



**INTERNATIONAL
SYMPOSIUM ON
CLIMATE CHANGE
AND MUSEUMS:
CRITICAL APPROACHES
TO ENGAGEMENT
AND MANAGEMENT**

Manchester, UK, 11th -13th April 2018

If you are interested in attending, please register at <https://www.kxregistration.mmu.ac.uk/WSCCM18>

A TASTE OF OUR PROGRAMME!

We are still finalizing the final programme, but our speakers will be as follows:

Welcoming remarks and Introduction

Henry McGhie, Manchester Museum, and Walter Leal, MMU

Action for Climate Empowerment

Adriana Valenzuela, Focal Point for Education, Training and Public Awareness, United Nations Framework Convention on Climate Change, Bonn, Germany

Remarks on Museums and Climate Change

Robert R. Janes, Founder and Co-chair, Coalition of Museums for Climate Justice (pre-recorded interview)

Creating a museum dedicated to climate change

Miranda Massie, Director, The Climate Museum, New York, USA

The Climate Museum is a New York City initiative to create a museum dedicated to building popular civic engagement with climate change. We strongly share the view of the Conference on Climate Change and Museums that museums, through interdisciplinary exhibitions and other programming, can play a critical role in the culture shift we so badly need on climate-- what Robert J. Lifton would call the "climate swerve." Museums are popular and trusted, with proven educational and prosocial outcomes. They make learning palpable and social. They express our shared priorities. In short, museums are major civic institutions with a transformative power that has yet to be mobilized sufficiently on climate. The Climate Museum believes that this potential can best be realized through content distributed across the established institutions represented at the Conference combined with the establishment of new dedicated hubs like the one we are working to create in New York. Finally, we believe that, as in policy efforts to address the climate crisis, far-reaching, intensive, and multi-directional collaborations will be required for us to fulfill the promise of generative museum work on climate change. We are greatly looking forward to it. We propose to present our theory of change and a summary of our organizational history, in order to build toward a discussion of collaborations we might consider together, and how every museum can be a climate museum and – given where we are in human and Earth history – how every museum should be a climate museum.

***Biography:** Miranda Massie is founder and director of the Climate Museum. Previously, she was general counsel and legal director of New York Lawyers for the Public Interest (NYLPI), where she also served as interim executive director. Before her time at NYLPI, she was a civil rights impact litigator, in which role she won Fletcher Foundation and W.E.B. Dubois Institute fellowships. Miranda was also Wasserstein Public Interest Fellow at Harvard Law School and a mentor-in-residence at Yale Law School.*

Nature-focused museums in the Anthropocene: engaging communities in the dynamics of the natural world

Emlyn Koster, PhD, North Carolina Museum of Natural Sciences, USA

The rising popularity of the Anthropocene as a scholarly and public frame of reference for the intensifying role of humanity as a geological force presents new and urgent opportunities for museums to engage their communities in the changing dynamics of the natural world. While climate change predominates the news, arguably a better approach for the long and wide responsibility of nature and science museums is a multifaceted one which view atmospheric changes in a whole-Earth context inseparable from the changes underway in the hydrosphere, biosphere (including the 'humanosphere' and 'technosphere'), pedosphere, cryosphere, and lithosphere. Ideally also, each provides citizen science opportunities. For museums to be vital resources in the Anthropocene requires an externally-mindful mission; a holistic past-present-future timeframe; seamless coverage of natural and anthropogenic forces; a diversified toolkit of experiences offering dialogue as much as exhibition; leverage of teachable moments in the news; and reference to global platforms such as the UN Sustainable Development Goals. Recent physical, cultural, content, audience, and outreach developments at the North Carolina Museum of Natural Sciences provide an instructive example. With a mission 'to illuminate the natural world and inspire its conservation', this institution's onsite, offsite, outdoor and online experiences ask 'what do we know?', 'how do we know?', 'what is happening now?', and 'how can the public participate?'.

