

*Nicholas Dorman*

Dear WAAC members,

In time-honored tradition, I would like to commence this newsletter with very best of new year wishes to the WAAC membership from me and from everyone on the board, and I would also like to say how appreciative I am to find myself elected to serve the WAAC membership as president for the coming year.

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Dan Cull's shoes are big ones to fill. He steered WAAC through the choppy waters of the tail end of the recession, masterminded WAAC's Facebook and Wikipedia presence, and topped off his presidency with the crowning achievement of organizing (from a distance) a superb meeting in Palm Springs. The meeting was a classic and classy WAAC meeting with great company, a wide range of scintillating presentations, and a jaw-dropping location. This was my first time in Palm Springs, and the ride out to Indian Canyons on the old hotel bike (complete with sightings of a roadrunner, black widow eating a mummified cricket, ravens, quail, and jack rabbits) and a short but beautiful last day hike in Joshua Tree National Park were memorable experiences.

The Palm Springs conference was unusual in one respect, Dan had chosen to time the meeting to coincide with the WMA annual meeting, so there was a nice degree of crossover with sightings of familiar non-conservator faces around town and a shared banquet at the Palm Springs Art Museum on the last evening.

I won't dwell, here, on the talks themselves, since an account of the meeting will appear elsewhere in these pages, and some presentations will appear in more expanded versions in this and subsequent newsletters, but I do want to commend Dan on a very well balanced program. There were fascinating papers by conservators in private practice and from institutions. I also want to mention the impressive showing made by the students, faculty, and graduates of the UCLA/Getty conservation program. It is great to have a fine program in our region, and their delegates made a substantial contribution to an immensely enjoyable schedule.

It isn't just my first term in a new WAAC board position; there are a number of other board changes to report. As Dan mentioned in September, we bade farewell to Molly Gleeson and Sean Charette, who did great work as Members at Large, managing, among other things, the recent member survey. Our election this summer brought new and familiar faces onto the 2013 board. I am very pleased indeed to report that the incoming Vice President is Katherine Holbrow, Chief Conservator at the San Francisco Asian Art Museum and new MALs are Susanne Friend and Elizabeth Homberger. It was gratifying to end up with such a strong slate of candidates and much of the credit for that must go to Susi Friend and Claire Dean, who served as my nominating team.

The process of scouring the members' directory in search of candidates to stand in the election is a subject that appears time and again in these pages and in board minutes. Yet, challenging as it may be, I came through the process even more firmly convinced of what a remarkable organization WAAC is and even more impressed by those who give so much to make the organization great.

Everyone is busy, so I want to express my sincere thanks to each of you who, despite hectic schedules, stood for board positions and to each of you who took the time to vote. I urge you to help smooth Katie's process next summer. If any of you are interested in joining the board, please let me or Katie know now. If you have an idea of a great candidate, please let us know. Finally, if you are in a senior position in an institution, after you put your own name forward, please encourage members of your team to stand. And if we don't get names by next June,

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## President's letter, continued

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just remember, you can run but you can't hide from the membership directory or the nominating committee.

In addition to the newly elected positions, there are some other board changes to report. Ozge Gencay Ustun is stepping down from serving as treasurer, and we are extremely grateful to her for her generous service on the board. Chris Stavroudis will take over this position. We are also sorry to bid farewell to Cristel Pesme. Cristel has been serving as a Member at Large, and she and Albrecht will soon be moving to beautiful Basel. However, following WAAC policy, we have the pleasure of welcoming back Sean Charette, outgoing MAL, to fill out Cristel's term.

I will have been working here in the West for twelve years in May. I still feel like a newcomer in many respects but throughout my time here, WAAC has been a perennial source of support and stimulation so I am delighted to announce that we will host the 2013 WAAC Annual Meeting at the Seattle Art Museum between September 17 and September 20. We are hosting the meeting a little earlier than last year to maximize our chances of decent weather but whatever the weather, you will have the chance to enjoy a great meeting in a great city. (Do bring an anorak just in case!)

The Seattle Art Museum is located in the heart of the city and attendees will also enjoy the museum's Olympic Sculpture Park and Seattle Asian Art Museum. Recently opened cultural venues include the new Museum of History and Industry and the new Chihuly museum at Seattle Center. We also have the best oysters, some fantastic fish, grunge, forests, water and mountains galore, and you might even be able to catch a decent game of soccer. We hope to see you here!

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## Regional News

*Katherine Holbrow,  
column editor*

### Alaska

The Arctic Studies Center and Anchorage Museum are co-hosting a workshop on salmon skin processing and sewing, bringing together traditional Alaska Native fish skin sewers and conservators. Artists Audrey Armstrong, Coral Chernoff, and Marlene Nielsen will work with conservators **Kelly McHugh, Sara Owens, Ellen Promise, and Monica Shah**. In addition, conservation students from UCLA/Getty and Winterthur will have the chance to ask these traditional skin sewers questions through video-conferencing.



