



The UK's Science and Heritage Strategic Research Programme:



Building Capacity, Creating Impact



Non-contact 3D Laser Scanning of a marble statue of Athena. Image (c) Dr Martin Cooper, National Museums Liverpool

Professor May Cassar
Centre for Sustainable Heritage,
University College London



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**Managing Material Change
Symposium**
Institute of Education,
London
December 2007



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**Looking Through the Prism:
Perspectives on Research in the
Arts and Humanities and Heritage
Science**
Tate, London
June 2008



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**Fostering Research Partnerships,
Collaborations and Networks**
Edinburgh Castle
April 2008



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Speed Dating for Research
Joint Science and Heritage
Programme/Institute of Conservation event
University College London
October 2007



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Art of Hard Science
Joint Science and Heritage
Programme/STFC event
Daresbury Laboratory
February 2008



Image (c) STFC, Daresbury Laboratory



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Shaping the Heritage Science Community: Research Clusters Symposium

Aston University and Soho
House, Birmingham
June 2009



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Collaborative Research Studentship Symposium September 2010

Above – Science and Heritage Programme PhD students and supervisors. Right – Post Doctoral Fellows and members of the Programme’s Advisory Panel



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NUMBER OF APPLICANTS TO THE PROGRAMME (FUNDED left AND TOTAL INC. UNFUNDED right)				
	PhDs	Networks	Post-Doctoral Fellowships	Interdisciplinary Projects
Individuals engaged in applications for each call	17/45	31/104	9/37	32/82
Individuals applying to a call more than once (or to more than 1 call)	0/3	4/7	1/1	5/17
New individuals engaging with Programme calls	17/45	27/97	8/36	27/65
Cumulative total of individuals engaging with Programme calls	17/45	44/142	52/178	79/243





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NUMBER OF INSTITUTIONS APPLYING TO THE PROGRAMME

(FUNDED *left* AND TOTAL INC. UNFUNDED *right*)

	PhDs	Networks	Post-Doctoral Fellowships	Interdisciplinary Projects
Institutions with applicants to the Programme	15/36	19/51	8/28	20/35
Institutions with individuals applying to a call more than once (or applying to a previous call)	5/10	4/29	5/6	8/19
New institutions with applicants engaging with the Programme	15/36	14/37	3/6	7/12
Cumulative total of institutions with researchers engaging in the Programme	15/36	29/73	32/79	44/86





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Interdisciplinary Research Projects

PROJECT TITLE	CO INVESTIGATOR INSTITUTIONS	PROJECT PARTNERS (HERITAGE)	PROJECT PARTNERS (INDUSTRY)	OTHER COLLABORATORS & STAKEHOLDERS
The Detection of Archaeological residues using Remote Sensing Techniques (DART) (PI: University of Leeds)	University of Winchester University of Bradford University of Birmingham University of Nottingham	Historic Scotland Institute of Field Archaeologists RCAHMS RCAHMMW Perth and Kinross Heritage Trust	Utsi Electronics Ltd Scott Wilson Ltd Ingegneria dei Sistemi UK Ltd Air Photo Services	Royal Agricultural College, University of Glasgow, British Geological Survey, Rutherford Appleton, University of Exeter, Council for British Archaeology, Ludwig Boltzmann Institute, Porton Down Defence Science and Technology Laboratory, Nottingham Trent University, University of Hull
Collections Demography On Dynamic Evolution of Populations of Objects (PI: University College London)	University College London, University of East Anglia, The National Archives	English Heritage, Library of Congress (USA) Nationaal Archief (Netherlands)		University of Leicester Manchester Museum
Evidence-based Condition-Monitoring Strategy for Preservation of Heritage Iron (PI: Cardiff University)	University of Manchester	English Heritage, Mary Rose Trust, SS Great Britain Trust	Dorothea Restorations Eura Conservation Ltd	Museum of London Centre for Business Relationships, Accountability, Sustainability and Society (BRASS)
PARNASSUS: Ensuring integrity, preserving significance: value based flood resilience for protection of cultural heritage from climate change impact (PI: University of Bath)	University of Bath University of Bristol University of Southampton	The National Trust National Trust for Scotland ICOMOS-ISCARSAH ICOMOS-ISCEAH Historic Scotland	Ecclesiastical Insurance Gifford Eatec Ltd ARC Chartered Architects	BRE Watford UNESCO
Heritage Smells! (PI: University of Strathclyde)	The British Museum UCL The British Library	National Museums Scotland English Heritage National Archives of Scotland	Owlstone Ltd	
The Next Generation of Optical Coherence Tomography (OCT) for Art Conservation - in situ non-invasive imaging of subsurface microstructure of objects (PI: Nottingham Trent University)	The National Gallery University of Southampton	English Heritage	Gooch & Housegow Plc	
Representing Re-Formation: Reconstructing Renaissance Monuments (PI: University of Leicester)	University of Leicester, University of Oxford	Yale University Center for British Art English Heritage		