***Biography:** Dr Emlyn Koster is a geologist and museologist with scores of presentations and publications in each sector. A past president of the Geological Association of Canada, his career began with university faculty and research agency positions and moved to CEO appointments of major nature and science museums, since 2013 at the North Carolina Museum of Natural Sciences. An adjunct professor of Marine, Earth and Atmospheric Sciences at North Carolina State University, he is also the founding chair of the Working Group on the Anthropocene for the Committee on Museums and Collections of Natural History of the International Council of Museums.*

Museums and Science Centres as Provocateurs and Change Agents in Climate Change Action

Prof. Fiona Cameron, Senior Research Fellow, Institute of Culture and Society, University of Western Sydney, NSW, Australia

In this presentation I discuss key findings from the Australian Research Council funded international project, "Hot Science Global Citizens: The Agency of the Museum Sector in Climate Change Interventions" (2008-2012) <http://ics.westernsydney.edu.au/hotscience/>. The project looked to the museum sector - natural history, science museums and science centres - to play a role as resource, catalyst and change agent in climate change debates and decision-making locally and globally. We used an interdisciplinary approach to develop new knowledge about what constitutes effective action around climate change, and how it can be represented and debated in local and global public spheres. Here I focus on the research findings relating to the current and potential roles and agencies of natural history, science museums and science centres in climate change action within Australian and US contexts. Through the analysis, eight strategic positions and role changes emerge for the different forms of the museum with a greater emphasis on collective action, networking and building

more critical information on climate change as a complex issue and governing subject alongside activism in community and political contexts.

Biography: *Professor Fiona Cameron is currently based at Linköping University, Norrköping, Sweden. Fiona is a Senior Research Fellow at the Institute for Culture and Society, Western Sydney University, Australia. Her research and writing focuses on the idea of the museum and interrelationships between institutions and contemporary societies in an increasingly complex and globalising world. Fiona works across two broad fields. The first examines the agency of the museum sector in public culture in the representation of 'hot' topics of societal significance, most importantly climate change. The second area of research interest is digital heritage. Cameron was also a museum practitioner and has worked in the sector as a museum director, a social history curator and as a curatorial consultant on major exhibition projects in New Zealand, Australia, Singapore and Vanuatu for more than 15 years. In March 2011 Fiona led an Australian federal parliamentary briefing A Climate for Change on the findings of Hot Science, Global Citizens to parliamentarians, government department employees, academics and the museum sector. The research has been used in policy development.*

Communicating Climate Change and the Anthropocene: A Special Opportunity for Natural History Museums

Eric Dorfman, PhD, Director, Carnegie Museum of Natural History, Pittsburgh, USA

Climate issues represent a challenge for museums, especially in the United States where the subject has become highly politicized. Compounding this is the ease with which popular and social media continue to present misinformation. Unfortunately, climate change and its solutions don't resonate with people sufficiently for many to understand or care. The scale, in many cases, seems too large to comprehend. And yet, some aspects of the world's environmental issues can be understood in a very personal way. Global temperature zones shift by over a meter a day, covering the average size of a backyard in weeks. Almost a billion birds die by crashing into windows every year in North America alone. Rubbish thrown into a street in Tokyo or San Francisco can eventually contribute to the Great Pacific Garbage Patch, which may now be the size of Turkey. Climate change, ubiquitous pollution, global mass extinction and human overpopulation are fundamental issues of our time. For natural history museums, which enjoy a high level of credibility in the public eye, describing the importance (and the reality) of anthropogenic climate change is both mission-driven and critical for the long-term benefit of society. Our ability to make arcane information accessible on a visceral level presents us with both an opportunity and a responsibility. At Carnegie Museum of Natural History (CMNH), we are tackling these communication challenges by focusing on the Anthropocene, a term for the concept that humans have had such a profound impact on the Earth that its impact will be present in the geological record millions of years from now. This issue is useful in helping us deal with climate change, and move above it to an even more holistic approach. Developing expertise in the Anthropocene is an important opportunity for CMNH. As an institution committed to presenting evidence of natural phenomena through time, CMNH has embraced the Anthropocene as one of its major themes going forward, using the concept as the basis for stream of multidisciplinary research and the subject for a major topic for visitor engagement through exhibitions and programming. In this talk, I present these initiatives as a way of communicating important environmental issues to our communities.