**Ellen Carrlee** assisted the University of Alaska Fairbanks Museum of the North with condition surveys on the Alaska native basketry collection and archaeological organics while studying anthropology for the semester. She was on an academic leave of absence from the Alaska State Museum, where 500 wet shipwreck artifacts await her return.

WAAC welcomes Maisie Elise Bidwell, born December 18, 2012, weighing 7 pounds 2 ounces, to Member at Large Pam Skiles and her husband Geoff Bidwell.

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## Volume 35 Number 1 WAAC Newsletter

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Carolyn Tallent

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Katherine Holbrow

### HEALTH & SAFETY

Chris Stavroudis

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Susanne Friend

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### Internet

Articles and most columns from past issues of WAAC Newsletter are available on-line at the WAAC website, a part of CoOL (Conservation OnLine) <http://cool.conservations-us.org/waac/>.

### Deadline

Contributions for the May Newsletter should be received by the Editor before **April 2, 2013**.

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# Western Association for Art Conservation

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**The Western Association for Art Conservation** (formerly, the Western Association of Art Conservators), also known as **WAAC**, was founded in 1974 to bring together conservators practicing in the western United States to exchange ideas, information, and regional news, and to discuss national and international matters of common interest.

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Change of Address

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## Regional News, continued

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**Scott Carrlee** has been working on a large trove of artifacts recovered from a 1901 shipwreck near Juneau. A previous salvage attempt sent part of the ship to deeper waters where it lay undisturbed until the restart of recovery operations this past summer. The current salvage operation has brought almost 500 artifacts to the surface in remarkably good condition. Artifacts of metal, wood, ceramic, rubber, and textile are now being processed and treated in the Alaska State Museum conservation lab.

*Regional Reporter:*

Ellen Carrlee

## **Arizona**

**Nancy Odegaard** attended an advisory council meeting of the Iraqi Institute of Conservation of Antiquities and Heritage (IICAH) in Erbil, Kurdistan, Iraq in October and presented on the project at the WAAC meeting. She also presented in a panel discussion on NAGPRA for the new University of Arizona (UA) president, administrators, and US Congressman Grijalva.

**Teresa Moreno** attended an Image Permanence Institute workshop at the Newberry Library in Chicago on *Sustainable Preservation Practices for Managing Museum Collections*. Teresa is working together with ASM curators to prioritize collections storage and preservation needs for the next coming years. Teresa has just completed processing a loan of Navajo textiles which are on loan to the De Nieuwe Kerk museum in Amsterdam and is working on several other loans for other institutions. As well she is continuing work on her dissertation research and recently attended the American Indian Marketplace at the Autry National Center.

Nancy and Teresa are working together with UA Planning Design and Construction overseeing the construction renovation of a new climate controlled storage vault to house the museum's archaeological and ethnological basketry collection, designated under the Save America's Treasures program as a national treasure.

**Marilen Pool** is the project conservator and has developed a database for the conservation survey. Heritage conservation science students **Elyse Canosa** and

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## Correction to 34/3 Newsletter pending

pHuck the pH Meter Redux

In the September 2012 issue of the *Newsletter* I wrote about the difficulties in measuring the pH of Pemulen TR-2 gels and gave revised recipes for the 2x working concentration gels that can be used with the MCP components.

The recipe given for the pH 6.5 gel is correct. The recipe for the 8.5 is quite wrong - it seems to come out with a pH around 11 - 11.5. (I suspect I doubled the amount of the 10% NaOH or the triethanolamine - or both - by mistake when I made my notes.)

As I have not had time to figure out what I did wrong, the correct formulae for Pemulen TR-2 gels will appear in the May 2013 *Newsletter*.

It is WAAC policy that all 2012 members receive the January 2013 issue, but to receive the May issue with the corrections, you must renew your membership. (I promise it is only a co-incidence that I have resumed the position of WAAC Treasurer.)

Chris Stavroudis



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## Regional News, continued

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**Brunella Santarelli** are assisting her with analysis and data entry.

Elyse, Nancy, and **Dave Smith** are working on a headspace solid phase microextraction (SPME) project to identify tobacco residues in American Indian pipes. Brunella is also working on early lead glaze detection and characterization in Basket Maker pottery using several analytical techniques.

**Werner Zimmt** is developing an apparatus that uses magnetism as a characterization measurement.

New heritage conservation science student **Jae Anderson** is developing standards for an arsenic removal project (NCPTT funded) and American Indian studies graduate student **Martina Dawley** is conducting a pXRF survey of the ASM Navajo textile collection to identify the extent and distribution of arsenic in the collection and assist in selection of specimens suitable for removal studies. The ASM lab hosted a two day Navajo textile analysis workshop with Dr. Ann Hedlund. **Gloria Giffords** lectured at the ASM on her earlier research with Talavera pottery from Mexico. Nancy, Brunella, and **Gina Watkinson** continue to work on several large repatriation projects.