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Post-Doctoral Fellowship Projects	Supporting Institutions
Accessible Heritage: Remote transcontinental heritage support system	University College London <i>English Heritage</i> <i>Government of the Republic of Benin</i> <i>UNESCO World Heritage Centre, Paris</i>
From structural change to perceived damage: Appropriate environmental conditions for parchment	The National Archives <i>University of Cardiff</i>
Advancing and communicating synchrotron techniques for heritage metal conservation	University of Warwick <i>Universiteit Gent (Belgium)</i> <i>Mary Rose Trust</i> <i>STFC Daresbury Laboratory</i>
Change or damage? Effect of climate on decorative furniture surfaces in historic properties	University College London <i>English Heritage</i>
Cultural objects worked in skeletal hard tissue	University of Bradford <i>University of Manchester</i> <i>Hull Museums and Art Gallery</i> <i>Horniman Museum</i> <i>Ken Hawley Collection Trust, University of Sheffield</i> <i>York Archaeological Trust</i>
Salts and synthetic coatings on wall paintings: characterizing their transformation, interaction and contribution to deterioration	Courtauld Institute of Art <i>English Heritage</i> <i>Mehrangarh Museum Trust, Jodhpur (India)</i>
Advancing heritage science with spectroscopic imaging	Imperial College London <i>The National Gallery</i> <i>British Museum</i>
Seeing through walls: discovering Europe's hidden mural paintings	University of Reading <i>Institut Lumière Extrême (France)</i> <i>Centre de Recherche et de Restauration des Musées de France</i>
Interpreting the surface: the application of surface science to the artists' acrylic emulsion paint films	University of Manchester <i>Getty Conservation Institute</i> <i>Tate</i>





Creating Impact



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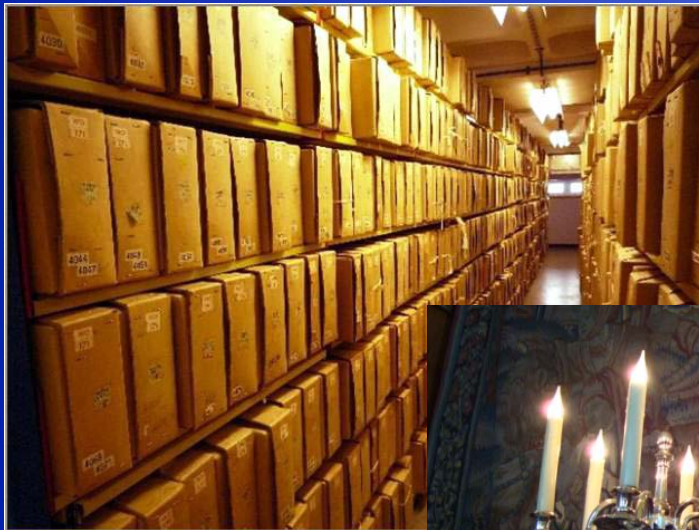
Research Clusters



EGOR: Environmental Guidelines: Opportunities and Risks

The National Archives

Award holder – Nancy Bell



All images (c) Dr Matija Strlic, Centre for Sustainable Heritage, UCL.



