



Collecting the Future:

Museums, Communities and Climate Change

2-4 October 2013

 AMERICAN MUSEUM OF NATURAL HISTORY

Program

**Linder Theater, 1st floor
American Museum of Natural History
77th Street entrance
between Central Park West and Columbus Ave
New York, NY 10024-5192**

Collecting the Future:

Museums, Communities and Climate Change

Welcome

Welcome to *Collecting the Future: Museums, Communities and Climate Change*, and to the American Museum of Natural History in New York.

Collecting the Future brings together curators, educators, historians, anthropologists and other scholars and practitioners from around the world to explore how museums can move beyond a singular focus on science education to address and integrate the physical, social, cultural and emotional dimensions of climate change. We hope it will provide a stimulating forum in which to explore how our institutions can contribute to building communities able to engage and respond to profound transformations of social-ecological systems around the globe.

How can museums use their collections, interpretations and traditions of encouraging debate to help people re-imagine and re-shape their lives in a world profoundly altered by climate change?

This workshop is designed to be interactive, oriented to conversation, imagination and discussion rather than formal presentations, and we encourage you to jump in with questions, comments and ideas. Much of the program is organised as panels, which will each begin with short provocations from each of the participants, with lots of time for questions, answers and discussions. Interludes are designed to explore ways of thinking about the objects that sit at the heart of most museums. And we have a couple of keynote lectures presenting more elaborated and resolved considerations of our key questions. By Friday, we hope that some shared ideas about future projects and new directions will be emerging.

Above all, we hope that you enjoy the three days and if you have any questions, suggestions or problems, please feel welcome to contact one of us.

Jenny Newell 347 583 7732
Libby Robin libby.robin@anu.edu.au
Kirsten Wehner +61418 822 513
Jacklyn Lacey jlacey@amnh.org



Jenny Newell

American Museum of Natural History, New York, NY, USA
jnewell@amnh.org

Dr Jenny Newell is curator of Pacific Ethnography at the American Museum of Natural History, New York, USA. She has previously worked as a curator at the British Museum and then as a research fellow at the National Museum of Australia, Canberra. Her major research projects explore the cultural impacts of climate change in the Pacific; a current focus is a collaboration with the Museum of Samoa on changing ideas about climate, houses and homes. Jenny has a PhD in Pacific History from the Australian National University and has published on Tahitian environmental history – *Trading Nature: Tahitians, Europeans and Ecological Exchange* - and on themes in Pacific material culture in *Pacific Art in Detail*. She works with Pacific diaspora communities as well as with individual curators, artists and scholars in the islands.



Libby Robin

Australian National University / National Museum of Australia, Canberra, Australia
libby.robin@anu.edu.au

Professor Libby Robin is an environmental historian and professor at the Australian National University. She is also a senior research fellow at the National Museum of Australia, and guest professor at the Royal Institute of Technology, Stockholm, where she works in the creative KTH Environmental Humanities Laboratory. Libby has written extensively on local and global environmental change. *Desert Channels: The Impulse to Conserve* (2011) was a collaborative project with an artist and an ecologist, working in partnership with the community of south west Queensland. Her latest book (with Sverker Sörlin and Paul Warde) is *The Future of Nature* (Yale UP 2013).

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Kirsten Wehner

National Museum of Australia, Canberra, Australia
kirsten.wehner@nma.gov.au

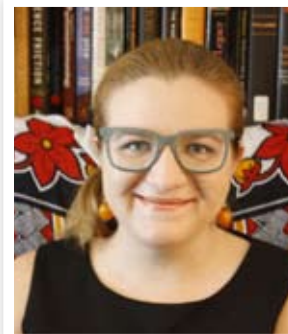
Dr Kirsten Wehner is Head Curator of the People and the Environment program at the National Museum of Australia. She is a member of the Mellon Australia-Pacific Observatory in Environmental Humanities, a professional associate of the Donald Horne Institute Centre for Research in Creative and

Cultural Practice at the University of Canberra and sits on the governing board of the Gallery of Australian Design.

An anthropologist by training, Kirsten has curated a range of collections, exhibitions and films exploring diverse aspects of Australian history and culture, with major projects including the National Museum's *Landmarks* (opened 2011) and *Journeys* (2009) galleries. She holds a PhD from New York University and is the co-author of *Landmarks: A history of Australia in 33 places* (2013) and co-editor of *National Museums: Negotiating H* (1999). Kirsten's work focuses on developing museums' capacities to build empathetic and ecological understanding, with current projects exploring place histories, inter-species relationships, re-interpretations of natural history collections and online exhibition environments.

Jacklyn Lacey

American Museum of Natural History, New York, NY, USA
jlacey@amnh.org



Jacklyn Lacey has been curatorial associate of African and Pacific Ethnology at the American Museum of Natural History since autumn 2011. In 2012 she presented at the American Ethnological Society and the American Anthropological Association. This year she is working with Jenny Newell and Lumepa Apelu on the Museum Connect project "Rethinking Home: Climate Change in New York and Samoa." She has a background in virology and medical anthropology, previously working in public health education in Tanzania, HIV/AIDS testing and research at African Services Committee in Harlem, and in Drew Cressman's NSF funded immunology lab at Sarah Lawrence College. After Hurricane Katrina, she worked in New Orleans with a multi-faith coalition to clear debris from destroyed homes in the Lower Ninth Ward and witnessed both the fragility and determination of coastal communities facing a changing climate.

Collecting the Future is convened by the National Museum of Australia and the American Museum of Natural History. The below institutions have contributed to the workshop, and it would not have been possible without their support.

This workshop has been particularly generously supported by the Andrew Mellon Australia-Pacific Observatory in Environmental Humanities, University of Sydney, and the convenors would like to thank Iain McCalman, Director of the Observatory, for his engagement and encouragement.

The Andrew W. Mellon Foundation



Collecting the Future:

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PROGRAM

Wednesday 2 October

Places

Chair: Jenny Newell

11.30 am – 12.30 pm : Registration, with light refreshments

North West Coast Hall, adjacent to the Linder Theater.