We are thrilled to welcome conservator **Jae Gutierrez** who joins the staff at the Center for Creative Photography at the UA in October.

Marilen continues to work part-time as project conservator on the Save Americas Treasures Basketry Project at the Arizona State Museum, currently in the middle of surveying the Southwest Ethnographic basketry collections. In her private practice, Marilen is working on a variety of ceramics and Mexican lacquerware and is consulting on a storage upgrade project for the Tucson Museum of Art.

Work continues apace on the 20% expansion at the Musical Instrument Museum (MIM), where the temporary exhibit *Portraits from the Golden Age of Jazz: Photographs by William Gottlieb*, recently opened. This exhibit of loaned photographs is illustrated by a selection of instruments from MIM's collections. As well as prepping the instruments for

this temporary exhibit the lab has been busy with a lot of other projects. As the only conservator on staff, **Daniel Cull**, worked on the more complex, difficult, or time sensitive treatments, such as the c. 1590 Belchior Dias Guitar, made in Lisbon, Portugal, thought to be the second oldest guitar in existence, and a 1960s beaded ivory gown worn by Ella Fitzgerald and made by Don Loper Boutique, of Beverly Hills, CA.

Daniel also processed incoming loans, including Pablo Casals' 1843 cello made by Jean-Baptiste Vuillaume, a stage costume worn by Roger Daltrey, made by the Skin Room, a selection of sound making objects from the Kronos Quartet, Janis Joplin's "Hummingbird" Guitar, and the Vestax QFO turntable co-designed, used, and autographed by DJ Qbert. To mark the 100<sup>th</sup> birthday of John Cage, Daniel co-organized and took part in a performance of Cage's masterpiece 4'33" in the MIM Theater.

Other members of the MIM collections team were equally busy. **Jill Crane**, laboratory assistant, oversaw the IPM for the museum and the low temperature treatments of incoming objects. Jill also supervised the cleaning of objects in the galleries, where most objects are on open display. Jill recently also treated an 1858-1860 James Ashborn style 3 guitar and a 1931 balalaika shaped guitar made by Bernard Fritsch.

**Steve Hinders**, lab assistant/collections technician, assisted with the cleaning of objects on exhibit and conducted simple treatments when needed. **Troy Sharp**, collections technician, recently completed the treatment of a 1950s "quad" lap steel made by Fender and a selection of pre-Columbian flutes, panpipes, and vessel whistles. **Frank Gonzales**, collections technician, completed the treatment of several zithers and a Bandura made by Herasymenka Vasil at the Trembita Musical Instrument Factory.

**Cristina Caballero**, collections technician, treated a late 19th-century zither from Sweden and assisted with the conservation installation work for the *Golden Age of Jazz* exhibit.

**Rose Cull** has been researching the pres-

ervation of digital audio files and recently published "The Preservation and Conservation of Electronic Music: Beats, Bits, and Bytes" *AIC News* (November, 2012), 37:6. She had a great time at the WAAC annual meeting in Palm Springs.

**Martha Winslow Grimm**, textile/costume conservator, is once again organizing an Angels project for Costume Society of America. The May 28, 2013 event will be at the Boulder City/Hoover Dam Museum located just outside of Las Vegas, NV. The museum is on the second floor of a hotel, and the Angels have been invited to stay at the hotel and have their own "Night at the Museum." All members of CSA are invited to participate.

**Dana Senge** worked with Martha on a project to survey, rehouse, and treat historic textile collections in the National Park Service storage repository in Tucson. Dana, **Maggie Kipling**, and **Audrey Harrison** are treating historic metals from Little Bighorn Battlefield National Monument and Fort Bowie National Historic Site. Maggie created new custom exhibit mounts for prehistoric items made of plant materials at Mesa Verde National Park. The lab welcomes pre-program intern **Bailey Kinsky** who has begun rehousing historic hats from Chiricahua National Monument.

**Brynn Bender** worked on preparing a document to help national parks plan for the evacuation of museum collections in emergency situations. This work was encouraged after the last year's wildfire season. She also contributed to revisions in the NPS Museum Handbook and thoroughly enjoyed maternity leave this summer.

*Regional Reporter:*  
Brynn Bender

## Hawaii

**Dawne Steele Pullman** is back in China working on collections of contemporary Chinese art and attending the Taipei Art Fair.

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## Regional News, continued

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**Kent Severson** started work at Doris Duke's Shangri La in late March. Working with curator Keelan Overton and the rest of the Shangri La team, the Damascus Room was opened to the public for the first time in early July. For the past five years, the decorated walls and ceilings were the subject of a Winterthur intern examination and treatment program; this year marked the start of annual inspection and maintenance.

Objects for the traveling exhibition *Doris Duke's Shangri La: Architecture, Landscape, and Islamic Art* were prepared with the help of two pre-program interns: **Liane Ikemoto** and **Kat Harada**, and the show had a successful opening at New York's Museum of Art and Design in early September. Kent also traveled to Turkey for two months to participate in New York University's archaeological project at Aphrodisias.

