian de Ciência*: Music, science and fundraising together as an innovative model in science communication – A partnership between Instituto Gulbenkian de Ciência biomedical research institute and Everything is New, the promoter of OptimusAliveOeiras music festival

**Stefano Sandrelli**, *INAF – Astronomical Observatory of Brera*: ESA on RAINNEWS: A new format for scientific communication on television. Space as a source of daily news

Chair: **Dominique Brossard**, *University of Wisconsin-Madison*

### *Science Cafés and Informal Engagement*

**Room: 101**

**Anne Dijkstra**, *University of Twente*: Can Science Cafés contribute to scientific citizens? The Nanotrail project as a case

**Koen Dortmans**, *Radboud University Nijmegen*: Organizing informal dialogue on science and technology in the Netherlands

**Helen Featherstone**, *University of the West of England*, and **Hannah Hope**, *British Society for Immunology*: Is the act of making an act of engagement?



**Erin Navid**, *University of Calgary*: Biobricks and brews: Synthetic biology in the Science Café

Chair: **Jan Riise**, *Agadem AB*

*Science in Culture*

**Room: 203**

**Declan Fahy**, *American University*: Science and celebrity studies: A framework for analyzing scientists in public

**Karl Grandin**, *The Royal Swedish Academy of Sciences*: The workings of the Nobel Prizes in the sciences: Is there a public understanding?

**Rod Lamberts**, *Australian National Centre for Public Awareness of Science*: Quality and honesty (but it ain't always beautiful): The science communicator as public critic.

**Adrian Thomasson**, *University of Uppsala*: Primo Levi: Syllables of the periodic table

Chair: **Suzanne de Cheveigné**, *CNRS, France*

- **SHOW, TELL AND TALK SESSIONS**

*What do Science and Art Activities Bring to Science Communication?*

**Room: 4**

Images of cells and biological tissues brought to life by state of the art microscopy and staining techniques. Colourful graphs illustrating scientific data. Pictures of protein structures and polymer molecules. Experimental instruments like particle detectors and particle accelerators. All of these things are pure science, but they look like works of art. And that should come as no surprise: as creative disciplines, Science and Art have much in common, and there's much to be gained for science by working with the arts.

Art inspired by science intuitively conveys the substantial story of science, the secret of nature and how important the products of scientific research are. Art raises the profile of science, and this has not gone unnoticed by the scientific community.

Today, a number of research institutes and universities are introducing Science and Art activities as a part of their science communication, since such initiatives have the power to convey the secret and the beauty of nature by intuition, reaching out to new audiences. In this session, three research institutes, Diamond, RIKEN and CERN will discuss their Science and Art activities. Representatives of these three leading labs will discuss why and how they are engaging with the arts, how their activities are organized and what impact the-

se activities have on the labs' public image. The goal of the session is to exchange information and discuss the relevance of Science and Arts initiatives in the ongoing dialogue between science and its publics.

**Isabelle Boscaro-Clarke**, *Diamond*

**Quentin Cooper**, *BBC Radio 4*

**James Gillies**, *CERN*

**Saeko Okada**, *RIKEN*

Chair/Organiser: **Saeko Okada**, *RIKEN*

*New Approaches to Media*

**Room:6**

**Martha Duhne**, *El Colegio de la Frontera Sur, ECOSUR*: Building bridges between researchers and popularization of science professionals

**Wiebke Finkler-Hendry**, *University of Otago*: Communicating science through TV commercials to alter attitudes to sustainable whale watching practice and management

**Arne Sjöström**, *Philipps-University Marburg*: Improving the interplay between science and the media: A workshop concept

**Tan Yihong**, *Science Times Group*: Role Exchange – An innovative approach to engage scientists and journalists in science communications

Chair: **Vladimir de Semir**, *Pompeu Fabra University*



FRIDAY, 20<sup>TH</sup> APRIL  
PARALLEL SESSION 3  
13.00-14.15

• PANEL SESSIONS

*Monitoring Science in the Media*

**Room: 202**

This session will focus on the discussion of different methodologies used for monitoring science coverage. Researchers from different countries and backgrounds will present and discuss the different paths they used for meeting their objectives. This session is as a follow up of an effort started by the Royal Society in London in 2007.

**Luisa Massarani**, *Museum of Life, House of Oswaldo Cruz*

**Federico Neresini**, *University of Padova and Observa Science in Society*

**Petra Pansegrau**, *University of Bielefeld*

**Ahmet Suerdem**, *LSE and Istanbul Bilgi University*

Chair/Organiser: **Luisa Massarani**, *Museum of Life, House of Oswaldo Cruz*

*Social Contextualization of Neuroscience by Public Communication: Exploring the Relationships Between Neuroscientists and the Media, Their Consequences for the Public Image of Neurosciences and Possible Repercussions on Science*

**Room: 5**

After psychology and genetics, neuroscience is now the dominant paradigm to explain personality, perceptions and behavior. It challenges the classical concept of moral responsibility, promises a cure for psychiatric disorders, and moves neuro-enhancement, computer-brain interfaces and mind-reading from science fiction into R&D. In view of the growing impact of neuroscience on culture and technology, the quality of public communication matters. Critics warn against over-interpretation of neuroscientific results, in particular as they seem to be particularly persuasive. While the media are often seen as the main cause of inadequate coverage, this session also explores the role of the neuroscientific community. Three research papers deal with media coverage of neuroscience and with the interdependencies between the neuroscientific community and the media.

**Joachim Allgaier**, *Research Center Jülich*: Neuroscientists' media interactions and their repercussions on research

**Timothy Caulfield**, *University of Alberta*: Science hype: Sources and solutions

**François Gonon**, *University of Bordeaux*: Why most neuroscience findings echoed by the media turn out to be false or hyped

Chair/Organiser: **Hans Peter Peters**, *Research Center Jülich*

*Art + Science: Two Eyes on Our World*

**Room: 6**

This panel will try to show the intellectual process behind the development of art and science exhibitions. In a new perspective, rather than simply exploit art for scientific purposes or science for artistic ones, artworks and science exhibits become different but complementary points of view on the same topics. The hoped-for result is a richer and more significant experience of the visitor, in whose mind the stimuli provided by art and by science will inspire new thoughts, new emotions, and therefore new knowledge. The double perspective provided by art and science can be a useful platform for public discussion, and to renew education tools. The speakers - an art curator, a science writer and the director of one of the most interesting art and science programmes - will explore the issue of how to develop the connection between art and science through exhibitions, by unveiling and discussing the intellectual process behind their work. Thanks to the different points of view, the panel will show how the approach has evolved in three examples of exhibitions: Anthroposphere, Happy Tech, The new ages of life - developed within the event organized by Fondazione Marino Golinelli in Bologna, Arte e Scienza in Piazza, and their stop off at the Triennale venue, Milano. Furthermore, as a partial sum up of a learning process, the speakers will discuss the results of past exhibitions, in terms of weaknesses and strengths, and the future development of the project.

**Giovanni Carrada**, *Fondazione Marino Golinelli*

**Siân Ede**, *Calouste Gulbenkian Foundation*

**Cristiana Perrella**, *Fondazione Marino Golinelli*

Chair/Organiser: **Giovanni Carrada**, *Fondazione Marino Golinelli*



*Exploring the Scholarship of Engagement: Reassessing Practices, Media, Formats and Science Communication Models*

**Room: 4**

The scholarship of engagement, combined with an emergent community of practice, is increasingly generating interest among academics across the university sector, and within user communities. However, uptake is far from comprehensive; enthusiasm for public engagement remains uneven across the university sector, within and across academic fields, and among user communities. Whilst some academics and user communities are contributing to, and being affected by, changes to media, formats and models of science communication, a context partly characterized by disruption and change, others support established norms and practices.

The focus for this session is academic enthusiasts of the scholarship of engagement. They are addressing new challenges and opportunities as they work with peers (and sometimes also with user communities) to envisage, theorise and instantiate new places, spaces and methods for engagement. In so doing, scholars of engagement are working to identify (and increasingly to assess) more effective ways of generating, representing, circulating and debating knowledge in the public sphere.

This panel discussion brings together distinguished science communication experts to explore the scholarship of engagement and how it is (re)conceptualising contemporary and next generation practices and technologies in relation to science communication.

**Alice Bell**, *Imperial College London*: "ScienceBlogs is a high school clique, Nature Network is a private club": Do bloggers see their work as public engagement?