12.30 – 12.35 pm : Welcome to the Collecting the Future workshop

Jenny Newell

12.35 – 12.45 pm : Welcome to the American Museum of Natural History

Michael Novacek

Provost, American Museum of Natural History

12.45 – 1.00 pm : Workshop Frameworks

Kirsten Wehner

Climate change constitutes a profound global challenge, one to which all aspects of human (and non-human) societies will eventually be required to respond. How can museums best help people engage with this future? How should museums understand and adapt their traditions, skills and capacities to build communities able to re-imagine their lives? In this short provocation for the workshop, I ask what museums can distinctively offer to this important process of cultural-ecological change.

1.00 – 1.30 pm : Key Questions

Places and Changes: Rising seas, shrinking sea ice and heat stress

Libby Robin

Climate change is just one of many interlinked environmental changes accelerating rapidly and globally in the 21st century. The idea of the Anthropocene, the geological epoch where humanity's actions are changing the physical systems on Earth, describes the interdependence and acceleration of global change. It is being adopted by both the natural sciences and the environmental humanities to aid conversations about action and adaptation to change. Museums are also using the Anthropocene to explore questions of the history of changes, and environmental justice for the future, particularly for those communities first in line as changes sweep through, causing rising seas, melting ice and heat stress in different parts of the world.

1.30 – 2.30 pm : Panel 1 : The Pacific – Fluid places, local places and museums

Moderator: Jenny Newell

Panellists: Lumepa Apelu, Mata'afa Autagavia, Kirstie Ross, Peter Rudiak-Gould

What happens to communities and cultures when their places are threatened? This panel considers the ways environmental changes are impacting on cultural practices and social well-being in the Pacific. These cultural impacts are an area that is only beginning to receive attention in studies of the impacts of climate change in the region. We will explore the ways museums in and beyond the Pacific can potentially act as cultural resources for people who are facing changes or losses of land and all that is rooted within. How might museums, with their collections and capacities for acting as community meeting places, places of discussion, and transmission of knowledge, enable people in the line of fire from climate change events (extreme and gradual) to better manage their futures?

2.30 – 2.45 pm : Interlude 1 : Voice and Object : A turtle shell mask from the Torres Strait

Leah Lui-Chivizhe

Turtle shell dance masks from the Torres Strait were collected by Europeans from the mid-19th century and are today held in museums around the world. These objects have long been separated from the cultural life of the Torres Strait and as Islanders become more interested in and engaged with these artifacts, questions emerge about what they might now mean to, and in, their communities of origin.

2.45 - 3.00 pm AFTERNOON TEA

3.00 – 3.15 pm : Interlude 2 : Rising Seas: Facts, fictions and aquaria

Susanna Lidström and Anna Åberg

Exhibiting ocean environments poses particular practical difficulties for most museums, but rising sea levels and other drastic marine shifts arising from climate change make the ocean an essential part of any exhibit engaging the issue. In this interlude, we explore how aquaria and other museums have and might in the future interpret and showcase ocean science in their attempts to imagine a warmer world.

3.15 – 3.30 pm : Interlude 3 : Geopolitics and material heritage

Dag Avango

Pyramiden is an abandoned Soviet / Russian coal mining town on Spitsbergen, full of industrial heritage. In its latest 'remake', it is set to be transformed into a center for Arctic science and heritage tourism. The neat shift from controversial coal mining to climate research and heritage conservation reflects geopolitical struggles. Heritage, in this case, proves to be a way to maintain presence in a strategically important area.

3.30 – 4.30 pm : Panel 2 : The Arctic – When the ice breaks: Geopolitics, opportunity and museums

Moderator: Nina Wormbs

Panellists: Nina Wormbs, Miyase Christensen

In 2007 and again in 2012, satellite imagery showed the Arctic sea-ice reaching record lows. In the international news media, striking images of polar bears and crumbling ice chunks were joined to alarmist metaphors about the disastrous impact of global climate change. In the far north itself, however, responses to rapidly diminishing sea-ice have been quite different, as new trade routes and business opportunities open up and communities re-make their identities in ways that incorporate global and local stories and objects. This panel considers the 2007 minimum and stories and objects it created, exploring some disjunctions and intersections between far north and metropolitan narratives, projects and collections.

4.30 – 5.00 pm : Performance and discussion

Jeremy Pickard, Jonathan Camuzeaux, Lisa Phillips, Courtney St John

Excerpt from 'Don't Be Sad, Flying Ace' (Superhero Clubhouse), part of the 'Marfa Dialogues/ NY' program.

A duet performance exploring how people respond in the face of extreme climatic events. Perched on the roof of his small house, armed only with a typewriter and a rare imagination, a dog attempts to adapt after a hurricane that left him stranded and floating far away from home. Inspired by Charles Shultz' iconic beagle, incorporating leading climate science and featuring live music and unique physicality, Don't Be Sad, Flying Ace! is a multi-disciplinary tour-de-force arousing hope for a changing world. Followed by discussion with the performers and members of Columbia University's Earth Institute.

5.00 – 5.15 pm BREAK

5.15 – 6.30 pm : Mellon Observatories Reception

Ocean Grill. 384 Columbus Ave at 78th Street, NY 10024

The Andrew W. Mellon Australia-Pacific Observatory in Environmental Humanities hosts this special reception. This is an opportunity to meet representatives from the Australia-Pacific, American and European Observatories and the Consortium of Humanities Centres and Institutes' Humanities for the Environment Network and to explore, over a glass of wine, how museums are shifting their agendas, roles and practices to response to the global challenge of climate change.

Thursday 3 October

Collections

Chair: Libby Robin

9.00 – 9.30 am : Key Questions

Towards an ecological museology : Museums as collecting institutions

Kirsten Wehner

For many museums, collections represent the core of their *raison d'être*, with the materials, forms, frameworks, organisation and styles of interpretation of their holdings defining them as particular kinds of institutions, that is, as museums of history, art, anthropology, natural history, science and technology, folk cultures and so on. Collections constitute inheritances, legacies that both embody older structures of knowledge and that hold profound creative potential for fresh modes of understanding. As climate change reshapes the world, how can collections provoke us to thinking and acting in new ways that will help us respond to future challenges? Can museums re-visit their existing storehouses of objects, images and texts to provoke new engagements and interpretations? And in what ways should we shape future collecting to build communities capable of responding to climate change?