On his way out and on his way back he stopped to inspect ongoing work on the openwork marble screens (known as *jali*) that formed a pavilion on the roof of Doris Duke's bedroom. The marbles were set in concrete surrounds in the 1930s and the entire assemblage was taken down in 2010 to repair the roof. In so doing, much of the concrete was destroyed and old repairs came apart. After three weeks of preparation work in May, the panels were shipped to Spectra, Inc., in Pomona, California for repair and re-fabrication of new cast concrete surrounds. All of the pieces have returned to Hawaii and reassembly has begun.

Shangri La was closed to the public in September for maintenance. The conservation team, together with collections technician **Bethany Barrister-Andrews** and historic housekeeper **Napua Germano**, used that time to vacuum all textiles in the public rooms of the house, including furniture, carpets, and objects on the walls, clean the chandeliers in the Dining Room, and clean lots and lots of tiles embedded in the walls.

*Regional Reporter:*  
D. Thor Minnick

### Los Angeles

Conservators at LACMA were busy last fall preparing artworks for several exhibitions including *Drawing Surrealism*; *Ken Price*; *Bodies and Shadows: Caravaggio and His Legacy*; and *Stanley Kubrick*.

**Joe Fronek** and Elma O'Donoghue traveled to France last October to deinstall the *Caravaggio* exhibition, which was shown at two venues in Montpellier and Toulouse. **Susan Schmalz** went to Paris in November to install *Fashioning Fashion* at the Musée des Arts Décoratifs, and **Natasha Cochran** and **Siska Genbrugge** went to the Museo de Arte Moderno in Mexico City in September to install *Women in Wonderland: the Surrealist Adventures of Women Artists in Mexico and the United States*.

**Elma** will travel to the National Museum of Korea in Seoul this January to install *Art Across America*, an exhibition organized jointly by LACMA, the Philadelphia Museum of Art, the Houston MFA, and the Terra Foundation. Third-year paintings intern **Morgan Hayes** is busy with the restoration of a portrait by 17<sup>th</sup>-century painter Ferdinand Bol.

The Paper Conservation Department is excited to have Erin Jue back as an assistant paper conservator.

Last autumn **Terry Schaeffer** retired from the position of Chemical Hygiene Officer. She will continue to collaborate with the conservation scientists and conservators on research projects. **Allison Akbaroff** has joined the Conservation Center as the new Chemical Hygiene Officer.

**Chetan Suryawanshi's** Mellon Postdoctoral Research Fellowship ended in November, and he will be returning to India.

2012 brought many changes for **Chail Norton**. After 15 years in paper conservation Chail has left LACMA to be home with her infant twin boys, and has moved back to Santa Barbara. Chail hopes that in 2013 there will be the opportunity to connect with the art world in Santa Barbara and continue conserving.

**Israel Campos** left LACMA's Watts Towers conservation team to continue his education. **Christina Fisher** and

**Mariana Ruiz** joined the Watts team in August as research assistants.

**Tania Collas** and **Liz Homberger** are about to embark on the conservation of California Mission Period artifacts selected for the Natural History Museum's new permanent exhibit on the history of Los Angeles, opening in July, 2013. For the same exhibit, **Lalena Vellanoweth** is conserving the iconic "Little Tramp" costume worn by Charlie Chaplin in the movie, *City Lights*.

In the Decorative Arts and Sculpture Conservation lab at the Getty Museum, graduate intern **Jan Dorscheid** arrived from the University of Applied Science Potsdam with a degree in the conservation of wooden artifacts. Jan is concentrating this year on technical studies of French Rococo furniture.

**Brian Considine** is serving on the US Indemnity Panel for International Exhibitions for which he travels to Washington D.C. twice a year.

**Arlen Heginbotham** was a co-instructor for a workshop held at the Getty entitled Recent Advances in the Characterization of Asian Lacquer, along with **Michael Schilling** of the GCI, and **Nanke Schellmann** of the Academy of Fine Arts Vienna. The one week, hands-on course covered sampling techniques, cross section staining methods, and py-GC/MS analysis of Asian lacquer materials. The participants included 9 paired scientist/conservator teams from 6 countries.

**Julie Wolfe** is starting a pilot research project to test different commercial and home-made rust removers for in-situ cleaning of outdoor stainless steel. The work is related to the maintenance of the Getty's outdoor sculpture collection. The effectiveness of the products and repassivation on stainless steel alloy ASTM 304 will be evaluated using voltammetry. The work is in collaboration with scientist and electrochemist **Virginia Costa**.

*Regional Reporter:*

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## Regional News, continued

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### New Mexico

**Keith Bakker** is working on a CAP survey for the Anderson-Abruzzo International Balloon Museum in Albuquerque and would like to speak with curators who have considered environmental standards, particularly light levels, for modern manufactured materials.

