



SUSTAINABLE CULTURAL HERITAGE

National Endowment
for the Humanities

Consiglio Nazionale
delle Ricerche



Sustainable Cultural Heritage

Sponsored by the National Endowment for the Humanities and the Consiglio Nazionale delle Ricerche of Italy (CNR), this conference brings together Italian and American experts to explore sustainable strategies for the care of tangible cultural heritage. Speakers will discuss the impact of climate change on cultural heritage, methodologies for assessing the condition of collections and monuments, and strategic approaches to managing collection environments.

MONDAY, MAY 11, 2009

**Old Post Office Building, Room M-09
Washington, D.C.**

9:00–9:30

Opening Remarks

Carole M. Watson, Acting Chairman,
National Endowment for the Humanities

Michael McDonald, Acting Deputy Chairman,
National Endowment for the Humanities

Roberto de Mattei, Vice President,
Consiglio Nazionale delle Ricerche

9:30–10:45

Session One: Cultural Heritage and Climate Change

*Sustainable Stewardship: preventive conservation
in a changing world*

Jerry Podany, Senior Conservator of Antiquities,
J. Paul Getty Museum and President of the
International Institute for Conservation of Historic
and Artistic Works

The presentation will review the development of approaches to preventive conservation and how the changing global climate, increasing demands for access to material cultural heritage, and the world-wide economic challenges are demanding a more dynamic and flexible approach to preservation.

*Overview of research about the impact of climate
change on cultural heritage*

Cristina Sabbioni, Research Director at CNR's
Institute of Atmospheric Sciences and Climate

The presentation will focus on what we know now and what we need to learn about the impact of climate change on cultural heritage. It will summarize the objectives, methodologies, and results of the Noah's Ark Project. Funded by the European Commission within its Sixth Framework Program for Research, the Noah's Ark Project studied the impact of global climate change on built heritage and cultural landscapes.

10:45–11:15

Morning break

11:15–12:30

Session Two: The Impact of Environmental Factors on Cultural Heritage

Preventive conservation as a sustainable strategy

Mara Camaiti, Researcher at CNR's Institute for Conservation and Enhancement of Cultural Heritage

The presentation will examine economically and scientifically sustainable stewardship strategies for the preservation of historic and artistic works in Italy. The focus will be on products used to protect works of art from such environmental factors as pollution, solar radiation, and water.

Challenges and accomplishments—National emergency preparedness, response and recovery

Debra Hess Norris, Vice Provost for Graduate and Professional Education and Chairperson, Art Conservation Department at the University of Delaware

The presentation will summarize recent initiatives designed to help cultural institutions better plan for emergencies and respond effectively. Topics will include Heritage Health Index findings, the American Institute for Conservation—Collections Emergency Response Team, Heritage Preservation's Alliance for Response, and MayDay.

12:30–1:30

Lunch break

1:30–2:45

Session Three: Environmental Monitoring and Preservation Metrics

Overview of research applied to sustainable preservation strategies and management of indoor environments

Adriana Bernardi, Senior Researcher at CNR's Institute of Atmospheric Sciences and Climate

The presentation will examine environmental monitoring methodologies with particular attention to field tests conducted in such settings as the Sistine Chapel, the British Museum, the Louvre Museum, the Lascaux Caves, the Uffizi Galleries, and the Basilica of Santa Croce.

Using preservation metrics to achieve sustainable collection environments

James M. Reilly, Director of the Image Permanence Institute and Professor in the Rochester Institute of Technology's College of Imaging Arts & Sciences

The presentation will focus on preservation metrics, which represent a fundamentally different way of managing environments based on a unified view of collection object needs, local climatic conditions, building characteristics, and mechanical system energy usage.

2:45–3:15

Afternoon break

3:15–4:30

Session Four: Combined Actions and Coordinated Efforts in Pursuit of Sustainable Preservation

Scientific and cultural requirements for sustainable conservation of historic monuments

Luciano Cessari, Senior Researcher at CNR's Institute for Technologies Applied to Cultural Heritage

The presentation will use case studies to introduce an interdisciplinary and collaborative approach that combines historical studies, hard science, architecture, energy evaluation, and wide-ranging impact assessment to restore monuments of the ancient past.