9.30 – 10.30 am : Panel 3 : Exhibiting Climate Change

Moderator: David Harvey

Panellists: Lauri Halderman, David Ireland, Edmond Mathez

This panel is a case study of two climate change exhibits: the exhibit that opened at the AMNH in 2008, and the exhibit that opens at the Royal Ontario Museum on Oct 18 this year.. Panellists will be considering the conceptual basis, audiences, challenges, and design solutions for these exhibits. We will also think through the ways museums have used (or not used) their existing collections to present and engage audiences with ideas this issue. How are museums exhibiting on the subject now? What opportunities for using collections have been missed and how could we be designing and collecting for future exhibits?

10.30 – 11.00 am

MORNING TEA

11.00 am – 12.00 pm : Panel 4 : Curating the Anthropocene

Moderator: Helmuth Trischler

Panellists: Helmuth Trischler, Nina Möllers and Bernd Scherer

The concept of the Anthropocene provides a new framework for researching and shaping human relationships to nature. It forces us to leave our comfort zone, insisting that we think in unfamiliar connections and across disciplinary boundaries and forcing us to ask old questions in new ways. From the perspective of the Anthropocene, seemingly typical concerns of modernity, such as 'What do we eat? How do we move around? What will our cities look like?', gain new relevance as we begin to grasp systemic relationships between natural and social spheres, the interactions between global and local phenomena and actions, and the relatedness of our present to the deep past and future. Museum exhibitions can help us develop the necessary skills for living in the Anthropocene. In this panel, we explore how a number of current and recent projects reveal possibilities for creating spaces for public conversations about the concept of the Anthropocene in the Deutsches Museum, Munich and in the Haus der Kulturen der Welt, Berlin.

12.00 – 12.15 pm : Interlude 3 : The thylacine trade

Kathryn Medlock

The thylacine (*Thylacinus cynocephalus*), extinct since 1936, is today an international icon of recently extinct species, but in the 19th century it was an evolutionary rarity. Its singular nature as a marsupial carnivore ensured that it was wanted in most large natural history museums in Australia, North America and Europe and museum trading networks undoubtedly contributed to its final demise. As the thylacine became rarer during the 19th and early 20th century, collections relating to it became the basis for museum trade. They increased in value, often beyond what museums could afford, fostering a philosophy among curators of collaboration and data sharing. In this interlude, I explore some of the motives and actions of those behind this collecting phenomenon.

12.15 – 1.15 pm : Panel 5 : Lost Species - Extinction in Museums

Moderator: Kirsten Wehner

Panellists: Joshua Drew, Joanna Radin, Kathryn Medlock, Nancy Simmons, George Amato

Many museums around the world hold collections relating to threatened or recently extinct species and, as climate change and other ecological pressures threaten global biodiversity, these specimens are emerging as evidence of both past events and possible (or likely) futures. This panel considers how extinction has historically catalysed and shaped the assemblage and preservation of collections, and how museums are re-visiting and re-interpreting these objects to document and engage audiences with profound shifts in the planet's ecosystems.

1.15 – 2.15 pm LUNCH

2.15 – 2.30 pm : Interlude 6 : A Stump-Jump Plough - Reframing a national icon

George Main

The stump-jump plough, invented in South Australia in 1876, enabled the transformation of the Australian continent's complex scrub and grassy woodland ecologies into simplified patchworks of crop and pasture. The plough became a national icon, celebrated for its powerful capacity to transcend the particularities of Australian land, but the erasure of indigenous biological communities soon caused devastating changes in land and climate, including unprecedented erosion events and the release of immense volumes of carbon into the atmosphere. In this interlude I explore possibilities for reinterpreting the stump-jump plough and its history in order to reveal and undermine cultural foundations of climatic and ecological disorder.

2.30 – 3.30 pm : Panel 6 : Food Histories

Moderator: Kirsten Wehner

Panellists: George Main, Cathy Stanton, Eleanor Sterling

What we eat, and how we produce, manufacture, distribute, consume and dispose of what we eat (or grow but don't eat), is one of the most powerful ways in which people engage, shape and are shaped by the non-human world. Food is of interest to almost everyone, a highly accessible and engaging topic. Contemporary practices of food production also rank high among anthropogenic causes of climate change and climatic shifts will profoundly affect food futures. All this suggests food as a highly productive focus for museums trying to engage communities with the challenges of climate transformation. This panel explores recent museum collection, exhibition and site interpretation projects developing the possibilities of food histories in the era of climate change.

3.30 – 4.00 pm AFTERNOON TEA

4.00 – 4.45 pm : Panel 7 : Art for the Anthropocene

Moderator: Libby Robin

Panellists: William L. Fox, Susannah Sayler and Edward Morris

The Center for Art + Environment at the Nevada Museum of Art, founded in 2009, has a creative focus on the art of the Anthropocene, including land and landscapes created since the late 1700s, art and architecture. Our global archive collections hold materials from more than 500 artists working on all seven continents. One of the archives the Center collects on an ongoing basis is that from the Canary Project, which was founded in 2007 by Susannah Sayler and Edward Morris. This panel considers how the Canary Project's unique works, collaboratively drawing on materials from many sources, activate conversations about the history of art as a cultural artefact, the history of invention and adaptation and/or natural and human history. We explore how the interlacing of objects/artworks from partner collections with the artists' contemporary interpretations of our changing landscape, generate an extreme collapsing of time and a suggestion of both what is at stake and what is possible in this present moment.

4.45 - 5.15 pm: The Anthropocene Observatory

Introduction: Bernd Scherer

Excerpts from *The Anthropocene Observatory*, produced by the Haus der Kulturen der Welt in collaboration with artist-film maker Armin Linke and Territorial Agency. *The Anthropocene Observatory* is a filmic investigation into the construction of the concept of the Anthropocene. It pursues questions such as: How was the earth transformed into an object of international planning? How does abstract modelling influence current decision-making and political processes? Can the planet be controlled?"

5.15 – 6.15 pm EVENING BREAK

6.15 – 7.30 pm : Public Lecture - The Darwin of the Coral: How Charlie Veron's living collections came to prophesy future reef extinction.