**Conservation Solutions** recently opened an office in Ottawa, Canada, and has added four team members to their overall operations. Recently completed projects include ironwork at Marshall Gold cemetery, Coloma, CA; sculptures and architectural elements at Vizcaya Museum and Gardens, Miami, FL; bronze at the west façade of the US Supreme Court and Federal Reserve Building, Washington, DC; granite and bronze at the Soldiers & Sailors Monument, Watertown, NY; marble at Mexican War Memorial, Pennsylvania State Capitol, Harrisburg; zinc and granite at the Defender's Monument, New Ulm, MN.

Currently ongoing projects include materials consulting, Menokin Glass House Project, Warsaw, VA; conservation of marble statues, I. Miller Building, 1552 Broadway, New York, NY; conservation implementation and oversight, exterior envelope restoration of the House of Parliament, Ottawa, Canada; ceiling conservation at the Scottish Rite Temple, Washington DC; condition assessment, Atlantis Orbiter, Kennedy Space Center, Cape Canaveral, FL; restoration of earthquake damage, Blair-Lee Houses, Washington, DC; conservation oversight, Clara Barton House, Washington, DC; and conservation treatment on monuments and markers at Veterans Administration cemeteries nationwide.

*Small Museum Pro!*, the online professional certification program for professionals working in small museums, started by **M. Susan Barger**, PhD, and Museum Development Associates, was transferred to the American Association of State and Local History on January 1, 2013. This program was designed for those working in small museums who needed more professional development opportunities than could be had through a series of workshops and for whom a museum studies degree was not an option. Started in 2009 to fill a need for professional development for workers in

small museums in New Mexico, it was never imagined that the program would quickly reach all over the United States, Canada and beyond.

**Silvia Marinas-Feliner** and a group of ten students from the Museum Conservation Program of NMSU recently restored the bronze sculpture *The Traders*. Located on the College of Business plaza on the New Mexico State University campus and created in 1988 by Duke Sundt, a fine arts graduate student of NMSU. The sculpture depicts trade in New Mexico circa 1850. This was the first time any conservation treatment had been done to *The Traders* and follows 24 years of outdoor exposure.

*Regional Reporter:*  
Silvia Marinas-Feliner

### Pacific Northwest

During October and November **J. Claire Dean**, assisted by conservators **Deborah Uhl** and **Tara Hornung**, worked on the banks of the Snake River cleaning up multiple square meters of spray painted graffiti from a pictograph site. Over the course of the six week project, they were visited by several Big Horn Sheep, deer, jumping steelhead trout, and salmon and serenaded by numerous birds. They got out before the snow came in - but only just.

**Miriam Clavir** launched her conservation mystery novel, *Insinuating: Murder in the Museum*, at the UBC Museum of Anthropology, Vancouver.

**Lisa Duncan** will be moving her private practice from Eugene, OR, to Seattle, WA, as soon as her husband can find a job in an architecture firm. Eugene has been wonderful, but Lisa is looking forward to the prospects of the big city.

At the Seattle Art Museum, the conservation department hosted conservator **Jane Hutchins** and Japanese paintings conservator **Tomokatsu Kawazu** who worked for a week with **Marta Pinto Llorca** to prepare paintings for a display at Seattle Asian Art Museum.

Chief conservator **Nicholas Dorman**, has produced a gallery display about the recent conservation treatment of two important Japanese paintings. The treatment of one of the paintings was funded by the Sumitomo Foundation and the other was supported by the Carpenter Foundation and the Japan Foundation. Mr. Kawazu has kindly lent a number of wonderful tools and conservation materials that will be on display in the gallery.

Nick continued testing and examination in preparation for the treatment of *Sea Change* by Jackson Pollock. The project is funded by a Bank of America conservation grant. When the lights went out on Cai Guo-Qiang's *Inopportune: Stage One* (consisting of nine white Mercuries and Tauruses hanging from the SAM entrance lobby ceiling, with dozens of sequenced multi-channel light tubes projecting from them), **Liz Brown** got a crash course in LED investigation and repair. SAM conservation intern **Josh Summer** is studying and documenting a sequence of plein air landscape studies by William Trost Richards.

**Corine Landrieu** was busy this fall working on an underwater Civil War mine in fragile condition. She is now involved in the conservation of a glazed terra cotta sculpture which is to be installed on the wall of the new Museum of History and Industry at South Lake Union in Seattle.

The Conservation Services Section at the Royal BC Museum has been heavily involved in exhibition and loan work during the fall of 2012. Highlights included the *Royal BC Museum at Wing Sang* exhibit in Vancouver, a large dinosaur exhibit, a display of original photos of Queen Elizabeth II, an ancient maps show, naval art, and the *2012 Wildlife Photographer of the Year* travelling exhibit from the Museum of London. And those were just the temporary exhibits requiring attention. Additionally, a prominent role was once again played in the museum's largest and most popular annual fundraiser, *Artifact or Artifice?* Conservators spun yarns and impressed well-dressed guests with conservation-related trivia associated with an object from the collection.