**Richard Holliman**, *The Open University*: Digital scholarship and public engagement: Communication, conversation, confrontation

**Will Rifkin**, *University of Sydney*: Engaging scientists with digital media

**Eileen Scanlon**, *The Open University*: Rethinking the scholar: Openness, digital technology and changing practices

Chair/Organiser: **Richard Holliman**, *The Open University*

*Communicating Genomes: Scientists, Publics and Media in the Age of the New Genetics*

**Room: 101**

The Ethics Committee of the Human Genetics Foundation (HUGEF), based in Torino, explores in this session the unique challenges in science communication that arise from the convergence of three technological and social developments: 1) the rise of the new genetics, with an unprecedented ability to characterize individual genetic variation and the imminent capacity for individual whole genome sequencing; 2) the consolidation of new actors in the production of genetic knowledge, chiefly direct-to-consumer genetic testing companies, that challenge traditional forms of expertise and establish a direct communication between knowledge providers and knowledge users; and 3) the emergence of new modalities of public participation in the life sciences, whereby both individual citizens and organized groups acquire a leading role in the shaping of research priorities and modalities. The flourishing of new communication media, most notably under the paradigm of the social network, constitutes a particularly fertile soil where the digital power of the new genetics encounters another key tenet of the digital age, namely the fragmentation and redistribution of expertise.

Members of the HUGEF Ethics committee will analyze these emerging challenges integrating bioethical, legal and sociological perspectives.

**Cinzia Caporale**, *CNR, Italy*

**Demetrio Neri**, *University of Messina*

**Giuseppe Testa**, *European Institute of Oncology*

Chair/Organiser: **Giuseppe Testa**, *European Institute of Oncology*

*From Responsibility of Communication to Responsibility in Science and Technology Communication*

in collaboration with Fondazione Giannino Bassetti

**Room: Onice**

The Bassetti Foundation for responsible innovation invites the PCST conference participants to discuss if science and technology communication should not be responsible as well as quality-driven, honest and beautiful.

There is nowadays a *political* problem about who manages science communication. This is a problem that regards all actors in PCST: from science journalists to researchers engaged in communicating one's results, to the professionals employed in education and museum institutions, etc.



We signal here the need to shift about personal responsibility in communicating science, to building more responsible systems for the communication of science. For instance, opposite political effects can be drawn from communicating the same factual situation in different ways, especially if we consider not only quality of information but its sheer quantity that circulates in the media, typically at times when pivotal decision must be deliberated.

Here are some possible examples of topics that could be discussed in this session: Science communicators are often not media professionals but rather internally trained staff at laboratories, museums and enterprises. These tend to preside over the information they offer about themselves. Do they do it responsibly? What should be the communicator's role in verifying data, focussing on relevant details and providing adequate framework to the information provided by socio-economic actors? Citizens' science, patients' associations etc. increasingly co-construct scientific, medical and pharmaceutical knowledge. What is their role in communicating such knowledge and how could it be improved?



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**Franca Davenport**, *Science writer, Science for environment Policy*: Walking the ethical tightrope between science and policy

**Margherita Fronte**, *Fondazione Gianni Bassetti*: The challenges of innovation and responsibility

**Alexander Gerber**, *innocomm Research Centre*: Open science without scientists?

**Ann Grand**, *University of the West of England*: "It feels like the right thing to do": Ethical perspectives of open science

Chair: **Gail Edmondson**, *Science Business*

- INDIVIDUAL PAPERS SESSIONS

*Science Centres*

**Room: Limonaia**

**Luigi Amodio**, *Fondazione Idis-Città della Scienza*: The use of social media in science centres and museums: From viral marketing to involvement of public in programming activities and contents

**Ayelet Baram-Tsabari**, *Technion Israel Institute of Technology*: Communicating evolution through theatre: The case of 'Darwin's Journey'

**Leonie Rennie**, *Curtin University*: Communicating science in museums and science centres: How stories are told and interpreted

**Carla Sandim**, *ERA Virtual*: Virtual tours of museums: Technology in art and science promotion

**Midori Takahashi**, *Shizuoka Science Museum*: Cultivating science communication in a local community

Chair: **Bernard Schiele**, *Université du Québec à Montréal*

*Scientists and Journalists*

**Room: 203**

**Germana Barata**, *State University of Campinas*: Science journals investing on science communication

**Yin-Yueh Lo**, *Research Center Jülich*: Scientists and journalists – the Taiwanese case: Results of a survey of biologists and neuroscientists regarding their experience with and their attitudes towards the mass media

**Nico Pitrelli**, *Sissa, Italy*: Allies or opponents? The way scientists influence science journalism in the digital age

**Connie St Louis**, *City University London*: Five years of science journalism complaints sent to UK media watchdogs: An indication of quality?

Chair: **Marco Cattaneo**, *Le Scienze*

*Science News*

**Room: Auditorium**

**Blanka Jergović**, *Croatian Radio and University of Zagreb*: Lost in transition? Science in the Croatian newspaper

**Andrea Kiraly**, *Eötvös University*: Brief and social responsibility – case study on the Hungarian interpretation of a "sensitive" scientific news

**Felicity Mellor**, *Imperial College London*: Contested standards of quality in science broadcasting: Impartiality and balance at the BBC

**Kathryn O'Hara**, *Carleton University*: Liberation therapy. A case study of responsibility in medical science news

**Holger Wormer**, *Dortmund University*: A question of quality: Criteria for the evaluation of science and medical reporting and testing their applicability

Chair: **Gabriele Beccaria**, *La Stampa, TuttoScienze*

- SHOW, TELL AND TALK SESSIONS

*Institutions Reach Out*

**Room: 9**

**Manuela Arata**, *CNR, Italy*: Outreach and social inclusion

**Eduardo Basto**, *Universidade do Porto*: Strategies for science communication and participation in different socio-technical networks: Experiences in the Portuguese context

**Amy Fletcher**, *University of Canterbury*: From metropolis to biopolis: Incubating the biotechnological future in Los Angeles

**Collette Vosloo**, *Research Communication CSIR*: Experiences in herding cats: Communicating science in (and of) a multidisciplinary organisation

Chair: **Michel Claessens**, *ITER Organization*

*Festivals and Events*

**Room: 104**

**Amy Sanders**, *The Wellcome Trust*: Science in non-science spaces - experiments in engaging with new audiences

**Senkei Umehara**, *Japan Science and Technology Agency*: Science Agora: The history, evolution and evaluation of Japan's leading science communication event

**Alex Verkade**, *Very Disco Foundation*: Discovery festival – drawing more attention to science by focusing less on communicating science

Chair: **Jan Riise**, *Agadem AB*

FRIDAY, 20<sup>TH</sup> APRIL  
PARALLEL SESSION 4  
14.15-15.30

- PANEL SESSIONS

*Understanding the Public Understanding of Science: A German Research Program*

**Room: 101**

What is a modern understanding of science like? How can its development be promoted? How do people manage that science often offers only preliminary evidence? Such questions are scrutinized by 17 research projects within the research program Science and the General Public funded by the German Research Foundation. The session presents the rationale of and three exemplary studies from the program.

**Daniela Bauer**, *Knowledge Media Research Center*: Knowledge transfer of conflictual natural scientific issues in museums and exhibitions: The role of authentic objects

**Dorothe Kienhues**, *University of Münster*: Understanding the preliminary nature of scientific evidence: Rationale of the research program

**Eva Thomm**, *University of Münster*: Laypeople's grasp of scientific discourse: Distinguishing between understanding and personal belief about science information

**Stephan Winter**, *University of Duisburg-Essen*: Coping with information overload: How laypersons select science-related content in Web 2.0

**Dominique Brossard**, *University of Wisconsin-Madison*, discussant

Chair/Organiser: **Dorothe Kienhues**, *University of Münster*

*From Cities of Science to Cities of Scientific Culture*

**Room: 202**

Several European cities are strongly betting on science and technology as the keys to economic and social development. Two main examples cited at the European Union level are the UK's Science Cities and Germany's Cities of Science. The UK Science Cities are examples of a national initiative to push science as a driver of development, particularly economic development. German cities using science to reshape their social and econo-



mic landscapes enter a competition to win the annual City of Science title.

Introducing the concept of culture, as in moving from Cities of Science to Cities of Scientific Culture, shifts the emphasis from economic development to a notion of science and technology as a necessary part of the cultural fabric of a city.