Iain McCalman - Linder Theatre, AMNH

J.E.N 'Charlie' Veron, famed coral scientist and discoverer of over a third of the world's corals, clocked up 7,000 hours of diving from the southern temperate to the far northern tropical zones of Australia's Great Barrier Reef. Living corals turned out to show startling greater variation than the 'type specimens' held in museum collections, leading Veron to develop a controversial new theory of coral evolution. In the process, he also realised that the world's corals were succumbing to the consequences of climate change. In this lecture, I examine how and why Charlie Veron came to this grim realization and how he seeks to 'open the eyes of the world' through a digital form of 'collecting' that dynamically analyses and displays the state of all the corals of the world. His photographs, databases, websites and a brilliant recent book, *A Reef in Time: The Great Barrier Reef from Beginning to End*, argue that corals provide an early warning system of catastrophic global environmental changes already underway. Our planet's sixth mass extinction beckons.

Friday 4 October

Futures

Chair: Kirsten Wehner

9.00 – 9.30 am : Key Questions

House of Stories

Jenny Newell

When Toi Hauiti, a group from the east coast of Aotearoa New Zealand gave a week of public performances at the AMNH, they began their story each day with their original ancestor and traced the line of descent down to the material ancestor placed on the stage before us: a agable figure (tekoteko) in the museum's collection. Their powerful timeline, their cloaking of the object in stories, and their use of the museum as a 'contact zone' highlighted for me the transformative power of bringing these elements together. This paper draws on several examples of projects involving the telling of 'stories that matter', the implications of long and short temporalities, and the potential role of museums as spaces for the growing diasporic communities of the future.

9.30 – 10.30 am : Panel 8 : Future Collections and Projects

Moderator: Kirsten Wehner

Panellists: Kirstie Ross, Jacklyn Lacey, George Main, Cathy Stanton

How can we best imagine, develop and use collections and museums to understand, engage and respond to climate change? This panel is designed as an exploration of 'work in mind' projects, either recently underway or planned for the future, that are changing museum practice, with a view to building an international understanding of work going on in museums in different parts of the world. Panellists will present some projects either recently underway or planned, with a view to stimulating new ideas, imaginings and proposals.

10.30 – 10.45 am : Future Directions Proposal : Building an online 'Museums and Climate Change Network'

Jenny Newell

'Collecting the Future' has been designed to create connections: useful and inspiring connections between all of us working in this shared field of concern. I want to capture the impetus of this workshop and create an online network: the 'Museums and Climate Change Network'. A website that provides links to our cultural institutions and individuals working on issues of climate change, the site will be a forum to share ideas, news, contacts, objects; a resource that will help us to continue to share our conversations, and our exhibitions. This session introduces a draft plan of the website, on paper, to which I invite you to add your comments and ideas.

10.45 – 11.15 am

MORNING TEA

11.15– 11.30am: Interlude 8 : Climate change right here – the Climate and Urban Systems Partnership (CUSP)

Raluca Ellis and Michaela Labriole

This interlude introduces the Climate and Urban Systems Partnership, a five-year, multi-city project focused on engaging urban residents in community-based learning about climate change science and city-level responses to urban impacts of climate change. Led by The Franklin Institute, CUSP works through networks of community-based organizations in four urban centers—Philadelphia, Pittsburgh, New York City, and Washington, DC.

11.30 – 12.30 am : Keynote Address : This Brief Multitude: the Anthropocene and Environmental Justice

Rob Nixon

Curating an idea as vast as the Anthropocene involves the imaginative selection of objects, images and stories that will make visceral those geologic processes that now happen on human time scales. But alongside the curatorial challenge of choosing forms that have both a visceral energy and an explanatory potential a second challenge arises: how do we integrate into our representations the rise of the Anthropocene as a grand narrative during an age when what it means to be human is becoming increasingly fractured? How, in other words, do we address both the convergent story of the Anthropocene and the divergent story of widening inequalities, in wealth, in access to environmental resources and in environmental impacts?

12.30 – 1.30 pm LUNCH

1.30 – 2.30 pm : Panel 9 : History, the Anthropocene and Environmental Justice

Moderator: Libby Robin

Panellists: Jim Fleming, Lelei LeLaulu, Leah Lui-Chivizhe, Sverker Sorlin, Helmuth Trischler

What does it mean for humanity to be moving from the age geologists call the Holocene—where the historical records originated, to the Anthropocene—where it seems humanity may bring on its own demise? What are the advantages and dangers of historians and curators in bringing this term to the museum context? Do we need to historicise the idea, to grapple with when it actually began, or should we be concentrating on adapting and living with a globally changed planet where some groups of people, particularly in the global south, face the negative consequences of anthropogenic global change before others? How can museums offer not just information, but also hope? This panel, above all others, demands reflection on the event, rather than pre-drafted papers. We are thinking that each of you might speak for 3-5 minutes, just a short provocation - then the bulk of the time should be turned over to the audience for comments and questions. So it is a task to 'open up discussion' rather than provide information - and perhaps a model for museum events in our home museums where we use the space of the museum to have important conversations not possible in other venues.

2.30 pm

CLOSE

Collecting the Future:

Museums, Communities and Climate Change

Workshop Participants



Anna Åberg

Royal Institute of Technology (KTH), Stockholm, Sweden

anna.aberg@abe.kth.se

Dr Anna Åberg works at the Royal Institute of Technology, Stockholm. She successfully defended her doctoral thesis (KTH), *The Gap in the Grid* (on energy history) in May 2013. She has long-standing interests in film - particularly science fiction and environmental

documentary films, and has taught courses in the division since 2007. Her present work in the KTH Environmental Humanities Laboratory at the Royal Institute of Technology is in partnership with the University of Wisconsin, Madison (Cultures, Histories, Environments initiative), in the joint team for the Tales of Planet Earth film festival, to be held in Madison in 2013, and then in Stockholm in 2014.