**Kjerstin Mackie** was fortunate to travel to Sechart three times, participating in



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## Regional News, continued

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workshops on traditional Salish weaving of textiles, baskets, and hats. Kjerstin also delivered a talk to the University of Oregon on her work with the Kwaday Dan Ts'inchí garment.

**Lisa Bengston** has been heavily involved in exhibit work, but has also begun an extremely delicate and complex conservation treatment involving an early 20<sup>th</sup>-century Chinese lantern. There is a plan afoot to showcase Lisa completing the conservation work in one of the museum galleries in the spring of 2013.

**George Field** was honored with an award of appreciation from the Victoria Native Friendship Centre for his many contributions to their programs. He is also delighted to be travelling with a shipment of ethnographic objects on loan to a museum in Amsterdam. George and **Kasey Lee** reached new heights to complete some minor totem pole maintenance work while the weather cooperated in the early fall and treated the new CEO to a ride-along as the *John Lennon Rolls Royce* took its annual laps around the local speedway.

**Betty Walsh** and **Colleen Wilson** have been conscripted into many of the exhibit preparations. **Robert Davison** saw the first BC Archives magnetic media collections move into cool storage before the end of the year, the culmination of a long and convoluted project. Cold storage for other vulnerable collections will ensue in the New Year.

*Regional Reporter:*  
Corine Landrieu

### Rocky Mountain Region

**Marissa Stevenson** spent the fall semester as an intern in the conservation lab of the Buffalo Bill Historical Center. Stevenson helped solve the problem of preserving silk ribbon on leather and treated two family Bibles damaged in hurricane Katrina.

**Beverly Perkins** is serving on the board of Heritage Preservation, the Buffalo Bill Art Show, and the Smithsonian Affiliates. Bev is currently conserving an

amazing collection of firearms on loan from the Smithsonian Museum of American History.

**Karen Jones** would like to announce the follow event: the Rocky Mountain Antiquarian Book and Paper (RMABA) Fair 2013 will be held the evening of Friday, August 2 and 10a-5p on Saturday, August 3. The theme of the event is "To Have and to Hold," and RMABA has agreed to open the collections care component of the fair to include collections of all types. A panel of conservators will present their specialty and then take questions. Specialties include: objects, paintings, textiles, photographs, works of art on paper, and books. There will also be a "preservation station" where the public can come and ask questions and/or see a demo. The fair will be at the Merchandise Mart in Denver.

**Laura Downey Staneff** is closing her practice, Silverpoint Art Conservation LLC, in order to begin her new position of associate conservator of paper and photographs at the Williamstown Art Conservation Center in January 2013. Despite her immanent departure for Massachusetts, Laura intends to continue her WAAC membership and looks forward to keeping up with her Western colleagues by reading the Regional News!

The Denver Art Museum is in the process of implementing a campus-wide exhibition that will highlight its textile holdings as well as feature works from a range of outside collections. *Spun* officially opens in May 2013, but in the coming months, numerous exhibits of varying scale, content, and composition will open and require the expertise of all conservation staff to prepare and display this range of textile-based materials.

**Kate Moomaw** has been evaluating and preparing works for the upcoming rotations in the modern and contemporary galleries, including *Chamber*, a site-specific, electronic media installation by Charles Sandison. She has also been working on the room-sized interactive piece, *Walking in Venus Blue Cave* by Ernesto Neto. The latter consists of small Styrofoam pellets contained in nylon spandex fabric and will be featured in *Focus: Material World*, as part of *Spun*.

The north conservation lab is now equipped with a Delta cabinet that has been retrofitted to extract volatile components from collection objects. **Allison McCloskey** successfully used the cabinet to mitigate off-gassing naphthalene and enable wet cleaning of a Harry Tyler double-weave coverlet dating from 1835.

**Gina Laurin** has been treating a range of objects including numerous recently-acquired Asian lacquer objects for the small but beautiful exhibition *All that Glistens*. She also worked on three pieces of Spanish colonial silver and two Chippendale-style chairs that are currently on loan to Museum of International Folk Art in Santa Fe. In addition, **Mark Minor** treated a period table and settee for the same loan.

**James Squires** continues to work on the painting, *Venice, the Piazzetta from the Bacino*, by Canaletto. To follow the progress of the treatment and hear conversations with James and the curator, visit the DAM website, [www.denverartmuseum.org](http://www.denverartmuseum.org). In addition, James is also overseeing conservation assistant **Michael Mikesell** who is cleaning a group of late 19<sup>th</sup>-century Incan oil paintings on canvas.

Applying his metals and design expertise, **Steve Osborne** has created numerous mounts for objects ranging from Asian lacquer to Pre-Columbian ceramic figurines. In addition, he has nearly completed building a custom copy stand for photographing flat objects of varying sizes.