In this session, two research studies related to Cities of Scientific Culture will be presented, followed by an examination of case studies on the concepts practical implementations.

The role of science communication institutions in building urban science culture will also be addressed by examining the work that these institutions are developing within the context of PLACES: City Partnerships are arising from science communication institutions forming alliances with local policymakers. These cooperative relationships will yield Local Action Plans targeting science communication policies in European cities and regions. Over 70 European cities, representing 27 countries, are currently engaged in the project.

**Tim Caulton**, *ERRIN*

**Antonio Gomes da Costa**, *ECSITE*

**Rainer Lisowski**, *University of Applied Sciences Osnabrück*

Chair/Organiser: **Catherine Franche** and **Antonio Gomes da Costa**, *ECSITE*

*New Perspectives on Public Attitudes and Engagement with Biomedicine*

**Room: Onice**

This session brings together international researchers presenting new work that seeks to understand the social and psychological forces that coalesce to influence attitudes, beliefs and engagement with modern biomedicine. Each paper introduces novel data and fresh perspectives that provide insight for science communicators and social scientists in the field.

**Nick Allum**, *University of Essex*; **Paul Stoneman** and **Patrick Sturgis**, *University of Southampton*: Religious beliefs, knowledge about science and attitudes towards medical genetics

**Paul Stoneman** and **Patrick Sturgis**, *University of Southampton*; **Nick Allum**, *University of Essex*: Exploring public discourses about emerging technologies through statistical clustering of open-ended survey questions

**Jennifer Hochschild**, *Harvard University*: Race, DNA, and criminal justice: Linking public opinion to public policy

**Niels Mejlgaard**, *University of Aarhus*: Performed and

preferred participation in science and technology across Europe: Exploring an alternative idea of 'democratic deficit'

Chair/Organiser: **Nick Allum**, *University of Essex*, and **Patrick Sturgis**, *University of Southampton*

*Public Communication on Communication Sciences: The Relation Between Academic Studies, Everyday Knowledge and Engineering Models*

**Room: 9**

This panel addresses the topics of communication on social sciences. We question the relation between the sharing of academic knowledge, everyday knowledge of social actors and the development of the market of models and engineering of public communication.

The relation between academic and non-academic knowledge in the case of communication is a challenge for research and political thought, for three kinds of reasons at least: (1) the production of knowledge on communication has considerable impact on social life, whereas it remains a minor and is not identified as decisive in the academic field; (2) communication is central in social practices and, a fortiori, in all the academic disciplines in social sciences; (3) social actors have their own knowledge on communication before scientific actors meet them to produce academic knowledge.

In those conditions, theoretical frames to analyse communication tend to be more easily appropriated by professionals of instrumental communication than by academic communities of other disciplines. Social actors are proposed to use instrumental solutions coming from the flow of ordinary communication – what we call industries of triviality. Those industries endeavour to generate value from what circulate in society, by the way of any device able to stimulate, induce, collect social knowledge on communication. Frequently, the purpose is not mainly to share that knowledge but to publicize the devices which can collect them.

This situation leads to discuss the way knowledge on communication is constructed and the way that knowledge is discussed, stimulated, made visible or, on the contrary, underestimated.

**Fausto Colombo**, *Catholic University of Milano*

**Joëlle Le Marec**, *Université Diderot Paris*

**Bernard Schiele**, *Université du Québec à Montréal*

Chair/Organiser: **Yves Jeanneret**, *Paris Sorbonne University (CELSA)*



*Arenas, Modalities and Pathways in the Public Communication of Emerging and Converging Technologies*

**Room: 203**

In the last ten years, the social study of science and technology has recognized in the Emerging and Converging technologies (i.e. the several convergences between information technology, nanotechnology, biotechnology, cognitive science, robotics, and artificial intelligence, etc.) a new area where inquiry on the relationship between science and society and a novel challenge for the advancement of the public communication of science.

This special session, organized by the CIGA centre of the University of Padova, will focus on the different recent researches and perspectives that deal with new areas, modalities and pathways in the sector of the public communication of science in relation with the development of the new emerging and converging technologies.

The session will host several researches, coming from different academic fields and rooted in various disciplinary backgrounds, focused on the relationship between emerging technologies and public communication of science and science education. These researches will offer empirical, theoretical and operational contributions in order to map the new and rising perspective and approaches fermenting in this sector of research.

**Denisa Kera**, *National University of Singapore*: Hackerspaces and DIYbio labs: from DIY kits and design probes to policy protocols

**Brice Laurent**, *Mines-ParisTech*: Communicating nanotechnology, constructing democracies

**Andrea Lorenzet**, *University of Padova*: Nano-keyword. The communication of 'multiple' nanotechnologies in the World Wide Web

Chair/Organiser: **Paolo Magaudda**, *University of Padova*

*Better Science Communication for Better Choices*

**Room: 4**

On the basis of sociology, social psychology and gender studies, the focus of the session will be on how young people's educational choices in various STEM disciplines in European countries can be influenced by the media. External factors like science centers and museums, science fictions and books influence the choice of scientific degrees. In particular mass media, which, together with the information conveyed by the social

networks, contribute to the building of social representations young people have of different disciplines and, thus, influence academic choices.

The session aims to present and raise the discussion about the role of the media in young people's recruitment and retention in STEM higher education and career, as well as to present the relevant guidelines for achieving this purpose, based on the theoretical frameworks and the empirical knowledge.

**Alessandra Allegrini**, *Observa Science in Society*: Gender roles in ST media experiences and STEM choices. Some suggestions from the Italian Iris survey

**Ellen Henriksen and Fredrik Jensen**, *University of Oslo*: Using experiences outside of school to recruit young people to STEM education

**Marianne Løken**, *University of Oslo*: Communicating research on educational choices; When research challenge gender stereotypes

**Giuseppe Pellegrini**, *Observa Science in Society*: Science goes to Hollywood. Students, fiction and STEM choices

Chair/Organiser: **Giuseppe Pellegrini**, *Observa Science in Society*

• **INDIVIDUAL PAPERS SESSIONS**

*Health and Medicine*

**Room: Limonaia**

**Siân Aggett**, *The Wellcome Trust*: Whose knowledge is it? Engagement approaches that challenge public health research as we know it

**Herbert Batta**, *University of Uyo*: Sensationalising the female pudenda: An examination of public communication of aesthetic genital surgery

**Cristophe Boete**, *Institut de Recherche pour le Développement – Aix-Marseille Université*: Scientists and public involvement: A consultation on the relation between malaria, vector control and transgenic mosquitoes

**Mauro Turrini**, *University of Padova*: Medicine and bodies in Italian talk shows

**Holley Wilkin**, *Georgia State University*: Evaluating health storytelling in ethnic media: A content analysis of US Spanish-language television programs

Chair: **Rick Borchelt**, *Johns Hopkins University*



*Social Networks***Room: 6**

**Fulvio Drigani**, *ESA*, and **Francesco Rea**, *INAF*: Do we still need traditional news media to communicate science?

**Jenny Eklöf**, *Umeå University*: The role of search engines and the press in the biofuel controversy: Technoscientific marketing or democratic deliberation?

**Brenda Moon**, *Australian National Centre for the Public Awareness of Science*: Scanning the science-society horizon: Using social media to monitor public discussion of science

**Julia Tagüeña**, *Universidad Nacional Autónoma de México*: Modeling social networks response to science information

Chair: **Julia Tagüeña**, *Universidad Nacional Autónoma de México*

*Policy, Politics and Values***Room: 104**

**Dominique Robert**, *University of Ottawa*: Honesty in communicating science to politics in the (pre) modern era. How can an advocate scientist stay true to his two allegiances at once?