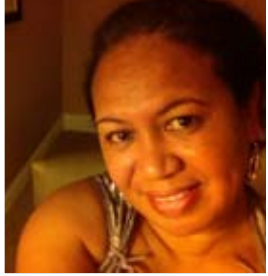
George Amato

American Museum of Natural History, New York, NY, USA

gamato@amnh.org

Dr. George Amato is the Director of the Sackler Institute of Comparative Genomics at the American Museum of Natural History. In addition to administering this interdepartmental scientific program of more than 70 scientists, postdoctoral fellows and graduate students, George continues to conduct research in conservation genetics of endangered species. He also serves as an adjunct professor at Columbia and Fordham Universities. Previous to joining the Museum, George spent seventeen years conducting conservation research and programs at the Wildlife Conservation Society, where he was the Director of Conservation and Science until 2005. George has lectured and published extensively on conservation strategies for endangered species, concentrating much of his work on the use of molecular analysis to determine conservation priorities and in developing forensic tools for monitoring the illegal trade in wildlife. Additionally, he is the chairman of the Consortium for the Barcode of Life Conservation Committee, and a trustee of the Lemur Conservation Foundation and the Rare Species Conservatory Foundation. George is involved in conservation issues on a global scale working on projects in Africa, Southeast Asia, and the Caribbean. He received his B.S. from the University of Connecticut and M.S., M.Phil. and Ph.D. from Yale University.





Lumepa Apelu

Museum of Samoa, Apia, Samoa
l.apelu@mesc.gov.ws

Lumepa Apelu is the Principal Officer and curator of the Museum of Samoa, in Apia, Samoa, a position she has held since 2011. In addition to the management and curating of the museum, she maintains the website and writes regularly for the museum. Her background is in tourism, mathematics and law.

She won a scholarship to study in New Zealand and Australia. She has a Bachelor of Mathematics, Applied Statistics: Wollongong University, Australia, and the National University of Samoa. She speaks both English and Samoan fluently. Lumepa has experience in resort management, as a math teacher, and research officer for the National Kidney Foundation. She is also the secretary and a founding member of the Arts Sector of Samoa.



Mataáfa Atuagavaia

Ministry of Education Sports and Culture, Samoa
e.autagavaia@mesc.gov.ws

Mataáfa Atuagavaia is a Culture Specialist for the Culture Division in the Ministry of Education Sports and Culture, Samoa. Mataáfa is the main writer of the oral traditions educational books published by the Ministry.

Dag Avango

Royal Institute of Technology (KTH), Stockholm, Sweden
avango@kth.se

Dag Avango teaches in the Division of History of Science, Technology and Environment, Royal Institute of Technology (KTH), Stockholm, Sweden. He has worked extensively on industrial heritage in polar environments, including in Svalbard, Norway and in South Georgia, Argentina.



Miyase Christensen

Royal Institute of Technology (KTH), Stockholm, Sweden
miyase@kth.se

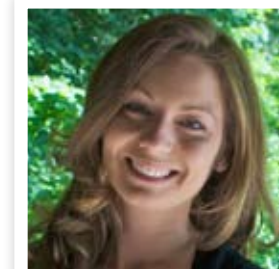
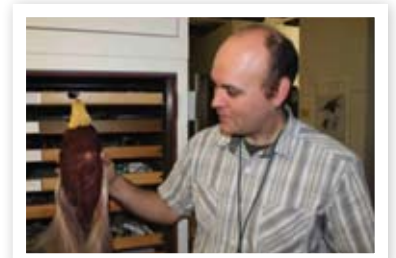
Professor Miyase Christensen is a joint appointment in the Division of History of Science, Technology and Environment, at the Royal Institute of Technology (KTH), and the Department of Media Studies at Stockholm University, Sweden. She is well-known in Sweden for her analysis of media trends, particularly in relation to public responses to climate change.

Her latest book is Miyase Christensen, Annika E. Nilsson and Nina Wormbs (eds), *Media and the Politics of Arctic Climate Change: When the Ice Breaks*, NY: Palgrave Macmillan 2013.

Josh Drew

Columbia University, New York, NY, USA
jd2977@columbia.edu

Dr Josh Drew is a lecturer in Columbia University's Ecology, Evolution and Environmental Biology department where he directs their MA in Conservation Biology. He holds a Ph.D. in biology from Boston University and held a postdoctoral fellowship in the Biodiversity Synthesis Center and the Division of Fishes at the Field Museum.



Raluca Ellis

The Franklin Institute, Philadelphia, PA, USA
rellis@fi.edu

Dr Raluca Ellis is the Director of the Climate & Urban Systems Partnership (CUSP) and the environmental scientist on staff at The Franklin Institute, Philadelphia. Her role includes providing support for exhibits and programs with an environmental science focus, with the major focus currently on development the CUSP. Raluca holds a Ph.D. in environmental chemistry from the University of Toronto, where she spent time measuring air quality in urban and rural environments all over the world, and she previously held a post-doctoral research fellowship at Harvard University, where she studied the formation, transport and impact of pollution on US National Parks. Raluca is very passionate about sharing the fun and wonderful side of science with the public, engaging in lifelong learning, and encouraging young kids, especially girls, to pursue science.



Jim Fleming

Colby College, Waterville, Maine, USA
jfleming@colby.edu

Jim Fleming is professor of science, technology, and society at Colby College. His books include *Meteorology in America, 1800-1870* (1990), *Historical Perspectives on Climate Change* (1998), *The Callendar Effect* (2007), *Fixing the Sky* (2010), and *Toxic Airs* (2014). He is deeply invested in connecting the history of science, technology, and medicine with public policy. New

work includes a study of atmospheric research in America and connecting the environmental humanities with ideas about the Anthropocene.

William L. Fox

Nevada Museum of Art, Reno, Nevada, USA
wfox@earthlink.net

William L. Fox is Director of the Center for Art + Environment, Nevada Museum of Art. He has published fifteen books on cognition and landscape, numerous essays in art monographs, magazines and journals, and fifteen collections of poetry. Bill is also an artist who has exhibited in numerous group and solo shows in eight countries since 1974. He has researched and written books set in the extreme environments of the Antarctic, the Arctic, Chile, Nepal, and other locations. Bill is a fellow of both the Royal Geographical Society and Explorers Club, and the recipient of fellowships from the Guggenheim Foundation, National Endowment for the Humanities, and National Science Foundation. He has been a visiting scholar at the Getty Research Institute, Clark Art Institute, the Australian National University and the National Museum of Australia.