In early October, **Sarah Melching** attended the Mountain Plains Museum Association meeting in Corpus Christi, TX. Along with architects **Rick Cronenberger** and **Walter Crimm**, she was part of the panel presentation and discussion "The New Reality: Practicality and Affordability in the Museum Environment."

In October, **Caitlin Whaley** began volunteering in the labs as a pre-program intern.

*Regional Reporter:*  
Paulette Reading

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## Regional News, continued

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### San Diego Area

**Jacinta Johnson** has joined the Emerging Conservation Professionals Network (ECPN) as a Southern California liaison. The aim of the group is to assist AIC members as they make the transition from student to professional. Recently, Jacinta helped organize an ECPN survey of Tony Smith's *Playground (3/3)* in Beverly Hills through the Artist Research Project. Meanwhile, Jacinta continues working on a year-long, pre-program internship in San Diego.

*Regional Reporter:*  
Frances Prichett

### San Francisco Bay Area

The objects conservation lab at the Fine Arts Museums of San Francisco is working on the conservation of the Salon Dore; an eighteenth-century French period room installed at the Legion of Honor. The lab welcomes new assistant objects conservator, **Amy Tjong**, a recent fellow at the Metropolitan Museum of Art.

At the Asian Art Museum, objects conservator **Mark Fenn** is radiographing a pair of 8<sup>th</sup>-century dry lacquer sculptures with visiting Japanese scientists to determine the extent of modern restorations. Asian paintings/paper conservator **Shiho Sasaki** and paper conservator **Jennifer Badger** recently completed a major treatment of Chinese calligraphy works for the exhibition *Out of Character*.

Textile conservator **Denise Migdail** worked with the exhibition designer and conservation technician **Jocelyn Chan** to create floating magnetic mounts for a series of flat block-printed Japanese textiles in the exhibition *Batik*.

**Michelle Barger** tells us that the San Francisco Museum of Modern Art will begin construction on their substantial expansion in June 2013, which will result in a total of 130,000 sq. ft. of galleries - more than doubling the current size. Simultaneous to this, the institution is retrofitting their very first warehouse

for centralized art storage (currently the collection is stored in four different locations).

In preparation, packing of the collection is underway, and "spring cleaning" has come early to the Conservation Studio! The studio will close in March, when the conservators will shift their attention to moving the collection and setting up a temporary studio in the new off-site warehouse space. Conservators are thrilled to be working closely with Samuel Anderson Architects in the design of their new studio, which will open in the new building in January 2016.

*Regional Reporter:*  
Alisa Eagleston

### Texas

A current exhibit at the University of Texas at Austin Blanton Museum of Art focuses on examples which highlight the role of conservation in caring for five of the museum's Italian Baroque paintings and drawings. Entitled *Restoration and Revelation: Conserving the Suida-Manning Collection*, the exhibition includes before, during, and after treatment images and in-process video.

The centerpiece of the exhibit is the *The Death of Rachel* by Antonio Carneio, (c. 1660s), which recently received over 500 hours of treatment by conservators at the National Gallery of Canada, Ottawa. **Mark van Gelder**, of Art Conservation Services of Austin, was interviewed for an article about the exhibit in the University's Austin campus newspaper *The Daily Texan*.

In November, the Menil Collection completed work to stabilize two sculptures by John Chamberlain on long-term loan to the Chinati Foundation in Marfa, Texas. This work for the two wall-mounted sculptures, *Folded Nude* (1978) and *Kunststecher* (1977), was facilitated by Chinati Foundation staff under the direction of conservator **Bettina Landgrebe**. The works were taken from view and transported to the old Ice Plant build-

ing for two weeks where they underwent structural stabilization treatments. This work completes a year-long conservation and research project funded by the Bank of America Art Conservation Project to document, stabilize, and preserve twelve sculptures by John Chamberlain in the Menil Collection.

The work was performed in this collaborative effort by conservators **Shelley M. Smith** from the Menil, **Catherine Williams** from Silver Lining Conservation, LLC of Austin, and master metalworker **Guido Schindler** of Schindler Metalworks of Houston. This project culminated in an exhibition of some of the recently treated works by Chamberlain at the Menil Collection and a paper outlining the project to be presented at the next AIC Meeting in Indianapolis in May.

**Erin Stephenson** began her Andrew W. Mellon Fellowship at the Menil Collection in October. Erin received her degree from SUNY Buffalo State College in 2011 and comes to the Menil following a post-graduate fellowship at the Balboa Art Conservation Center.

Also in October, **Katrina Bartlett** transitioned from the Mellon Fellowship into the role of assistant painting conservator, special projects. In this one-year assignment, Katrina will continue her technical research with chief conservator **Brad Epley** on the paintings of René Magritte as well as undertake the examination and treatment of two 16<sup>th</sup>-century portraits by Christoph Amberger.