**Helene Limén**, *PER*, *The Swedish Parliament*: Parliaments facing a challenging situation

**Katherine McComas**, *Cornell University*: Examining researchers' perceived norms and responsibility for considering ethical implications of funding and conflicts of interest in science and engineering

**Zuzana van der Werf Kulichova**, *Delft University of Technology*: Science-policy interface from communication perspective

Chair: **Donghong Cheng**, *CAST, China*

*Science Events***Room: 5**

**Ana Godinho**, *Instituto Gulbenkian de Ciência*: Going beyond the 'science fair' approach: Engaging scientists in reflective, long-term science communication

**Diogo Lopes De Oliveira**, *Instituto Brasileiro de Informação em Ciência e Tecnologia and University of Brasilia*: Science Weeks in Catalonia (Spain) and Pernambuco (Brazil): A comparative perspective

**Cristina Palma Conceição**, *University Institute of Lisbon*: New(?) actors in science communication: The role of scientific associations

**Hauke Riesch**, *Imperial College London*: What has pu-

blic engagement ever done for us? The value of "citizen science" public engagement projects from an OPAL scientist perspective

Chair: **Sook-Kyoung Cho**, *Korea Foundation for the Advancement of Science & Creativity*

- **SHOW, TELL AND TALK SESSIONS**

*Audio-Visual Media***Room: 105**

**Lloyd Davis**, *University of Otago*: March of the Penguins makes for Happy Feet: The truth about penguins on screen

**Sofia Guedes Vaz**, *New University of Lisbon*: Do you standby? The use of video in communicating environment

**Gabriel Machado**, *Universidade Federal do Rio de Janeiro*: A playful arsenal against cancer: The importance of interactivity with the audience in the construction of effective tools for disease prevention

Chair: **Elisabetta Tola**, *formicablu*

*Media Skills Courses for Scientists: Ingredients and Recipes***Room: Auditorium**

The major goal of the session is to share experiences that have been proved to be successful in teaching scientists to improve dialogue with the media. The workshop discussions and output would be used to subsequently to build an online workshop kit for facilitators of media skills training workshops for scientists a kind of best recipes-kit to be included on the PCST website.

Many journalists, communicators, educators, are engaged in training scientists in media skills. The courses offered vary wildly. They range between seminars no longer than a couple of hours to workshops of several days duration. Some of the courses focus on meeting with TV reporters, others prefer to focus on writing techniques. Some courses are designed for senior academic staff, others are directed to early career scientists. Various workshops are meeting the different pressures, needs, and expectations of participants.

To-date, teachers of media skills courses for scientists have needed to develop their own concepts, and produce their own supporting materials and exercises. They have developed exercises based on their own experience or from adapting practices from other, similar,



courses (e.g. creative writing courses).

Currently, we do not know how many are involved in media-training of scientists, nor how successful such training is.

Journalists, communicators, and educators involved in such activities, along with those who could be interested in developing and promoting these courses, are invited to join this discussion.

**Fred Balvert**, *Erasmus Mc University Medical Center Rotterdam*

**Toss Gascoigne**, *Toss Gascoigne and Associates*

**Marina Joubert**, *Southern Science and University of Pretoria*

**Jenni Metcalfe**, *Econnect Communication*

Chair/Organiser: **Jacopo Pasotti**, *Journalist, consultant, Promedia*

FRIDAY, 20<sup>TH</sup> APRIL  
PARALLEL SESSION 5  
15.30-16.45

• PANEL SESSIONS

*Science and Governance in a Knowledge Society: Research and Best Practices on the Role of Science Centres and Museums*

**Room: 202**

Many science centres and museums have proven to be platforms for governance, citizen participation and dialogue on the relationship between nature, science and society. This, despite the fact that science centres and museums are often viewed as places for fun, wonder and experimentation, where students and adults experience science in an informal and interactive way.

These science centres and museums have become interfaces between science, citizens and policy makers and their role in the dialogue between science and society is strengthening through innovative methods and programmes. These methods have been carefully evaluated through studies, carried out with the contribution of internal and external researchers, which have questioned their successes and failures.

ECSITE, the European Network of Science Centres and Museums, proposes a session to display the latest research on the role of science centres and museums in current scientific governance, as well as examine how these institutions can establish new connections between researchers and practitioners in the field of science communication.

**Andrea Bandelli**, *independent advisor on science communication initiatives, the Netherlands*

**Sabine Gerber-Hirt**, *Deutsches Museum*

**Stephen Roberts**, *Natural History Museum London*

**Paola Rodari**, *SISSA Medialab*

Chair/Organiser: **Marzia Mazzonetto**, *ECSITE*

*Working Towards Cultural Indicators of Science II*

**Room: Onice**

Surveys of public understanding of science have had international momentum since the 1990s and into the 2000s, mainly focussed on the measurement of science literacy and often taking the lead from NSF (i.e. the Miller Model). The proposal will revisit this survey tradition and ask the question: is it possible to re-examine



this emerging international database with a different framework and offer a re-interpretation of this data as 'indicators of science culture'? The symposium will take forward questions raised as an international workshop of the Royal Society in London back in November 2007.

**Martin W. Bauer**, *LSE*: A science culture index for Europe – changes and stabilities 1989 to 2010

**Massimiano Bucchi**, *University of Trento*: Long term trends and short term changes in public attitudes towards science and technology issues: Nuclear energy in Italy

**Ildeu de Castro Moreira**, *Federal University of Rio de Janeiro*: Public perception of science and technology in Brazil: Trends, indexes and the relationship between interest, knowledge and attitudes

**Vijay Reddy** and **Michael Gastrow**, *Human Sciences Research Council, South Africa*: The public relationship with science in South Africa

**Jon Miller**, *University of Michigan*: The impact of prior understanding on the processing of emergent events: An analysis of the impact of civic scientific literacy on making sense of influenza and Fukushima

Chair/Organiser: **Martin W. Bauer**, *LSE*

*Food, Science and Communication: Towards Inclusive Research Programming for Sustainable Food Innovations*

**Room: 101**

Over the past decade, most EU Member States have identified food and health as key priorities. This is in response to increases in obesity and diet-related chronic diseases amongst their populations. Also an insufficient nutrient supply in subgroups of the populations and special demands in ageing societies are identified as abiding challenges. Attempts to increase public awareness of appropriate ways to eat more healthily though do not seem to have led to significant changes in patterns of food purchase and consumption. It has become obvious that the development of effective measures for improvement is a demanding task and requires further systematic research and innovative approaches. At EU level, food-related health problems have now been identified as one of Europe's common major challenges which the emerging European Research Area needs to deal with. One main question that this research needs to tackle is the role of innovations in foods and new basic research technologies could play in counter-acting the alarming rise of food-related health problems. It requires a purposeful communicative exchange between research, business, and civil society actors on the nature of the problem and the role

that innovative technological approaches could play in tackling it. In relation to the food and health problem this implies taking into account the various factors that determine diet, physical activity behaviors and uptake of technologies by citizens. In accordance with the FP7 Science in Society research program, it is a basic assumption of INPROFOOD that addressing this hugely ambitious task requires dialogue and mutual learning between industry, academia and civil society already in the earliest stages of the research processes directed towards developing innovative approaches (technical and social) for dealing with the food and health challenge.

**Susanne Braun**, *University of Hohenheim*

**Derek Victor Byrne**, *University of Copenhagen*

**Vicki Lei**, *University of Copenhagen*

**Michael Straehle**, *Wissenschaftsladen Wien - Science Shop Vienna*

**Christine Urban**, *Wissenschaftsladen Wien - Science Shop Vienna*

Chair/Organiser: **Klaus Hadwiger**, *University of Hohenheim*

*Rationales and Audiences for Communicating 'Big Science'*

**Room: Auditorium**

Scientific research is increasingly being undertaken by Big Science large scale international collaborations between multiple institutions. Under these circumstances, communication processes can become extremely complex. They also face key challenges related to dealing with cutting-edge science as it happens, and frequently rely more on communicating technology developments rather than science. This session will explore the rationale behind Big Science communication efforts, as well as specific key audiences and how best to strategically involve them.

Examples will be provided on how large change initiatives can be effectively managed with communication being a valued (and resourced) activity.

The European Spallation Source, ESS, and the MAX-IV synchrotron are the largest ever research infrastructure investments in Sweden. Plans for an integrated science/visitors centre show significant communication challenges.

ITER, which will be twice the size of the largest fusion reactor currently operating in the world, is a far-reaching, ambitious and potentially controversial project. But before being a fusion reactor, it is a fantastic observatory of science communication and science journalism.

Finally, the specific audience of policy makers will be



considered, in the context of their need to engage with research to ensure policy making is grounded in evidence. This will focus on strategies to overcome communication barriers that may limit policy makers engagement with new research on science and technology and raise questions for discussion about who should be responsible for such communication.

