ERIC F. DOEHNE

Education

Ph.D. in Geology, 1994, University of California, Davis

M.S. in Geology, 1987, University of California, Davis

B.S. in Geology, 1984, Haverford College, Haverford, Pennsylvania

Areas of Expertise & Research Interests

Stone Conservation, Weathering and Change

- Weathering of stone, formation of patinas, and stone conservation
- Salinization, climate change and salt weathering
- World Heritage sites as an metric for adaptation to climate change

Art Conservation, Art Forensics, Materials Science, History of Technology

- Scientific Methods for Authentication of Art; Connecting Forgery, Looting and Tourism
- Science for Preservation: Art, Architecture, Archaeology, and Archives
- Science and history of pigments, glass, ceramics and stone
- Coral Red, Han Purple, Cochineal and Maya Blue

Computational & Analytical Imaging, Measuring Change, Electron Microscopy

- ESEM-EDS, FIB, EPMA, PLM, Hyperspectral and Time-Lapse Methods
- Low-cost techniques to measure changes to historic materials (3D, RTI)
- Measuring change in world heritage using crowd sourcing

Contact Information

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www.ConservationSciences.org
http://www.ScrippsCollege.edu/eric-doehne
Interdisciplinary Courses in Art Conservation

Social Media and Dissemination
Profiles on Mendeley and Zotero
Public groups on Mendeley

Eric's profile at ResearchGate.net, Google Scholar, Academia.edu, and LinkedIn

Experience

Principal Consultant and Expert Witness: Conservation Sciences, Pasadena, California, May 2010 to Present. Materials science applied to art, archaeology, architecture and archives. Current clients include the Alamo, San Antonio, TX, The Getty Conservation Institute, English Heritage and Occidental College.

O'Brien Distinguished Visiting Professor and Lecturer, Art Conservation Department at Scripps College, Claremont, CA, January 2011 to Present: ARCN 101 Intro to Art Conservation; ARCN 110 Artist Materials, Ancient and Modern, ARCN 115-Art and Crime: Plunder, Fakes & Forensics, ARCN 120-Global Tourism and Preservation Technology, ARCN 125 Preserving Cultural Landscapes.

International Chair for Cultural Heritage Conservation, 2012: PATRIMA: « L'avenir d'un patrimoine vulnérable : détecter, évaluer, prévoir » *(The future of a vulnerable heritage: identify, assess, plan)*. *University Cergy Pontoise*. Invited by the *Foundation for Cultural Heritage Science* to participate in a new teaching and research program with the Louvre, Versailles, and universities.

Scientist, The Getty Conservation Institute, The Getty Center, Los Angeles July 1988 to April 2010. Conservation scientist and project manager responsible for research, teaching and fieldwork in the area of inorganic materials conservation, such as stone, glass, pigments and ceramics, as well as analytical support for the J. Paul Getty Museum. *Project Manager and PI:* The Getty Kouros Project, Marble Weathering Project: Collaborations with Stanley V. Margolis, Norman Herz, Don DePaolo, Vincent Barbin and Antony Kozelj on ancient quarry surfaces, patinas and the development of oxalate and calcite crusts, and formation of microtravertine layers. Microanalysis Lab Manager: ESEM-EDS, EPMA, PLM, & RTI. Project work included: Desalination (EC), Magnesian Limestone (EH), Salt Research, Great Sphinx, Maya Initiative, Values of Heritage, First Photo, Poultice Workshop, Laetoli Footprints Porous Calcareous Materials, Tomb of Nefertari, Analytical Imaging, Athenian Pottery Project.

Lecturer for Luxor Field Course, USAID-American Research Center in Egypt (ARCE). January 2010. Field training of conservation technicians - analysis and treatment of damage at Karnak Temple.

Lecturer for *The International Centre for the Study of the Preservation and Restoration of Cultural Property* in Rome (ICCROM–UNESCO). Venice Stone Conservation Course, May 2009 Weathering and Treatment.

Selected Publications

Stone Conservation: An Overview of Current Research, 2nd Edition *(book cited by 286),* **Eric Doehne** & Clifford Price, 2010, The Getty Conservation Institute, Los Angeles, CA, November 2010. PDF.

Marcello Manfredi, Greg Bearman, Greg Williamson, Dale Kronkright, **Eric Doehne**, Megan Jacobs, Emilio Marengo, 2014, *A new quantitative method for the non-invasive documentation of morphological damage in paintings using RTI surface normals*, *Sensors (Basel, Switzerland)*, 14(7), 12271-12284. Link.

E. Doehne 1994, Weathering of dolomite marble from Thasos, Greece, Advisors: Stanley Margolis, Jeffrey Mount. Dissertation, Geology Department, University of California, Davis. 224 p. Link.

Greg Bearman, **Eric Doehne**, Luther Beegle, William Hug, Ray Reid, Rohit Bhartia, 2013, *Remote Detection of Biofilms on Stone. In* Built Heritage 2013 - Monitoring Conservation Management. Edited by: Lucia Toniolo and Maurizio Boriani. The Center for the Conservation and Promotion of Cultural Heritage Milan: Politecnico di Milano. Link.

Salt weathering: Influence of evaporation rate, supersaturation and crystallization pattern (cited by 323), Rodriguez-Navarro, C. & **Doehne, E.** 1999 *Earth Surface Processes and Landforms* 24(2-3), 191-209.