Biography: *Dr Eric Dorfman is Director of Pittsburgh's Carnegie Museum of Natural History and President of the International Council of Museums Committee for Museums and Collections of Natural History (ICOM NATHIST). He completed a master's degree through San Jose State University studying the behavioural ecology of porpoises in Monterey Bay, California and a doctorate at The University of Sydney on scale-dependent habitat use of waterbirds in eastern and central Australia. Eric is active in the natural history museum sector internationally, co-authoring the ICOM Code of Ethics for Natural History Museums, as well as chairing the ICOM NATHIST Wildlife Trafficking Working Group. He is an author of several popular books on New Zealand natural history and climate change, as well as papers on museum business models, public programming, Egyptology and the ecology of wetland birds. His most recent authorship is as editor of 'The Future of Natural History Museums' (Routledge 2017). He is a board member of Visit Pittsburgh and an adjunct professor at University of Pittsburgh and on the editor board of Museum Worlds: Advances in Research. Prior to his current position, he was Director of Whanganui Regional Museum in New Zealand and lectured in the Museums and Heritage Studies Department of Victoria University of Wellington.*

Creative Collaborations: Communities, Collections and Environmental Change

Dr Jenny Newell, Manager, Pacific and International Collections, Australian Museum, Sydney, Australia

Many museum workers know at first hand the potency of having communities and collections come together. Typically transformative experiences for all involved, these meetings are generative of new knowledge and powerful, deeply-felt connections. When community members find that these encounters spark reflections on changing environments – whether around things that can no longer be made, or knowledge that no longer applies – the insights generated can be usefully taken out and shared in public spaces. These perspectives can help audiences in the Global North to understand the challenges of global climate change for their own communities as well as for those in the Global South. Museums have been moving in recent years from scientific explanations of climate change to more interactive, culturally-engaged modes of approaching the issues. Considering human and cultural dimensions, museums have been gradually exploring more imaginative ways to captivate audiences and communicate views from those on the “front line”. Using several case studies drawn from collaborations between museums and Pacific Island communities, this paper explores the fostering of climate-engaged citizens that can emerge from creative connections between communities and collections.

Biography: *Dr. Jenny Newell is a curator who works in the environmental humanities, focusing on climate change in the Pacific and Australia. Jenny is a manager of collections at the Australian Museum and has worked with Pacific communities, histories, and collections in London (British Museum), New York (American Museum of Natural History) and Australia (National Museum of Australia and AM). Her books are Trading Nature: Tahitians, Europeans and Ecological Exchange; Pacific Art in Detail; and the co-edited volume Curating the Future: Museums, Communities and Climate Change. Current projects include a community arts program “Oceania Rising: Climate Change in our Region”, and ongoing collaborations in the Marshall Islands and Fiji. She convenes the Museums and Climate Change Network (www.mccnetwork.org).*

‘Melting the Poles’: How Museums can Reach New Audiences and Overcome Polarisation through Narratives of Shared Values

George Marshall, Climate Outreach, UK

In many countries, especially the English-speaking world, few other issues are as politically and socially polarised as climate change. There is an urgent need to bridge these divides and find new ways of speaking about climate change, and the science behind it, that builds shared consensus and co-operation. Museums are trusted intermediaries with exceptional reach across schools, communities, and reach into the more sceptical, conservative audiences. Yet museums also struggle to reach new demographics and this experience can inform climate communication. In turn, talking about climate change could be a means for them to expand their curatorial choices and to reach out to new audiences. Drawing on 10 years of evidence-based research, and practical examples, George Marshall will outline key recommendations in speaking more effectively about climate change.

***Biography:** George Marshall is one of Europe's leading experts in climate change communication, and is the founder of Climate Outreach, a non-profit that advises British and European governments, the IPCC, UNFCCC, World Bank and most major international environmental organisations. George has led Climate Outreach's pioneering programme to identify and test new narratives around climate change for people of centre-right values to help overcome the political polarisation that undermines social acceptance and policy action. George is also driving the Global Narratives programme, developed to train community-level organisations to conduct rigorous qualitative research themselves with their own audiences, based on Climate Outreach's Narrative Workshop methodology. He is the author of an acclaimed book on the psychology of climate change: *Don't Even Think About It: Why our Brains are Wired to Ignore Climate Change*, which included detailed analyses of the representation of climate change in the London Science Museum and the Smithsonian Institution.*

Localising the Anthropocene: Re-shaping museum practice to engage and connect Australian communities responding to environmental change