**Michel Claessens**, *ITER Organization*

**Lawrie Kirk**, *Australian National Centre for the Public Awareness of Science*

**Jan Riise**, *Agadem AB*

**Emma Weitkamp**, *University of the West of England*

Chair/Organiser: **Karen Bultitude**, *University College London*

*Materializing Science Communication: Embodiment and Aesthetics*

**Room: 203**

Most science communication models focus on individuals involved in conscious, reasoned discourse. This conception of the individual is challenged by theoretical movements that insist that humans are also embodied actors that inhabit and enfold their material environment through their senses (aisthesis). This panel, which is based in a new science communication research and curatorial programme at Medical Museion, University of Copenhagen, explores the foundations and consequences of an aesthetic approach to public engagement with science. We take an interdisciplinary stance, drawing on philosophy, science studies, and museology.

**Adam Bencard**, *University of Copenhagen*: Aesthetics

**Anette Stenslund**, *University of Copenhagen*: Phenomenology and Olfaction

**Karin Tybjerg**, *University of Copenhagen*: Beauty and Truth

**Louise Whiteley**, *University of Copenhagen*: Process and Ethics

**Morten Bulow**, *Bios/King's College and Medical Museion*, discussant

Chair/Organiser: **Thomas Söderqvist**, *University of Copenhagen*

• **INDIVIDUAL PAPERS SESSIONS**

*Media Coverage of Health and Food Issues*

**Room: 6**

**Corrado Finardi**, *University of Parma*: The reasonable food: The public speech among evolving science, regulation and baseline human physiology

**Antonella Guzzon**, *Hylobates Consulting*: Food risk communication and the role of stakeholders

**Raphael Hammer**, *Institute of Health Research, Switzerland*: Media coverage of organ transplantation: Towards a contextualized model of communication?

**Giuseppe Tipaldo**, *University of Torino*: If San Gennaro is not enough. How the Italian press covered and framed the 2008 Naples' waste emergency

Chair: **Manoj Patariya**, *National Council for Science and Technology Communication, India*

*Communicating Food and Crops*

**Room: 9**

**Hak-Soo Kim**, *Sogang University*: Enhancing engagement by communicating acts: An experiment with food poisoning and food irradiation

**Karen Mogendorff**, *Wageningen University*: The uses of discursive scripts of prospective users in scientist-stakeholder interaction in plant technology development

**Marichel Navarro**, *Global Knowledge Center on Crop Biotechnology, ISAAA*: Science communication initiatives in developing countries: Global information network on crop biotechnology

**Jedrzej Sulmowski**, *Leuphana University of Lueneburg*: Communicating science = constructing science. Views of science as reference to discuss the quality of science communication in the agro-biotechnology discourse.

Chair: **Hak-Soo Kim**, *Sogang University*

*Scientists' Views of the Public*

**Room: Limonaia**

**Fabienne Crettaz von Roten**, *University of Lausanne*: Understanding scientists engagement toward society in the academic context

**Sergio Scamuzzi**, *Centro Interuniversitario Agorà Scienza*: How and why scientists communicate with society: The case of physics in Italy



**Claudia Loaiza Escutia**, *University of the Basque Country (Spain) and CONACYT (Mexico)*: European scientists' public communication attitudes. A cross-national quantitative and qualitative empirical study of scientists' views and experiences and the institutional, local and national influences determining their public engagement activities

**Rita Portela**, *IBMC, Instituto de Biologia Molecular e Celular, Portugal*: Scientists' participation in Science Communication activities. Perceptions follow the practices. The practice follows the policy

**Suzette Searle**, *Australian National Centre for the Public Awareness of Science*: The benefits of communicating with the general public from the scientists' point of view – An Australian study

Chair: **Hans Peter Peters**, *Research Centre Jülich*

*Media and Communication Factors Shaping Educational Choices in Science and Technology*

**Room: 4**



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The participation of young people (women in particular) in science, technology, engineering and mathematics (STEM) education and careers is a matter of international concern. Project IRIS (Interests & Recruitment In Science), with 6 academic partner institutions in 5 European countries, addresses this challenge through a multi-faceted research project. The session aims to present and raise the discussion about the theoretical frameworks and the empirical knowledge base in order to give policy-relevant guidelines for how young people, and young women in particular, may be recruited to, and retained in, STEM higher education and career, with a particular focus on the role of media and communication factors.

**Ellen Henriksen**, *University of Oslo*: Why choose STEM education and career - in 5 European countries?

**Elaine Regan**, *King's College London*: To STEM or not to STEM: Personal and social factors influencing degree choice

**Jim Ryder**, *University of Leeds*: The impact of science curriculum content on students' subject choices in post-compulsory schooling

**Lars Ulriksen**, *University of Copenhagen*: The first-year experience – issues of student retention and balancing of identities at STEM higher education studies

Chair/Organiser: **Slavko Dolinšek** and **Tina Hribar**, *University of Ljubljana*

• **SHOW TELL AND TALK SESSIONS**

*Experiences in Schools*

**Room: 5**

**Diana Escobar**, *Culture Institute, Barcelona City Council*: EscoLab: A collaborative network for approaching current science to high school students

**Tanjia Klop**, *Delft University of Technology and Kluyver Centre for Genomics of Industrial Fermentation*: Science for all; design of a science module for learners in lower educational levels

**Stefano Sandrelli**, *INAF – Astronomical Observatory of Brera*: Fantastic Voyage to the Galaxy center: Quality as the right professional people at the right places

**Francesca Taponecco**, *European Academy of Bolzano*: EURAC junior – Research meets school

Chair: **Masataka Watanabe**, *University of Tsukuba*

*Science Centres*

**Room: 104**

**Nelio Bizzo**, *University of São Paulo*: Biological evolution, Science Museums and children: Basic research on history and cognition

**Sara Calcagnini**, *Museo Nazionale della Scienza e della Tecnologia Leonardo Da Vinci*: Communication of research in Museum environment

**Lucia Martinelli**, *Museo delle Scienze, Trento*: Exploring visitors' opinions. Formative evaluation for the "Sustainability Gallery" at MUSE, the new Science Museum in Trento, Italy

**Alessandra Scucces**, *PERCRO Laboratory, Sant'Anna School of Advanced Studies of Pisa*: Communication models in Scientific Museums: An example of interactive knowledge

Chair: **Marina Joubert**, *Southern Science and University of Pretoria*

## BOOK CLUB

*Meet the authors, editors and contributors  
of recent books in the field of PCST!*

Chairs: Bernard Schiele, Lisbeth Fog, Federico Neresini

**Thursday, 19<sup>th</sup> April  
17.30-19.00**

*Room Onice*

- 17.30-18.15

David J. Bennett, discussing Bennett and Jennings (2011), *Successful Science Communication - Telling It Like It Is*, Cambridge UP

Donghong Cheng, discussing Cheng et al. (2008), *Communicating Science in Social Contexts*, Springer (to be released in Chinese language for PCST-12)

*Room Onice*

- 18.15-19.00

Matthew Nisbet, discussing the *Oxford Handbook of Climate Change* (2011)

Jon Turney, discussing Turney (2010), *The Rough guide to the future*

**Friday, 20<sup>th</sup> April  
11.15-12.00**

*Room Onice*

- 11.15-12.00

Martin Bauer discussing Bauer et al. (2011), *The Culture of Science: How the Public Relates to Science Across the Globe*, Routledge

Carmelo Polino discussing Polino et al. (2009), *Cultura científica en Iberoamérica. Encuesta en grandes núcleos urbanos*

*Room 4*

- 11.15-12.00

Bruce Lewenstein, discussing Priest S. H. (2010), *Encyclopaedia of Science and Technology Communication*, Sage.