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Collaborative Research Studentships (PhDs)



The Lifetime of Colour Photographs in Mixed Archival Collections

Centre for Sustainable Heritage, UCL/ The National Archives

Award holder - Dr Matija Strlic; Student - Ann Fenech



Above: CRS student Ann Fenech discusses her project with EU Commissioner Marie Gaughan-Quinn during the Commissioner's recent visit to UCL. Centre (top): Samples prepared for accelerated degradation. Centre (bottom): Rapid non-destructive characterisation of colour photographs using Near Infrared Spectroscopy (NIR). Far right: Ann Fenech (left) and Ana Martins (right; Museum of Modern Art, New York) working on a non-destructive method for dating photographic materials using Near infrared Spectroscopy. Images: Centre for Sustainable Heritage, UCL; Ann Fenech; Dr Matija Strlic, UCL



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Collaborative Research Studentships (PhDs)

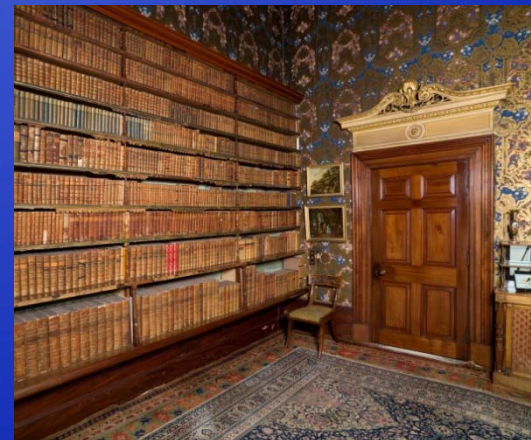
Preparing Historic Collections for Climate Change

University of East Anglia/English Heritage

Award holder – Prof. Peter Brimblecombe; Student – Paul Lankester



Top: English Heritage-owned Brodsworth Hall, South Yorkshire. Image © P. Lankester. Right: The library at Brodsworth Hall, where future damage has been predicted. Image © English Heritage. Left: The Cartoon Gallery at Knole, a National Trust property in Kent. Image © The National Trust.



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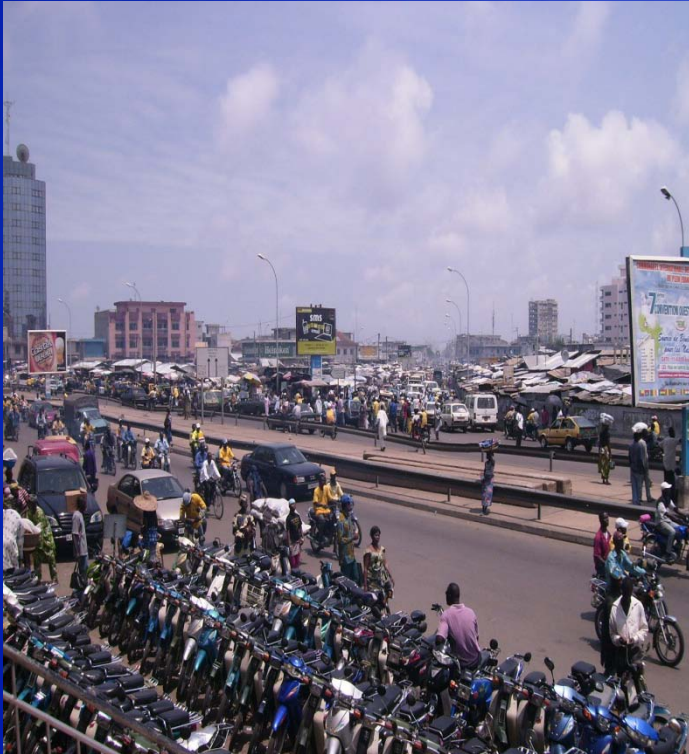


Creating Impact

Post Doctoral Fellowships



ACCESSIBLE HERITAGE - Remote trans-continental heritage support system
Centre for Sustainable Heritage, UCL. Award holder - Dr Henoc Agbota



Cotonou, the economical capital of Benin, West Africa. No study has been conducted so far to provide quantitative evidence of the impact of pollution on heritage assets. Right: deployment site; Palace of King Glele (top) one of the twelve palaces of the World Heritage site of Abomey and Apsley House, London (bottom) constantly exposed to traffic-generated pollution. Credits: H. Agbota; J. Baxter; M. Strlic



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Interdisciplinary Research Projects

PARNASSUS: Ensuring integrity, preserving significance: value based flood resilience for protection of cultural heritage from climate change impact

University of Bath. Award holder - Dr Dina D'Ayala



LISFLOOD-FP model using LiDAR data at 2m resolution. Image © Paul Bates, University of Bristol.



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