"To everything there is a season": strategic thinking for sustainable environmental management for collections conservation

Michael C. Henry, Principal Engineer/Architect with Watson & Henry Associates and Adjunct Professor of Architecture at the University of Pennsylvania

The presentation will examine how analysis and understanding of the climate/building interaction, combined with knowledge of a collection's environmental vulnerabilities, enable us to set realistic objectives and sustainable strategies for improved environmental management.

4:30–4:45

Closing Remarks

Nadina Y. Gardner, Director, Division of Preservation and Access, National Endowment for the Humanities

Participant Biographies

Adriana Bernardi is a senior researcher at the Institute of Atmospheric Sciences and Climate, which is part of the Consiglio Nazionale delle Ricerche. She specializes in microclimatology and environmental sciences for the conservation of cultural heritage and works on sustainable preservation strategies for indoor environments. Since 1982, she has participated in and coordinated many projects, such as the European Commission's TeACH, MESSIB, and H-KNOW, and has been an evaluator for the European Union's Fifth Framework Program. A member of several national and international committees on art conservation, she also works on cultural heritage standards with the Italian Organization for Standardization and the European Committee for Standardization. She is a member of the editorial board of the *Journal of Cultural Heritage* (Elsevier), and is editor in chief of *Bollettino Geofisico*, the journal of the Italian Geophysical Association. She received her doctorate in physics from the University of Padua, and is the author of over 150 scientific publications, and is a professor of microclimate for the conservation of cultural heritage at the University of Ferrara.

Mara Camaiti has been a researcher at the Institute for Conservation and Enhancement of Cultural Heritage, part of the Consiglio Nazionale delle Ricerche, since 1989. She specializes in the chemistry of synthetic polymers, a subject which she has taught since 2004 at the Ravenna campus of the University of Bologna for their program in the conservation of cultural heritage. She also teaches chemistry for the restoration of frescoes and paintings at the International University of Art in Florence and has been the scientific and project leader of several CNR research projects to develop new conservation materials and techniques. Since 2008, she has been project leader of the Bilateral Project between CNR and the National Scientific and Technical Research Centre in Morocco, studying solutions for the degradation problems of mosaics in Moroccan and Italian historic buildings. Her main research activities include the design of polymeric materials for the protection of works of art, particularly for stone artifacts and paintings; preventive treatments for the effects of pollution on artwork; and restorative techniques involving chemical and laser cleaning. She is the author and coauthor of numerous journal articles and book chapters on the conservation of paintings and stone artifacts.

Luciano Cessari is a member of the Scientific Board of Consiglio Nazionale delle Ricerche's Cultural Heritage Department, and is senior researcher at the Institute for Technologies Applied to Cultural Heritage, where he is head of research for the Built Heritage Lab. He received a degree in architecture and his PhD

in town planning from La Sapienza University of Rome. Cessari's research focuses on the documentation and conservation of historic buildings, using an interdisciplinary approach for survey, diagnosis, and restoration strategies. His work examines sustainable technologies and innovative solutions to assess the impact of energy-saving interventions in monuments and historic cities. The author and editor of several books and more than one hundred articles, essays, and conference papers, he has also coordinated and taught workshops in Italy, Greece, Cyprus, and Malta. Cessari has been the founder and director of many European Commission projects. In Uzbekistan, he has worked on the preservation of the Timurid monuments of Samarkand. In Italy, Spain, Greece, Malta, and France, he has coordinated the ARAMIS project for the study and conservation of Islamic hydraulic structures and the METAFORA and CITADELS projects for the documentation of the fortified Mediterranean heritage. Since 2005, under the United Nations Development Program, Partnership for the Future, he has been the project manager and conservation coordinator for the restoration of the Bedestan, the former St. Nicholas Church in Nicosia, Cyprus. The project was awarded the European Union Prize for Cultural Heritage/Europa Nostra Awards in 2009.