Dr Kirsten Wehner, Sydney Environment Institute, University of Sydney, Australia

Localising the Anthropocene: Everyday Futures in the Australian Age of Humans is a multi-year collaboration between researchers and curators at the Sydney Environment Institute, the University of NSW, the Australian National University, the National Museum of Australia and the Australian Museum. The project explores how people across Australia and the region are experiencing and responding to climate and related Anthropocenic cultural-ecological changes in their places. It aims to create a series of representational and social spaces, including a digital platform, story-telling workshops and co-generated museum exhibition events, that enable communities to tell, share and connect across the moral, social and environmental challenges of the era. Reflecting museum investment and expertise in the poetics of material culture and materiality, and particularly the capacity of artefacts to embody people's inter-relationships with their physical and social environments, *Everyday Futures* centres on a methodology of 'object-stories'. Participants select an object – three-dimensional artifact, image, text, sound or landscape – and reflect through text, spoken word or video on how that object signals and expresses their own experience of and response to how their places are changing. As the project progresses, object-stories are collected and shared with an accumulating network of participants, each contributing to the co-creation of the website and travelling 'story-exchange' exhibition. This talk introduces and reflects on *Everyday Futures*' character, challenges and achievements to date, focusing particularly on

how the project has endeavoured to develop museum traditions that enable collective public engagement with complex contemporary issues. Moving away from a focus on communicating the science of climate change, *Everyday Futures* aims to generate public capacity to engage climate change and related environmental transformations as cultural, conceptual and creative problems that must be addressed not only in terms of individual behavioural patterns and policy and regulatory schemes, but also, and perhaps more importantly, through the fostering of new collective cultural and social practices and identities.

Biography: *Dr. Kirsten Wehner is a curator, designer and visual anthropologist whose practice explores how spaces and experiences can foster cross-cultural understanding, creative experimentation and care for the more-than-human world. From 2011-16, Kirsten was Head Curator, People and the Environment, at the National Museum of Australia (www.nma.gov.au/pate), and from 2004-11, Senior Curator and then Content Director for the Museum's gallery development program. Her curatorial work encompasses more than thirty exhibitions, digital platforms and interpretive programs exploring diverse aspects of Australian environmental history. Kirsten holds a PhD in visual and cultural anthropology from New York University and in 2018 will complete an MA in Narrative Environments at Central Saint Martins, University of the Arts, London. Her publications include the co-edited/authored volumes *Curating the Future: Museums, Communities and Climate Change* (2017, Routledge) and *Landmarks: A History of Australia in 33 Places* (2013, NMA Press). Kirsten is a member of the Australia-Pacific Observatory of Humanities for the Environment (www.hfe-observatories.org) at the Sydney Environment Institute and was a 2015–16 Fellow at the Rachel Carson Center for Environment and Society, Ludwig-Maximilians Universität, Munich, Germany.*

Participatory workshop: Collaborating on Creating Climate Engagement: Designing a 'Localisable' Climate Exhibition for Anywhere

Jenny Newell, Fiona Cameron, Morien Rees, Kirsten Wehner, Henry McGhie, Miranda Massie

Join a small group of curators and designers from museums around the world to take the first, substantial step in developing a shared, downloadable template for a pop-up 'Climate Exhibition for Anywhere'. Jumping off from the open-source hardware movement, this workshop is directed at creating a template for an accessible, small-scale exhibition aimed at fostering constructive engagement in climate action. The resulting exhibition would be tailored for specific audiences, and would share powerful stories and imagery that are both local and global.

Other presentations (The final list of speakers is still subject to change)