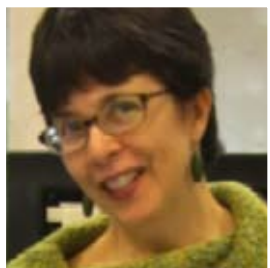


Laurie Halderman

American Museum of Natural History, New York, NY, USA
lauri@amnh.org

Lauri Halderman is the Sr. Director for Exhibition Interpretation at the American Museum of Natural History. Working closely with senior staff in the Exhibition and Education departments as well as with the Museum's curators and scientific staff, Lauri directs the Exhibition Department team that writes the interpretation for all new AMNH traveling exhibitions

and permanent hall renovations. Since coming to the Museum in 1998, Lauri has worked on dozens of major exhibitions, with subjects as diverse as butterflies, meteorites, the human genome, dinosaurs, Darwin, ocean life, the brain, the Silk Road, poison, pterosaurs and climate change. Before arriving at AMNH, Lauri was the lead writer for the Mashantucket Pequot Museum and Research Center. This past year Lauri was also a fellow of the Noyce Leadership Institute.



David Harvey

American Museum of Natural History, New York, NY, USA
dharvey@amnh.org

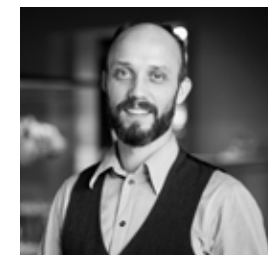
David Harvey is an interpretive exhibition designer whose passion is creating compelling museum experiences for the public. As senior exhibition designer at the Metropolitan Museum of Art, he designed nearly two-dozen permanent galleries and scores of major art exhibitions to showcase the work of artists ranging from Degas to Sugimoto, from Velazquez to Versace.

Venturing across Central Park to the American Museum of Natural History in 1997, David reorganized the museum's exhibition department, contributed to the realization of the Rose Center for Earth and Space and was subsequently responsible for the design of several permanent halls, as well as for environmentally focused exhibitions such as *Water: H2O=Life*, and *Climate Change*. Today these and well over a dozen other major exhibitions are visited at museum venues around the globe.

Dave Ireland

Royal Ontario Museum, Toronto, Canada
davei@rom.on.ca

Dave Ireland is Managing Director, ROM Biodiversity, Royal Ontario Museum, Toronto. Dave spent much of his young adult life guiding children and adults through Algonquin Park by canoe. He has a Master in Science (Ecology) degree from Trent University and instructed courses in Community Ecology, Conservation Biology, and Environmental Resource Management. He was previously the Curator of Conservation and Environment at the Toronto Zoo, and the Staff Biologist and Curator of Wolves at Haliburton Forest and Wildlife Reserve. Dave loves the outdoors, connecting people to wildlife and wild spaces, and he's a big fan of change.



Michaela Labriole

New York Hall of Science, New York, NY, USA
mlabriole@nysci.org

Michaela Labriole is the Manager of Online Professional Development at the New York Hall of Science (NYSCI). In addition to overseeing online course development and implementation, Michaela has managed many of NYSCI's climate change related projects, including *Communicating Climate Change*, *My Carbon Footprint*, and *Collect Construct and Change*. Michaela holds a B.S. in Cognitive Neuroscience from Brown University and an M.S. in Environmental Science from the State University of New York (SUNY) College of Environmental Science and Forestry, where her work focused on people's perceptions and understanding of climate change.

Susanna Lidström

Royal Institute of Technology (KTH), Stockholm, Sweden

susanna.lidstrom@abe.kth.se

Dr Susanna Lidström works in the KTH Environmental Humanities Laboratory at the Royal Institute of Technology, Stockholm. She is currently preparing a book, *Greening Poetry: Environmental Sensibility and the Poetics of Seamus Heaney and Ted Hughes*, under consideration by Routledge Environmental Humanities. She has new work focusing on imagining the ocean, and also urban ecology, particularly in South Africa. She holds a Ph.D. in ecocriticism from King's College, London.



Leah Lui-Chivizhe

University of Sydney, Sydney, NSW, Australia

l.lui-chivizhe@unsw.edu.au

Leah Lui-Chivizhe is a doctoral student in history at the University of Sydney, Australia. Her research focuses on Torres Strait Islander relationships and engagements with the marine environment and the Islander-turtle relationship. Leah holds graduate qualifications in material anthropology and human geography. She has undertaken research on material culture and eastern

Torres Strait tombstone ceremonies, Islander identity in Sydney and the history of Islanders in the northern Australia railways. From 2001-2012 she taught Indigenous Australian Studies at the University of Sydney and now works part-time for the Nura Gili Centre for Indigenous Programs at the University of New South Wales.



Lelei TuiSamoa LeLaulu

4lelei@gmail.com

A development entrepreneur working at the confluences of climate change, communication, sustainable tourism, food security, civil society and renewable energy, Lelei LeLaulu is a special advisor to the World Bank for Agriculture and Environment, a member of the Advisory Panel for Business and Sustainability of the International Finance Corporation, chairman of the Foundation of the Peoples of the South Pacific, VP of the Caribbean Media

Exchange and chairman of the Earth Council Alliance. Born in Samoa, Lelei's United Nations service included organizing and promoting the series of great global conferences and summits known as the "Development Continuum" of the 1990s which fed into the UN Millennium Development Goals. He was on the UN Reform Team which gave the organization its first major overhaul, and elected chairman of the Committee for the Security and Independence of the International Civil Service.



Iain McCalman

University of Sydney, Sydney, NSW, Australia

iain.mccalman@gmail.com

Professor Iain McCalman is a research professor in history at the University of Sydney and co-Director of the Sydney Environment Institute. He was born in Nyasaland in 1947, schooled in Zimbabwe and did his higher education in Australia. He was Director of the Humanities Research Centre, ANU, from 1995-2002 and won the inaugural Vice-Chancellor's Prize at ANU for Teaching Excellence. He is a Fellow of three Learned Academies, a former Federation Fellow and a former President of the Australian Academy of the Humanities. He was made Officer of the Order of Australia in 2007 for services to history and the humanities. His last book, *Darwin's Armada* (Penguin, 2009) won three prizes and was the basis of the TV series, *Darwin's Brave New World*. His new book, *The Reef – A Passionate History, from Captain Cook to Climate Change*, will be published by Penguin in Australia in November and by Farrar, Strauss and Giroux in the USA in May 2014.