Michael C. Henry, PE, AIA, is principal engineer/architect with Watson & Henry Associates. Since 1984, he has specialized in preservation of historic buildings and in environmental management for collections in historic and contemporary buildings. He is an adjunct professor of architecture at the University of Pennsylvania, where he teaches building pathology and building diagnostics and monitoring in the Graduate Program in Historic Preservation. He teaches sustainable strategies at the Centre for Sustainable Heritage, the Bartlett School of Graduate Studies, and University College London. He is guest lecturer in the Winterthur/University of Delaware Program in Art Conservation, and has taught in Getty Conservation Institute-sponsored training projects in Mexico, Tunisia, and Brazil. Henry has collaborated with conservators on challenging projects related to collections: passive environmental management at Hemingway's Finca Vigia, near Havana, Cuba; environmental stabilization for the sixteenth-century *retablo* at San Juan Bautista, Cuauhtinchan, Mexico; and passive, low-energy environmental management for collections and archives at Manzil-e-Meher, near Ahmednagar, India. Henry was 2005–06 Fulbright Distinguished Scholar at the Centre for Sustainable Heritage, University College London, where he investigated sustainable approaches for heritage conservation, informed by climate-specific, historic vernacular architecture.

Roberto de Mattei is a professor of modern history at the University of Cassino, and he teaches history of Christianity at the European University in Rome. He is vice president of the Consiglio

Nazionale delle Ricerche, and is a member of the Board of Directors in charge of the Human Sciences Sector. He is also a member of the Board of Guarantors of the Italian Academy (Columbia University, New York) and the Board of Directors of the Italian Historical Institute for the Modern and Contemporary Age. He is president of the Lepanto Foundation (Washington, D.C.), and was an advisor to the Italian government on international affairs from February 2002 to May 2006. He is the author of numerous books and publications, which have been translated into a variety of languages as well as a regular contributor to many Italian and international journals and newspapers.

Michael McDonald currently serves as the general counsel and acting deputy chairman at the National Endowment for the Humanities. He received his PhD in Romance languages and literatures from the Catholic University of America. He also holds a JD from the National Law Center at George Washington University and is a member of the Bar of the Supreme Court of the United States. McDonald has written on the law and on literature for a wide range of publications including the *Wall Street Journal*, the *National Law Journal*, the *American Scholar*, the *Legal Times*, the *National Interest*, the *Italian Quarterly*, the *International Review of Modernism*, the *Journal of European Studies*, the *American Interest*, the *Times Literary Supplement*, and the *Weekly Standard*. He is at present writing a biography of the Italian novelist Curzio Malaparte. This spring Libri Scheiwiller, a prominent Milan-based publishing house, will publish a selection of his literary essays under the title *Scrittori di fronte al male: riflessioni su letteratura e politica*.

Debra Hess Norris is the vice provost for graduate and professional education, chair of the Art Conservation Department, a professor of photograph conservation, and Henry Francis du Pont Chair in Fine Arts at the University of Delaware. She holds an interdisciplinary BA degree magna cum laude in chemistry, art history, and studio art and an MS in conservation from the University of Delaware. She has authored more than twenty-five articles and book chapters on care and treatment of photographic materials, emergency response, ethics, and conservation education, and has taught more than ninety-five workshops and seminars for conservators and allied professionals. Norris has lectured and consulted on the preservation of photographic collections worldwide: in Russia, India, Denmark, France, Finland, the Netherlands, Italy, Israel, Lebanon, Australia, and New Zealand. Norris was the chair of Heritage Preservation (2003–2008) and president of the American Institute for the Conservation of Historic and Artistic Works (1993–97). From 1990 to 1993, she chaired the AIC Ethics and Standards Committee that developed a revised Code of Ethics and Guidelines for Practice. She is currently serving as president of the Board of the Conservation Center for Art and Historic Artifacts, U.S. Commissioner to UNESCO,

project director of The Andrew W. Mellon Collaborative Workshops in Photograph Conservation, and a member of the Preservation Advisory Council to the National Archives.