Peter Weingart, Martina Franzen and Simone Rödler, discussing *The Sciences' Media Connection – Public Communication and its Repercussions*, *Sociology of the Sciences Yearbook* (2011)



## **SPEAKERS CORNER**

*Short, provocative speeches on PCST challenges*

Chair: Jenni Metcalfe

*Garden in front of Palazzo dei Congressi  
(in case of rain, speakers corner will take place inside)*

**Thursday, 19<sup>th</sup> April**  
**10.30-11.00**

**Friday, 20<sup>th</sup> April**  
**11.00-11.15**

*We know we are talking – but do we know why  
some people aren't listening?*

Craig Cormick, Australian Department of Innovation

*Science Express Enjoyable triad: expression, perception & public communication of science*

Paulino Rocio Ramirez, Pompeu Fabra University

*Communicating science through student media:  
what is the role of student science magazines?*

Mico Tatalovic, SciDev.Net

*Discussing science and technology: the route of  
participation starts from school*

Fabio Meliciani, University of Lugano



*An Evaluation Model of Science Communication  
Touring Exhibitions*

Zhimin Zhang, CRISP, China

*TV or not TV?*

Miriam Sullivan, University of Western Australia

## PERFORMANCES

**Thursday, 19<sup>th</sup> April**  
**17.30-19.00**

*Auditorium*

- 17.30

Science + Journalism:

*Is it Science or is it News?*

Giovanni Bignami, *President, INAF*

- 18.15

Science + Theatre:

*Reflecting on science made public*

Baudouin Jurdant, with Jöelle Le Marec, *Université Paris Diderot*, and Yves Jeanneret, *Paris Sorbonne University (CELSA)*

*Limonaia*

- 18.15

Science + Music:

*The Journey of Joe the Photon*

Sandro Bardelli, *INAF, Italy*

Francesco Poppi, *INAF, Italy*

**Friday, 20<sup>th</sup> April**  
**11.15-12.00**

*Auditorium*

- 11.15

Science + Kitchen:

*Cooking Hackers*

Davide Cassi, *University of Parma*



## PCST 2012 RADIO LAB

Organised by Cristina Rodriguez Luque (CEU Cardinal Herrera University)  
and Angela Simone (formicablu)

*Room Blu*

Are you a student in science journalism/science communication? Do you want to be part of PCST 2012 Radio Lab?

PCST 2012 Radio will podcast interviews and news live from the conference.

Enjoy the experience of being a digital radio reporter of PCST 2012 conferences!

Attendance is free for students registered at PCST 2012 but places are limited.

Please contact Cristina Rodriguez Luque: [cristinarluque@uch.ceu.es](mailto:cristinarluque@uch.ceu.es)

## SCREENINGS

**Thursday, 19<sup>th</sup> April**  
**17.30-19.00**

*Room 9*

- 17.30

*An international selection of short films about climate change*

from the ICCG Think Forward Film Festival, organised by the International Center for Climate Governance (ICCG) (see detailed programme on page 49)

*"If it works, it's obsolete": Marshall McLuhan, communication and technology*  
Alberto Brodesco, *University of Trento*

*Revolutionary Mind*

Sabrina Morena and Nicole Leghissa, *Associazione s\paesati*

**Friday, 20<sup>th</sup> April**  
**11.15-12.00**

*Room 9*

- 11.15

*"The desire to have a baby": science communication and ethics on MAR*

Monica Carvalho, *Portuguese Catholic University*

*Is it science or is it culture? Evaluating science communication films produced by Malawian and Australian Aboriginal students*

Mzamose Gondwe, *University of Western Australia*

*Mayon – The Volcano Princess*

Susan Eriksson, *Earth Observatory, Singapore*



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**Videos will also be projected continuously during the conference in Room 106 (see page 49 for complete list)**

## BOOK CROSSING AT PCST 2012

*Room 102*

All participants to PCST 2012 conference are invited to bring a book about science communication from their own country.

Books will be available for consultation during the conference, and when you leave your book you will be able to pick up another book among those left by other participants.

By inviting participants to share books from all around the world, **Bookcrossing@Pcst2012** aims at encouraging both the idea of recyclable reading as well as the global exchange of research and expertise on science communication themes.

## POSTERS

Chairs: Marina Joubert, Giuseppe Pellegrini

Poster Area - Palazzo dei Congressi, Lower Floor

### Thursday, 19<sup>th</sup> April

*Aesthetics & Astronomy: Exploring the public's perception of astronomy images and the science within*

Kimberly Arcand, *Smithsonian Astrophysical Observatory*

*The Clinical Lessons, experiences with public live surgery cases in The Netherlands*

Fred Balvert, *Erasmus Mc University Medical Center Rotterdam*

*Using Documentary Films as a Mediating Artifact for Promoting Pre-service Science Teachers' Ideas about Science and Nature of Science*

Gultekin Cakmakci, *Hacettepe University*

*Communicating the social sciences: A practitioners' point of view*

Piet de Vroede and Francis Van Loon, *University of Antwerp*

*The making of science communicators. The impact of participation in a school engagement program on doctoral science students*

Jan Dook, *University of Western Australia*

*From the laboratory to the factory: Communicating science concepts behind technological innovations*

Carlos Alberto Dos Santos, *IMEA - UNILA*

*Fukushima nuclear accident in the Spanish mass media. Analysis and reflections*

Carmen Enrique, *Universidad de Granada*

*University to the city: Science goes out*

Carmen Enrique, *Universidad de Granada*

*Five years of the Festa de la Ciència: The Barcelona science festival model*

Diana Escobar, *Institute for Culture of Barcelona*

*Viaje al Universo or how to involve scientific staff into your community to share the wonders of the Universe*

Antonieta Garcia, *Gemini Observatory*

*Challenges, Trends and Solutions for Science Communication in Germany*

Alexander Gerber, *innocomm Research Centre*

*Putting Action Behind Knowledge*

Tessa Gjødese, *Link.SDU*

*Communicating uncertainty: The case of precipitation forecasts in Tuscany, Italy*

Valentina Grasso, *CNR Ibimet - Consorzio LaMMA*

*Get People be Trapped by Beauty into Science!*

Veronica Guerrero, *Universidad Autonoma de la Ciudad de Mexico*

*Communicating science to power: What can we learn from political science?*

Jeffrey Harwood, *Curtin University*

*Social Media Communication Factors in Energy Campaigns*

Chao-Ping Hong, *Dublin City University*

*Combining virtual and remote astronomical observing for kids*

Giulia Iafrate, *INAF - Astronomical Observatory of Trieste*

*Communication Activities with the Public Fukushima Daiichi Nuclear Accident*

Jin-A Jeong and Gey-Hwi Lee, *Korea Institute of Nuclear Safety*



*Risk Communication under the Limitations of Science: The case of Seismology and 2011 Tohoku Earthquake*

Kakuzi Koketsu, *University of Tokyo*

*Social contexts of Taiwan's public interest in science and technology*

Yuh-Yuh Li, *National Sun Yat-Sen University*

*Mongolian Public Understanding of Khii: A Qualitative Case Study on Public Understanding of Science related to Mongolian Medicine*

Bing Liu, *Tsinghua University*

*Participation in Citizen Science programs – Research to evaluate impact*

Nancy Longnecker, *University of Western Australia*

*What is the best of visiting science museums? Young visitors' forum to evaluate science museum offers*

Chiara Mauro, *University of Padova*

*INDIA - BRAZIL: Building Knowledge Networks - Exploring Frontiers*

Maria Inês Nogueira, *University of São Paulo*

*Implementation and Issues of Science Communicator training program in collaboration with universities and museums*

Yoshikazu Ogawa, *National Museum of Nature and Science, Tokyo*

*Sprawling the brain science boom: Discourse analysis of Japanese magazine articles*

Natsuko Otsu, *University of Tokyo*

*Training science journalists in the digital age. The experience from the Master's Degree at SISSA, Trieste*

Nico Pitrelli, *SISSA, Italy*

*Can you tell me what this is?*

Victor Quintino, *CESAM, Portugal*

*Perspectives: A Nature Atelier*

Ana Maria Rodrigues, *CESAM, Portugal*

*Visits, journals, websites and clips: Science in animal health*

Elisabet Rodríguez, *CreSA, UAB-IRTA, Spain*

*Degree of public participation in science shops*

Francesc Rodríguez, *York University, Canada*

*Leading in medicine: Communication efficacy emphasizes excellence*

Lorella Salce, *National Cancer Institute "Regina Elena", Italy*

*Promoting quality of science journalism in developing countries*

Mico Tatalovic, *SciDev.Net*

*Fostering the role of knowledge-workers from within scientific institutes*

Paolo Tozzi, *INAF – Astronomical Observatory of Trieste*

*Communicating astronomy: Campaigns built around solar eclipses*

Brinder Kumar Tyagi, *Vigyan Prasar, Govt. of India*

*Attracting people's attention by 'blending science': Case studies of Science in Home Life*

Marika Uchida, *University of Tokyo*

*Evaluating the Engagement of the Public in Nature Conservation in a Zoo Setting*

Monae Verbeke, *University of Warwick*



## Friday, 20<sup>th</sup> April

*Evaluating Swedish newspapers' communication on the scientific background to antibiotic resistance*

Gustav Bohlin, Linköping University

*CommHERE - for communication of health research on the European arena*

Ulla Bredberg, Karolinska Institutet

*The tricky business of communicating a science organisation's impact. A case study from the Council of Scientific and Industrial Research, South Africa*

