= Getty Conservation Institute =

The Getty Conservation Institute (GCI) , located in Los Angeles , California , is a program of the J. Paul Getty Trust . It is headquartered at the Getty Center but also has facilities at the Getty Villa , and commenced operation in 1985 . The GCI is a private international research institution dedicated to advancing conservation practice through the creation and delivery of knowledge . It " serves the conservation community through scientific research , education and training , model field projects , and the dissemination of the results of both its own work and the work of others in the field " and " adheres to the principles that guide the work of the Getty Trust : service , philanthropy , teaching , and access . " GCI has activities in both art conservation and architectural conservation .

GCI conducts scientific research related to art conservation . It offers formal education and training programs , and it published a number of scholarly books . GCI has supported field projects around the world to preserve cultural heritage .

= = Scientific projects = =

GCI scientists study the deterioration of objects and buildings , and how to prevent or stop such deterioration . One of many projects in this area involved the effect of outdoor and indoor air pollutants on museum collections . Another project analyzed the cause of deterioration of the sandstone in the original National Capitol Columns now at the United States National Arboretum . In addition , GCI " conducts scientific research on materials ' composition . " For example , a project on the conservation of photographs has as one of its objectives the creation of an " Atlas of Analytical Signatures of Photographic Processes " which will provide " a precise chemical fingerprint of all the 150 or so ways pictures have been developed . " As a part of that project , Getty scientists once examined the world 's first photograph from nature by Nicéphore Niépce . Using X @-@ ray fluorescence spectroscopy , reflectance Fourier transform infrared spectroscopy , and other techniques during the 2002 @-@ 2003 project , they found (for example) that bitumen of Judea was present in the image .

Scientists at GCI viewed the CheMin instrument aboard the Curiosity rover , currently exploring the Gale crater on Mars , as a potentially valuable means to examine ancient works of art without damaging them . Until recently , only a few instruments were available to determine the composition without cutting out physical samples large enough to potentially damage the artifacts . The CheMin on Curiosity directs a beam of X @-@ rays at particles as small as 400 μm and reads the radiation scattered back to determine the composition of an object in minutes . Engineers created a smaller , portable version , named the X @-@ Duetto . Fitting into a few briefcase @-@ sized boxes , it can examine objects on site , while preserving their physical integrity . It is now being used by Getty scientists to analyze a large collection of museum antiques and the Roman ruins of Herculaneum , Italy .

= = Education and training = =

Training of interested parties around the world is important for the sustainability of GCI 's work . For example , GCI collaborated with other organizations to create a course " to assist museum personnel in safeguarding their collections from the effects of natural and human @-@ made emergencies . " Also , GCI developed a course on the " Fundamentals of the Conservation of Photographs " which is now taught in eastern Europe by the Academy of Fine Arts and Design in Bratislava and the Slovak National Library . Besides courses and workshops , GCI has also been involved with long @-@ term education programs , such as establishing a Master 's degree program in Archaeological and Ethnographic Conservation in collaboration with the University of California , Los Angeles .

= = Field projects = =

GCI 's field projects are " selected based on how they fit the institute 's goals of raising public awareness, contributing new, broadly applicable information to the field, and supporting cultural heritage " and " must be executed in collaboration with partners? who must be serious about their efforts? so that projects are assured of continuing after the Getty 's involvement ceases. " Among other completed GCI field projects were efforts to preserve the Mogao Caves and Yungang Grottoes in China (announced in 1989); to restore prehistoric rock paintings of Sierra de San Francisco in Baja California Sur (1994); and to protect ancient buildings and archaeological sites in Iraq following the start of the Iraq war (2004).

= = Dissemination of information = =

It has been stated that " perhaps the institute 's most profound contribution to conservation is the dissemination of information and methods learned in the field . " Methods of information dissemination include conferences; lectures; books; and online publications, newsletters, video, and audio.

The following are selected books published by GCI:

Ward, Philip R. The nature of conservation: a race against time. Marina del Rey, CA: Getty Conservation Institute, 1986. ISBN 0 @-@ 941103 @-@ 00 @-@ 5

The conservation of tapestries and embroideries : proceedings of meetings at the Institut royal du patrimoine artistique , Brussels , Belgium , September 21 ? 24 , 1987 . Los Angeles : Getty Conservation Institute , 1989 . ISBN 0 @-@ 89236 @-@ 154 @-@ 9

Cather , Sharon . The conservation of wall paintings : proceedings of a symposium organized by the Courtauld Institute of Art and the Getty Conservation Institute , London , July 13 ? 16 , 1987 . Marina del Rey , CA : Getty Conservation Institute , 1991 . ISBN 0 @-@ 89236 @-@ 162 @-@ X Beley , Ennis , and Jeffrey Levin . Picture LA : landmarks of a new generation . Marina del Rey , CA : Getty Conservation Institute , 1994 . ISBN 0 @-@ 89236 @-@ 305 @-@ 3

Klein , Kathryn . The unbroken thread : conserving the textile traditions of Oaxaca . Los Angeles : Getty Conservation Institute , 1997 . ISBN 0 @-@ 89236 @-@ 380 @-@ 0

Corzo , Miguel Angel . Mortality immortality ? : the legacy of 20th @-@ century art . Los Angeles : Getty Conservation Institute , 1999 . ISBN 0 @-@ 89236 @-@ 528 @-@ 5

Dorge, Valerie, and Sharon L. Jones. Building an emergency plan: a guide for museums and other cultural institutions. Los Angeles: Getty Conservation Institute, 1999. ISBN 0892365293

Lavédrine , Bertrand , Jean @-@ Paul Gandolfo , and Sibylle Monod . A guide to the preventive conservation of photograph collections . Los Angeles : Getty Conservation Institute , 2003 . ISBN 0 @-@ 89236 @-@ 701 @-@ 6

Schweidler , Max , and Roy L Perkinson . The restoration of engravings , drawings , books , and other works on paper . Los Angeles : Getty Conservation Institute , 2006 . ISBN 0 @-@ 89236 @-@ 835 @-@ 7

Rainer , Leslie and Angelyn Bass Rivera editors . The Conservation of Decorated Surfaces on Earthen Architecture . Los Angeles : Getty Conservation Institute , 2006 . ISBN 978 @-@ 0 @-@ 89236 @-@ 850 @-@ 1

Caneva , Giulia , Maria Pia Nugari , and Ornella Salvadori . Plant Biology for Cultural Heritage : Biodeterioration and Conservation . Los Angeles : Getty Conservation Institute , 2009 . ISBN 978 @-@ 0 @-@ 89236 @-@ 939 @-@ 3

Here is a selection of courses by GCI:

ARIS (International Course on Architectural Records, Inventories and Information Systems for Conservation)

= = Senior staff = =

Since GCI was established, it has had three directors. Besides the director, the GCI senior staff includes:

Associate Director, Programs: Jeanne Marie Teutonico

Associate Director, Administration: Kathleen Gaines

Chief Scientist : Giacomo Chiari Head of Education : Kathleen Dardes Head of Field Projects : Susan Macdonald

In 2009, GCI had a \$ 33 million budget, down from \$ 41 million in 2008.

= = Getty conservation activities outside GCI = =

In addition to the work of the GCI , the J. Paul Getty Trust contributes to the conservation field through the J. Paul Getty Museum conservation departments , the conservation collection located in the library at the Getty Research Institute , and conservation grants provided by the Getty Foundation .