Kathryn Medlock

Tasmanian Museum & Art Gallery, Hobart, Tasmania, Australia

kmedlock5@gmail.com

Kathryn Medlock is the curator of vertebrate zoology at the Tasmanian Museum and Art Gallery, and a PhD student at the Australian National University. Her thesis is examining the trade and exchange of thylacines or Tasmanian Tiger specimens by museums. To inform an understanding of the recent extinction of this famous marsupial carnivore and the role of the museums over time is central to her thesis. Kathryn's work at the museum over many years has involved curating three separate exhibitions on the thylacine, as well as being the museum's spokesperson on matters relating to recent extinctions. She is extremely interested in the multidisciplinary nature of natural science collections and is passionate about promoting the scientific as well as the cultural and historical aspects of the museum collections in her care.



George Main

National Museum of Australia, Canberra, ACT, Australia

george.main@nma.gov.au

Dr George Main is an environmental historian and curator in the People and the Environment program at the National Museum of Australia. He is currently developing a community outreach project called Food Stories, which seeks to use objects and their narratives to bolster the resilience of people and productive terrains.





Edmond Mathez

American Museum of Natural History, New York, NY, USA
mathez@amnh.org

Edmond Mathez is a Curator and Professor at the American Museum of Natural History and Adjunct Senior Research Scientist at Lamont Doherty Earth Observatory of Columbia University, where he conducts research in the fields of geochemistry and igneous petrology. He was lead curator of AMNH's Gottesman Hall of Planet Earth and co-curator of its

traveling exhibit, Climate Change: The Threat to Life and a New Energy Future. Mathez co-authored (with James Webster) the book The Earth Machine: The Science of a Dynamic Planet and authored the book Climate Change: The Science of Global Warming and Our Energy Future. He was co-recipient in 2002 of the American Geophysical Union's prestigious Excellence of Geophysical Education Award and a Fellow of the Mineralogical Society of America.

Nina Möllers

Deutsches Museum, Munich, Germany
n.moellers@deutsches-museum.de

Nina Möllers is project leader and curator of the Anthropocene exhibition scheduled to open in 2014 at the Deutsches Museum in Munich, Germany. The exhibition is a joint effort of the museum and the Rachel Carson Center for Environment and Society, a center for interdisciplinary and international environmental studies. Nina studied in Palo Alto, Tübingen and Nashville and received her Ph.D. from the University of Trier in American History. She has worked at the Museum of Technology and Labor in Mannheim (Technoseum) and was a postdoctoral researcher and coordinator of a research and exhibition project on household energy consumption at the Deutsches Museum. Her research interests are the history of technology; environmental, gender and museum studies; and the American South.



Rob Nixon

University of Wisconsin, Madison, WI, USA
rdnixon@wisc.edu

Professor Rob Nixon is the Rachel Carson and Elizabeth Ritzmann Professor of English at the University of Wisconsin, Madison. He is the author of four books, most recently Slow Violence and the Environmentalism of the Poor (Harvard UP), which was selected by Choice as an outstanding book of 2011

and has since received four major prizes. Rob Nixon has published over a hundred essays and book chapters in the fields of environmental studies, postcolonial studies and nonfiction and has delivered lectures on six continents. He is a frequent contributor to the New York Times, the Guardian, and many other major periodicals. Nixon has been a recipient of a Guggenheim, an NEH, a Fulbright, and a MacArthur Foundation International Peace and Security Fellowship.

Lisa Phillips

Columbia University, New York, NY, USA
phillips@ei.columbia.edu

Lisa Phillips is the Executive Director of the Lenfest Center for Sustainable Energy at the Earth Institute, Columbia University, and Co-Director of Positive-Feedback. She previously worked in the performing arts sector as a producer, manager, agent and consultant. She has curated art & science panels for the Martin E. Segal Theatre Center, the NoPassport Theater Conference, and produced/curated Artist/Scientist Speed-Dating events for Parsons The New School for Design, the Metropolitan Museum of Art, and Marfa Dialogues/ NY (upcoming November 6, 2013). Phillips has also presented on the process and value of arts & science collaborations at Theatre Communications Group, Association for Environment Studies and Sciences, the Association of Performing Arts Presenters, and the Prelude Festival.



Jeremy Pickard

Superhero Clubhouse, New York, NY, USA
jeremy@superheroclubhouse.org

Superhero Clubhouse is a collective of theater artists and environmental advocates working at the intersection of science and performance. Their initiatives include The Planet Plays (a series of nine full-length mythologies inspired by particular ecological conundrums), Big Green

Theater Festival (an eco-playwriting program for Bushwick 5th-graders), and an annual collaboration with climate scientists from Columbia University's Earth Institute and the Lamont-Doherty Earth Observatory.

Joanna Radin

Yale University, New Haven, CT, USA
joanna.radin@yale.edu

Joanna Radin is an Assistant Professor in the Program for the History of Science and Medicine at Yale University, where she is also affiliated with the departments of History and of Anthropology. Her current research on cryopreservation is part of a broader agenda that examines the social and technical conditions of possibility for the systems of biomedicine and biotechnology that we live with today. She has particular interests in the history of biotechnology, scientific collections, anthropology, epidemiology, and research ethics.





Kirstie Ross

Museum of New Zealand Te Papa Tongarewa, NZ
KirstieR@tepapa.govt.nz

Dr Kirstie Ross is curator, Modern New Zealand, at Te Papa Tongarewa. She is a graduate of the University of Auckland and has worked as a history curator at Te Papa since February 2004. Her curatorial projects include Te Papa's permanent environmental history exhibition, *Blood, Earth, Fire*, which opened in 2006. Kirstie's research interests include popular culture and the environment, and issues related to the presentation of social history

in museums. Her publications include *Going Bush: New Zealanders and Nature in the Twentieth Century* (Auckland University Press, 2008) which was supported by an Award in New Zealand History, granted by the New Zealand Ministry for Culture and Heritage.



Peter Rudiak-Gould

Oxford University, Oxford, UK
peterrg@gmail.com

Dr Peter Rudiak-Gould is an anthropologist and currently a Postdoctoral Associate in the School of Anthropology, Oxford University. His extensive field research on the human dimensions of climate change in the Marshall Islands has been published in *Global Environmental Change*, *Bulletin of the American Meteorological Society*, *Human Ecology*, *Weather Climate & Society* and elsewhere. An ethnography of

Marshallese climate change perceptions and responses, *Climate Change and Tradition in a Small Island State: The Rising Tide*, has recently been published by Routledge.