Alida Britz, CSIR, South Africa

*How a science community is using Facebook: The case of ITQB in Portugal*

Rita Caré, CIB and Universidade Nova de Lisboa

*Sharing Biotechnology News: Is Facebook helping us get more biotechnology readers?*

Rita Caré, CIB and Universidade Nova de Lisboa

*Science in Public Research Network*

Angela Cassidy, Imperial College London

*Public Communication and Participation in Biotechnology Issues: Experiences and Lessons Learned from GMO issues in Taiwan*

Chia-Hsin Chen, National Cheng Kung University

*Factors that facilitate communication with stakeholders and the local community in a marine conservation context: The case of Corvo Island, Azores*

Rita Costa Abecasis, University of Western Australia

*Active Science – Public Engagement with Science at School via Web*

Andrea De Bortoli, Centro Interuniversitario Agorà Scienza

*Darwin Trails in Brazil: An innovative activity in science communication*

Ildeu de Castro Moreira, Federal University of Rio de Janeiro

*Information and knowledge to promote Indian Ocean Biodiversity*

Sophie Della Mussia, CIRAD, France

*Effectiveness of Community Media in creating Health Awareness: A Case Study of Health Communication Campaign of Tuberculosis through Community Radio in India*

Ankuran Dutta, K K Handiqui State Open University

*Public communication of science in Peru*

Nemesio Espinoza Herrera, Universidad Nacional Mayor de San Marcos

*Inquiry-based science in kindergarten*

Karin Garber, Vienna Open Lab

*Opinions of Brazilian Young Students about Science & Technology, Environmental Issues and Evolution: Results of a nation-wide study*

Ana Maria Santos Gouw, University of São Paulo

*Research on the present state of communication and popularization of science within the enterprise*

Li He, CRISP, China

*Design and Evaluation of Intensive Workshop for Making Short-time Science Show Programs*

Gensei Ishimura, Hokkaido University

*Accidents and high-tech: Exploring the impacts of China's high-speed train crash on people's attitude on high technologies in social media*

Hepeng Jia, China Science Media Centre

*Success and failure in voluntary science communication by individual scientists after Fukushima Nuclear Incident in Japan*

Ikuko Kase, University of Tokyo

*Scientific Collaboration with Canadian Aboriginal Communities: Epistemic Lessons in Communication and Responsibility*

Eric Kennedy, University of Waterloo

*Bringing Natural History to Life; assessing the impact of three methods of learning about the natural world*

Grace Kimble, Leiden University / IAU, Leiden Observatory



*Brief and social responsibility – case study on the Hungarian interpretation of a “sensitive” scientific news*

Andrea Kiraly, Eötvös University

*Who is communicating carbon capture, transport and storage (CCs) in Norway? Public Engagement in Post Carbon Strategies*

Alexandra Klimek, NTNU - Department of interdisciplinary studies of culture/ CenSES

*“The Virtual Telescope project: Bringing science and knowledge to disadvantaged communities”*

Gianluca Masi, The Virtual Telescope Project

*Mad scientists? L’ideatorio: A space for new imaginaries*

Fabio Meliciani, University of Lugano

*“Misunderstood Misunderstanding”, Again. – Mother’s movement against radiation contamination emerged after Fukushima Nuclear Incident in Japan*

Nozoni Mizushima, University of Tokyo

*The Italian Astronomy Olympiad Project. Status and perspectives*

Stefano Sandrelli, INAF – Astronomical Observatory of Brera

*Towards the understanding of science communication and its potential role to bring prosperity in the rural and agro-based community of Pakistan*

Saima Siddiqui, University of the Punjab

*Differences in the quantity and quality of media coverage of different scientific disciplines: The case of Croatia*

Adrijana Šuljok, Institute for Social Research in Zagreb

*Constructing Ethical Attitudes through Persuasive Writings Training: A Challenge in Undergraduate Education of Engineering Ethics*

Emiko Tayanagi, Future University Hakodate

*Anoxia neonatal: A clinical problem getting benefits from Science Communication*

Maria Inês Nogueira, University of São Paulo

*Science Communication in Romanian Media - Case Study: Magazin Weekly Paper*

Cristina Stefania Olariu, Alexandru Ioan Cuza University

*Visualisation of a qualitative and quantitative analysis of stakeholder opinions and criteria for sustainable food- and biomass production*

Sebastian Olényi, Delft University of Technology

*FameLab International – Communicating science in diverse cultural landscapes*

Claire Rocks, FameLab UK

*The public understanding of biodiversity through a puppet shadow theatre*

Ana Maria Rodrigues, CESAM, Portugal

*Towards a Map of science communication activities in Mexico: A methodological proposal*

Aleida Rueda, Science journalist, Mexico City



## VIDEOS PROJECTED DURING THE CONFERENCE

Room 106

*An international selection of short films about climate change*

from the ICCG Think Forward Film Festival, organised by the International Center for Climate Governance (ICCG)

*Danger Global Warming*

Daniele Lunghini  
2011, animation, 4'46", Italy

*Climate Dish*

Peter Wedel  
2010, experimental, 1'07", Germany

*Where the Sea Whistle Echoes*

Kaori Brand  
2009, documentary, 11'17", Japan

*Global Warming*

Flavio Mac  
2010, adv, 1'04"

*Genesis*

Ameleto Cascio  
2010, videoclip/experimental, 3'20", Italy

*Second Hand*

Isaac King  
2011, animation, 7'35", Canada

*Don't Let It All Unravel*

Sarah Cox  
2007, animation, 2'06", United Kingdom

*Planet*

The Vikings  
2010, artistic short, 25'56", Germany

*"If it works, it's obsolete": Marshall McLuhan, communication and technology*

Alberto Brodesco

*Revolutionary Mind*

Sabrina Morena and Nicole Leghissa

*"The desire to have a baby": science communication and ethics on MAR*

Monica Carvalho

*Is it science or is it culture? Evaluating science communication films produced by Malawian and Australian Aboriginal students*

Mzamose Gondwe

*African Science Heroes*

Mzamose Gondwe

*Mayon – The Volcano Princess*

Susan Eriksson



## SOCIAL PROGRAMME

### OPENING CEREMONY (in collaboration with INAF - National Institute for Astrophysics)

**Wednesday, April 18<sup>th</sup> – 17:00**

*Palazzo Vecchio – Piazza della Signoria*

The Opening Ceremony will take place in the magnificent **Salone dei Cinquecento**, the biggest hall in Palazzo Vecchio behind which walls is said to be hiding Leonardo Da Vinci's legendary painting "La Battaglia di Anghiari".

On the walls large and expansive frescoes that depict battles and military victories by Florence over Pisa and Siena. The ceiling consists of 39 panels also constructed and painted by Vasari. In the central niche at the south of the Hall is Michelangelo's famous marble group, the *Genius of Victory*; other stunning marbles are set along the walls.

This central meeting chamber, built in 1494, is not only a prestigious home for great masterpieces, but also a place where architecture, sculpture, painting and the so-called "minor" arts come together to form a rich and unique complex of living history and art.

### RECEPTION

**Thursday, April 19<sup>th</sup> – 20:00**

*Palazzo Borghese – Via Ghibellina 110*

Located in the old, prideful heart of Florence, beneath the shadows of the tower of Bargello Museum, **Palazzo Borghese**, with its mirror rooms, frescoes, and marble floor, speaks of a glorious golden age that is far from being forgotten. Amidst a pleasant, laid-back atmosphere, all par-

ticipants will have the chance to relax while tasting a delicious array of Florentine food (such as different types of cold meats, fresh and seasoned cheeses, pasta) watered by the finest selection of worldwide famous **Chianti Wines**. The area will have several buffet corners, each one set up with different specialties.

**IMPORTANT:** Reception is reserved to those who booked it upon registering to the Conference. When collecting your badge make sure you also are given the ticket that will give access to the Reception.

### VISIT OF MUSEO GALILEO

**Saturday, April 21<sup>st</sup> and Sunday, April 22<sup>nd</sup>**

*Museo Galileo, Piazza dei Giudici 1*

*Opening hours: 9:30-18:00*

**Museo Galileo** contains the original instruments designed and built by Galileo Galilei among which the most important ones are two original telescopes and the objective lens of the telescope with which Galileo discovered Jupiter's moons. More generally, the Museum is the repository for the priceless scientific collections of the two dynasties that once ruled Florence: the Medici and the House of Lorraine.