Jerry Podany is the senior conservator of antiquities for the J. Paul Getty Museum. From 1999 to 2003, he served two terms as president of the American Institute for Conservation, and is now the elected president of the International Institute for Conservation. Most recently, he was awarded the AIC Rutherford John Gettens Award, which recognizes outstanding service to the profession, and the Engineering Research Institute's Heritage Innovation Prize, which recognizes outstanding contributions in the development of innovative solutions to preserve heritage. His fieldwork includes work at Terqa in Syria, the Athenian Agora, and the Roman Forum of Trajan. He has also performed an evaluation of damage to the Sphinx in Giza, and acted as field conservator for the preservation of the Laetoli Hominid Trackway Project in Tanzania. He is an adjunct professor at University of Southern California, and regularly lectures at Columbia University and UCLA. He has published widely in the field of conservation, disaster mitigation and response, and on the history of restoration. Podany has developed a series of collaborative conferences, on protecting collections from earthquake damage, in Turkey, Athens, Japan, and Italy. These conferences have resulted in the publication *Advances in the Protection of Museum Collections from Earthquake Damage*.

James M. Reilly is a professor in the School of Photographic Arts and Sciences of Rochester Institute of Technology in Rochester, New York. He is the founder and director of the Image Permanence Institute at RIT, which has been a world leader in preservation research and development since 1985. Under his guidance, IPI has made important contributions to film preservation, environmental assessment, and sustainable preservation practice. He oversaw the creation of the Preservation Environment Monitor datalogger hardware and Climate Notebook software, which were supported by the National Endowment for the Humanities, the Mellon Foundation, and the Institute of Museum and Library Services. He is the author of numerous publications, including *Care and Identification of 19th-Century Photographic Prints*, *IPI Storage Guide for Acetate Film*, and *Storage Guide for Color Photographic Materials*. He is a consultant to many museums and government agencies and is sought after worldwide as a teacher and seminar speaker. He was given a Technical Achievement Award from the Academy of Motion Picture Arts & Sciences in 1998. He was the first winner of the Hewlett-Packard Image Permanence Award from the Society for Imaging Science and Technology in 2007, and was presented the Silver Light Award for Lifetime Achievement from the Association of Moving Image Archivists in 2002.

Cristina Sabbioni, a doctor of physics and a professor of environmental physics at the University of Bologna, is the research director at the Institute of Atmospheric Sciences and Climate within the Consiglio Nazionale delle Ricerche. Her main scientific interests are in material-atmosphere interactions, effects of climate and pollutants on cultural heritage, damage evaluation, and risk assessment. She has presented on these topics at international conferences, and published 180 papers in international scientific reviews. She has been project leader on CNR and EU projects on cultural heritage protection since 1984. She has worked for the European Commission in the organization of the EC Conferences on Science and Technology applied to Cultural Heritage (Bologna 1989, Rome 1991, Rome 1997, Aachen 1998, Santiago 1999, Strasbourg 2000, Krakow 2002, and London 2004) and been chairperson of the Expert Advisory Group of The City of Tomorrow and Cultural Heritage Key Action within the EU's Fifth Framework Program. She has coordinated the Noah's Ark Project on global climate change impact on built heritage and cultural landscapes, one of the success stories of the EU's Sixth Framework Program. She is a member of the editorial boards of *Atmospheric Environment* and *Aerobiologia*.

Carole M. Watson was recently appointed by President Barack Obama as the Acting Chairman of the National Endowment for the Humanities. She will remain acting chairman until the presidential nomination and Senate confirmation of the agency's next chairman. Watson has served the Endowment in a number of leadership roles. Most recently she served as the assistant chairman for partnership and national affairs, where she oversaw liaison with the National Council on the Humanities, the Federal/State Partnership, the President's Committee on the Arts and the Humanities, the National Trust for the Humanities, and other institutions and organizations important to the Endowment. Previously she served as deputy chairman and as interim executive director of the President's Committee on the Arts and the Humanities from February to December 2001. Before joining the NEH Chairman's staff in 1995, Watson directed the Endowment's Division of State Programs (now Federal/State Partnership) and the Office of Outreach. Prior to her tenure at the Endowment, Watson directed intercultural programs at the Lindenwood Colleges in Saint Charles, Missouri, and was founding English department chairman of the Abraham Lincoln Opportunity School in St. Louis, Missouri. Watson is a recipient of Blewett and Ford Foundation fellowships, and in 1991 became a fellow of the Council for Excellence in Government. She received her doctoral degree in American cultural history from George Washington University in Washington, D.C., and her MA degree in English and American literature from St. Louis University. Watson is the author of *Prologue*, a study of the novels written by African-American women between 1859 and 1965.



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