Susannah Sayler and Edward Morris

The Canary Project, New York, NY, USA
susannah@canary-project.org
edward@canary-project.org

Susannah Sayler and Edward Morris (Sayler / Morris) work with photography, video, writing and installation. Of primary concern are contemporary efforts to develop ecological

consciousness. In 2006 they co-founded The Canary Project, a collaborative that produces visual media and artworks that deepen public understanding of climate change (www.canary-project.org). As part of the project, they have also developed a series of large-scale photographs titled *A History of the Future*, which were taken in 14 locations around the world where the impacts of climate change are most acutely felt. Works from The Canary Project have shown in diverse venues, including: art museums such as The Kunsthal Museum (Rotterdam), The Center for Art + Environment at the Nevada Museum of Art and The Museum of Contemporary Art/Denver; science museums such as the Cleveland Museum of Natural History and the Museum of Science and Industry (Chicago, IL); universities; public art projects; magazines; city halls; etc. In 2008-2009 Sayler and Morris were Loeb Fellows at Harvard University's Graduate School of Design. They are currently teaching in the Transmedia Department at Syracuse University.



Bernd Scherer

Haus der Kulturen der Welt, Berlin, Germany
Scherer@hkw.de

Dr Bernd M. Scherer has been Director of the Haus der Kulturen der Welt, Berlin since 2006. He was Director of the Goethe Institute Mexico from 1999 to 2004, and from 2004 to 2005 Head of the Arts

Department at the Goethe-Institut München. He was in charge of several international cultural projects, e.g. 'Re-thinking Europe' at the Haus der Kulturen der Welt and 'culturALE 2003' in Mexico. His main fields of activity are philosophy, semiotics, aesthetics and intercultural topics.

Nancy Simmons

American Museum of Natural History, New York, NY, USA
simmons@amnh.org

Dr Nancy Simmons is the Curator-in-Charge of the Department of Mammalogy at the American Museum of Natural History. Her research focuses on the evolutionary biology of mammals, especially bats.



Sverker Sörlin

Royal Institute of Technology, Stockholm, Sweden
sorlin@kth.se

Professor Sverker Sörlin is professor of Environmental History in the Division of History of Science, Technology and Environment, Royal Institute of Technology (KTH), Stockholm, Sweden, and a key founder of the new initiative, the KTH Environmental Humanities Laboratory. In 2013-2014, he is based at the Institute of Advanced Studies at Princeton University as part of their initiative in Environmental Humanities. He is widely published in both English and Swedish, and is a prominent commentator on television and radio and in the print media on the environment and public intellectual life in Sweden. His most recent book is *The Future of Nature: Documents of Global Change* (Libby Robin, Sverker Sörlin and Paul Warde (eds.), New Haven: Yale University Press, 2013).



Courtney St. John

Columbia University, New York, NY, USA
cstjohn@ei.columbia.edu

Courtney St. John is the Associate Director for Outreach at the Center for Research on Environmental Decisions (CRED) at the Earth Institute at Columbia University. She joined the CRED team in 2012 and oversees the center's outreach with key audiences

including partners and stakeholders, students, the larger scientific community, and the general public. Prior to joining CRED Courtney was the Climate Change Affairs Officer for the United States Navy's Task Force Climate Change.

Cathy Stanton

Tufts University, Medford, MA, USA
cathy.stanton@tufts.edu

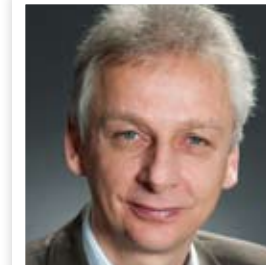
Dr Cathy Stanton is a Senior Lecturer in the Anthropology Department at Tufts University and an active public historian. Her work has focused on historical performance, postindustrial culture-led redevelopment, agritourism, and the relationship between car culture and Americans' sense of history. She serves as Digital Media Editor for the National Council on Public History and has been a consultant to the U.S. National Park Service on many ethnographic and historic studies, including one focusing on farming at Martin Van Buren National Historic Site in eastern New York state.



Eleanor Sterling

American Museum of Natural History, New York, NY, USA
esterling@amnh.org

Dr Eleanor Sterling is the Director of the American Museum of Natural History's Center for Biodiversity and Conservation (CBC). A scientist with interdisciplinary training in biological and social sciences, Eleanor has more than 30 years of field research experience in Africa, Asia, and Latin America. She has published on the potential future impact of climate change on biodiversity around the world. At the American Museum of Natural History, Eleanor has engaged in systems-level research on endangered species and high biodiversity ecosystems, and on the intersection between biodiversity, culture, and languages. Additionally, she has been curator for 6 temporary or traveling exhibitions, including *Our Global Kitchen: Food, Nature, Culture and Water H2O=Life*, and one permanent hall, the Theodore Roosevelt Memorial Hall. Eleanor received her B.A. from Yale College and a joint Ph.D. in Anthropology and Forestry and Environmental Studies from Yale University.



Helmuth Trischler

Deutsches Museum, Munich, Germany
h.trischler@deutsches-museum.de

Professor Dr. Helmuth Trischler is Head of Research at the Deutsches Museum, Munich, Professor of Modern History and History of Technology at the Ludwig-Maximilians-Universität Munich (LMU), and Director (jointly with Prof. Dr. Christof Mauch) of the Rachel Carson Center for Environment and Society (RCC). His main research interests cover the themes of knowledge societies and innovation cultures in international comparison, science, technology and European integration, history of museums and collections, and environmental history. His recent publications include the books *The Politics of European Knowledge: Creating, Organizing, Sharing Expertise* (London: Palgrave Macmillan, 2013) and *Anthropocene: Envisioning the Future of the Age of Humans* (Munich: Rachel Carson Center, 2013).

Nina Wormbs

Royal Institute of Technology (KTH), Stockholm, Sweden
nina@kth.se

Associate Professor Nina Wormbs is Head of the Division of History of Science, Technology and Environment, which hosts the KTH Environmental Humanities Lab, at the Royal Institute of Technology, Sweden. She holds an MSc in engineering physics and a PhD in history of technology. She has taken an interest in technology and the media, especially broadcasting, where she has also done some policy work. Her present research deals with remote sensing and the efforts to understand and display the Earth at a distance.



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