1. UK museums' environmental practice – progress, challenges and opportunities, Claire Buckley, Julie's Bicycle, UK

2. The role of museum archaeology in the communication of climate change, Jess Collins, University of Exeter, UK

- 3. Climate hack: rapid prototyping new displays in multi-disciplinary museums,** Charlotte Connolly, University of Cambridge, UK
- 4. What is a 'fossil free culture' and how do we make the transition?,** Clémence Dubois (350.org, France), Ragnhild Freng Dale (University of Cambridge, UK), Dr. Chris Barnard (Culture Unstained, UK), Teresa Borasino (Fossil Free Culture, Netherlands)
- 5. Environmental entrepreneurship: adapting our museums for a greener future,** Elliot Goodger, Museums' Association Representative, West Midlands, UK
- 6. Collaboration: the first line of defence – sharing Historic Environment Scotland's approach to assessing climate change risk and its impact on collections,** David Harkin, Lynsey Haworth and Sarah Connolly, Historic Environment Scotland, UK
- 7. Optimizing energy efficiency of museums with a new laboratory for testing unpowered museum display cabinets,** James Crawford, Sustainable Microclimates, Birmingham, UK
- 8. Communicating Climate Change: Reactions to Adapt and Survive exhibition and visitors' thoughts about climate change in the Pacific islands region,** Sarah Hemstock (Geosciences, Energy, and Maritime Division (GEM), The Pacific Community (SPC)) and Stuart Capstick (Cardiff University)
- 9. A mobile-guided smart-safari on an extracurricular location,** Prof. Dr. rer. nat. Sascha Henninger and Dipl.-Geogr. Tanja Kaiser, University of Kaiserslautern, Germany
- 10. Navigating agency in the Diaspora due to forced migration secondary to Sea Level Rise,** Dr. Lesley Iaukea, University of Hawaii Manoa, Hawaii
- 11. Active Stewardship - re-imagining museums as places of change towards a sustainable future,** Hilary Jennings, Director, Happy Museum Project, UK
- 12. Participation of science museums in enabling climate action,** Xiaofang Jin, Low Carbon Science and Technology Museum of Hangzhou China
- 13. The role of science drama for public participation in climate change mitigation and adaptation,** Han Jun, Low Carbon Science and Technology Museum of Hangzhou China
- 14. Best-bet climate change adaptation strategies for coastal areas in Sub Sahara Africa,** Prof. James Kungu, Kenyatta University, Kenya
- 15. Analysis of the organization to low carbon education activity in science and technology museums based on the activity of "Low Carbon Changes the Environment",** Niu Lulu, Hangzhou Low Carbon Science and Technology Museum, China
- 16. "We have no Planet B": using cultural engagement to inform climate change policy at a local level,** Sarah Mander, Tyndall Centre, Manchester, UK

- 17. Climate Change: a different narrative**, Henry McGhie, Manchester Museum, University of Manchester, UK
- 18. The Possible Museum: Future Scenarios**, Bridget McKenzie, Director, Flow Associates, UK
- 19. (Climate) data is just stories without a soul**, Asher Minns, Tyndall Centre, Norwich, UK
- 20. Development of Life Cycle Assessment Tool for Custodians of Cultural Heritage: Challenges and Goals**, Sarah Nunberg (Objects Conservation Studio, UK) and Sarah Sutton (Sustainable Museums, USA)
- 21. At Adaptation End: Working Across the Cultural Heritage Spectrum to Address Community-Scale Loss and Damage**, Andrew Potts, International Council on Monuments and Sites, US
- 22. Co-operation between Science Museums and NGOs towards Climate Change Actions**, Jingjing Qian, Low Carbon Science and Technology Museum of Hangzhou China
- 23. Heidegger's jug, museum collections and sustainability**, Morien Rees, Varanger Museum, Norway
- 24. Against dryness: the work of Museum of Water**, Amy Sharrocks, Museum of Water
- 25. Creating Change in the Field: Standards, Practice Guides, & Hashtags**, Sarah Sutton, Sustainable Museums, USA
- 26. Climate change and sea level rise: collecting the impact on Scottish saline lagoons**, Fiona Ware and Sankurie Pye, National Museums Scotland, UK
- 27. Natural history collections and historical body size changes: how collections can help unravel the impacts of biotic response to climate change**, Rebecca Wilson-Brodie (University of Southampton/NHM, UK), Stephen Brooks (Natural History Museum, UK), Philip Fenberg (University of Southampton/NHM, UK)
- 28. Building Community Climate Change Resilience**, Sylvester Woga, Legend Impact Communication, Nairobi, Kenya
- 29. Enduring Connections – Museums, Objects and Climate Change in Kiribati**, Anna Woodham (attending presenter) (King's College London), Sara Penrhyn Jones (Bath Spa University), Bryony Onciul (University of Exeter)