The Museum's subtitle preserves its earlier name of 'Institute and Museum for the History of Science', but the new designation 'Museo Galileo' adopted in 2010 emphasizes the central role of the Galilean heritage in the Florentine institution's activities and cultural profile. The Museum is not only a showcase for an invaluable legacy of instruments and experimental apparatuses, it operates as an institute engaged in research and documentation, offering the resources of its specialized library, which are also available online to scholars from around the world.



**On April 21<sup>st</sup> and 22<sup>nd</sup>, by showing your conference badge at the ticket office, you will be granted reduced entrance (€ 5,50) to Museo Galileo.**

**VISIT TO THE  
ARCETRI ASTROPHYSICAL OBSERVATORY  
AND VILLA “IL GIOIELLO”**

**Saturday, April 21<sup>st</sup> and Sunday, April 22<sup>nd</sup> 2012**

*Meeting point: Palazzo degli Affari – Piazza Adua  
– 9: 45. Only if booked in advance.*

**The Astrophysical Observatory**

The Arcetri Astrophysical Observatory is a public center for astronomical research and part of the National Institute for Astrophysics (INAF). The Observatory was founded in 1872. At present, the Observatory is involved in a variety of research activities, from the observation of the most distant galaxies and supernovae, to the birth of new stellar systems and protoplanetary disks; from the enigmatic cosmic rays to high resolution studies of our star, the Sun. The Observatory is also deeply involved in challenging technological projects, mainly in adaptive optics and infrared and radio instrumentation for the last generation telescopes.

**Villa “Il Gioiello”**

This stunning 14<sup>th</sup> century Villa is famous for being one of the residences of Galileo Galilei, in which he lived from 1631 until his death in 1642. It eventually became Galileo’s golden cage, when, after his abjuration, he was put there under house arrest.

**Programme of the visits**

Each visit is 1 hour long and will take place even in case of bad weather. They will include:

- Visit of the Villa Il Gioiello;
- Tour of the Observatory Park that hosts a scale model of the Solar System;

- Historical instruments: Amici and Tempel telescopes;
- Visualization of cosmic rays and natural radioactivity with the cloud chamber;
- Modern adaptive optics: deformable mirrors and pyramid wave front sensors.



## PRACTICAL INFORMATION

### WELCOME TO FLORENCE!

Florence, birthplace of the Renaissance, is a fascinating city.

Surrounded by Tuscan hills and bridging the Arno River, it is one of the world's most beautiful urban sites. It contains more great artworks per square metre than any other city in the world. It is small and you can walk across the city's historic centre in 20 minutes. In addition to historic sites and world-renowned museums, Florence will charm you with its picturesque parks, fruit and vegetable markets, street fairs, artisan shops, cafés, and trattorie... all within walking distance!

Florence awaits you.



### GENERAL INFORMATION

#### 52 Conference Venue

*Congress Center, Palazzo dei Congressi  
Piazza Adua 1 - 50123 Florence  
p. +39 055 49721*

The exhibition and congress facilities in Florence are among the most important and best equipped in Italy and are capable of holding a number of events at the same time.

Just a few steps from the Central Railway Station of Santa Maria Novella and 4 km from the motorway exit (A1 Firenze Nord) and the International Airport "Amerigo Vespucci".

Two large parking areas (for 600 + 300 cars) are available nearby, while others can be reached by bus.

The Palazzo dei Congressi (Congress Center) is hosted in a 19<sup>th</sup> century villa, Villa Vittoria. The villa was built by the Strozzi Ridolfi family and it is located a few steps away from the historical center of the city. The building is surrounded by a park and it has a large auditorium with a seating capacity of 1,000.

### Organizing Secretariat



Piazza Adua 1/d  
50123 Firenze - Italy  
Tel. +39 055 2608941  
www.enic.it

### Secretariat/Registration

18 April 2012 / h. 15.30 – 19.30 – Palazzo Vecchio  
19 April 2012 / h. 8:00- 19:00 – Palazzo dei Congressi  
20 April 2012 / h. 8:00 – 19.00 – Palazzo dei Congressi

### Language

English is the official conference language.

### Smoking policy

The whole conference area is a no smoking area. We remind you that smoking in Italy is forbidden in all public areas.

### Phone calls

For international calls to Italy, dial the international code +39 followed by the area code number (including 0) and the telephone number (ie. to call Florence: +39 055 123456).

### Currency

The unit of currency is Euro.  
Currency can be changed at banks and ATMs. Normal bank opening times are Monday to Friday, 8.30 to 13.30 and 14.30 to 15.30. Credit cards are widely accepted.

### Electricity

Electricity used in Italy is 220 Volts, its frequency is 50 Hz and the plugs have two male contact points. Plan to bring a transformer if your electrical device has a different voltage.

### Emergency

Dial 118 – Toll-free (only from within Italy).  
Tourist medical service (mon-sat 11am-12am, 5pm-6pm) Phone: 055 475411

## Taxis

In Italy you cannot catch a taxi raising your hand like in USA or UK. Taxis must be called by phone or taken at their parking areas. Please find below the main taxi companies' phone numbers:

055-4390 | 055-4499 | 055-4798 | 055-4242

For information please visit:

[www.socota.it](http://www.socota.it)

For any other Tourist information, please visit the Florence official tourism website, [www.firenzeturismo.it](http://www.firenzeturismo.it)

## Badges

A name badge will be provided on site together with your conference kit. Badges must be visible and used at all times anywhere within the conference venue.

**Important: If you booked it upon registering to the Conference, make sure that when you collect your badge you also are given the ticket that will give access to the Reception.**

## Disclaimer

Organizers claim no liability for the act of any supplier to this meeting nor liability for personal injury, the safety of any attendee while in transit to or from this event, for any loss or damage, for delays in transport by air, sea, rail, road, weather, strikes, sickness, war or other causes.

## Slide Center

The Slide Center is a room equipped with 5 PCs, located on the lower floor behind the Auditorium, where every speaker can stop by, upload and quickly review (suggested time: 3 minutes) his/her Power Point presentation under the assistance of a technician.

The Slide Center allows to gather all the PCST speakers' presentation, thus seamlessly integrating one session after another, sparing the hassle caused by the speakers trying to load simultaneously their presentation at the start of each session.

**We strongly suggest you to double-check your presentation time and date and show up at the Slide Center ahead of time**, thus avoiding queues. Please note that *if your session is scheduled on Friday, April 20<sup>th</sup> early in the morning, you will have to upload your presentation on Thursday afternoon by 16:30 pm.*

The Slide Center is open Thursday from 8:30 to 16:30 and Friday from 7:30 to 15:30. **The only format accepted is Windows formatted Power Point presentation.**



## ABOUT PCST

Public communication of science and technology is critical in a world thoroughly interwoven with science and technology. The International Network on Public Communication of Science and Technology (PCST) is a network of individuals from around the world who are active in producing and studying PCST.

The **PCST Network** includes:

- Science journalists;
- Science museum and science center staff;
- Science theatre directors;
- Academic researchers who study aspects of PCST;
- Scientists who deal with the public;
- Public information officers for scientific institutions;
- Many others interested in these issues.



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The PCST Network sponsors international conferences, electronic discussions, and other activities to foster dialogue among the different groups of people interested in PCST, leading to cross-fertilization across professional, cultural, international, and disciplinary boundaries.

The PCST Network seeks to promote new ideas, methods, intellectual and practical questions, and perspectives.

### PCST aims

- To foster public communication of science and technology (PCST);
- To encourage discussion of practices, methods, ethical issues, policies, conceptual frameworks, economic and social concerns, and other issues related to PCST;
- To link practitioners of PCST, researchers who study PCST, and scientific communities concerned with PCST;
- To link those from different cultures and countries worldwide, in both developed and developing parts of the world, concerned with PCST;
- To provide opportunities for meetings, electronic interactions.

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# MAP



- 1 - PALAZZO DEI CONGRESSI - *LOWER FLOOR* - Auditorium, Slide Center, Catering - Poster - Exhibition Area, Blu
- 2 - PALAZZO DEI CONGRESSI - *GROUND FLOOR* - Secretariat, Onice, 4, 5, 6, 9
- 3 - PALAZZO DEI CONGRESSI - *FIRST FLOOR* - 101, 102, 103, 104, 105, 106
- 4 - PALAZZO DEI CONGRESSI - *SECOND FLOOR* - 202, 203
- 5 - LIMONAIA