**Cheryl Carrabba**, chief conservator at Carrabba Conservation in Austin, is pleased to welcome a new registrar **Dana Olgesby** to the staff. Dana obtained her BA from Texas A&M University and her MA in Museum Studies from Texas Tech University. Cheryl says: "it is a luxury to have a professional registrar on staff in a busy private practice!!!"

*Regional Reporter:*  
Ken Grant



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## Jobs

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### **Fine Art Conservation Group LLC**

PAPER CONSERVATOR

PAINTINGS CONSERVATOR

Fine Art Conservation Group LLC is seeking to fill two permanent positions immediately. The first position is for a full-time paper conservator, and the second is for a full-time paintings conservator.

Candidates must have a master's degree from a recognized art conservation program and demonstrate the ability to work independently. A minimum of three to five years working experience and prior experience in the treatment of modern works of art is required.

Conservators will be responsible for the treatment of artwork comprised of a variety of media, and the preparation of condition reports and collection surveys. Our studio specializes in the conservation of modern and contemporary works of art including paintings, murals, and works on paper. Candidates must have strong interpersonal skills and will often need to collaborate on mixed media projects. The studio is located in the gallery district of Chelsea, and the company is currently undergoing expansion of the workspace.

Salary and benefits will be commensurate with experience. To apply, please contact Helen Im and attach a resume at [info@fineartconservationgroup.com](mailto:info@fineartconservationgroup.com)

## Membership, continued

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## Membership

*Chris Stavroudis*  
*column editor*

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## WAAC Publications

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### Handling Guide for Anthropology Collections

Straightforward text is paired with humorous illustrations in 41 pages of “do’s and don’ts” of collection handling. A Guide to Handling Anthropological Museum Collections was written by Arizona State Museum conservator Nancy Odegaard and illustrated by conservation technician Grace Katterman. This manual was designed to be used by researchers, docents, volunteers, visitors, students, staff or others who have not received formal training in the handling of museum artifacts. Paper-bound and printed on acid-free stock.

**Price: \$8.85**

(\$6.60 copy for orders >10 copies)

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### Back Issues of WAAC Newsletter

Back numbers of the *Newsletter* are available. Issues Vol.1 - Vol.14, #3 (Sept. 1992) are \$5/copy. Issues Vol.15 - Vol.29, #3 (Sept. 1997) are \$10/copy. Issues Vol.30 (Jan. 2008) and after are \$15/copy. A 20% discount will be given to libraries seeking to obtain back issues to complete a “run” and for purchases of ten copies or more of an issue.

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Claire Gerhard

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Donna Williams

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# Superstorm Sandy: Frontline Advice for Dealing with Mold and Salvaging Electronic Devices

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*compiled by Chris Stavroudis*

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The following procedures are the result of discussions and collaborations by conservators responding to damage from Superstorm Sandy. They are offered as suggestions worth sharing.

## Treatment for Mold

(Thanks to Elise Rousseau and her post to the CIPP list, David Goist, Mary-Lou Florian, Jane Bassett, Rustin Levinson, and Marc Williams for their thoughts and contributions.)

### Killing it

**For surfaces that can be exposed to a small amount of bleach (0.2% hydrogen peroxide) and are stable to alcohol solutions,** the following solutions should be our best chance of killing the mold with the least collateral damage. Of course, use your best judgment but these solutions should be able to be safely applied to surfaces such as the reverse of paintings, secondary support materials that will not be replaced, stretchers, frames, documentary materials, etc.

Careful consideration should be given before using any solution, particularly ones with oxidizing bleaches on works on paper or textiles. Remember that furniture finishes, coatings on frames, and many painting varnishes are soluble in or blanched by alcohol solutions.

47 ml 100% isopropanol  
23 ml 100% ethanol  
7 ml 3% hydrogen peroxide  
23 ml distilled water

The same recipe can be made from materials available from any well stocked pharmacy as follows:

44 ml 91% isopropanol rubbing alcohol  
30 ml 70% ethyl alcohol rubbing alcohol  
7 ml 3% hydrogen peroxide  
19 ml distilled water

or even more simply (for a large batch):

3 16 oz bottles (or 1 ½ 32 oz bottles) of  
91% isopropanol rubbing alcohol  
2 16 oz bottles 70% ethyl alcohol rubbing alcohol  
½ 16 oz bottle 3% hydrogen peroxide  
1 ¼ 16 oz bottles (measured in one of the empties)  
distilled water

Hopefully, as we gain experience with this formulation, we will get a better sense of under what circumstances it poses a risk to an artwork.

**For surfaces that can be exposed to alcohol/water solutions but there are concerns about the bleach,** use:

70% isopropanol or 70% ethanol  
or, to parallel the above recipe,  
3 parts 70% isopropanol to 2 parts 70% ethanol

With any of these solutions, the surface must become wet -- only very slightly wet or well dampened -- but a mist that doesn't really touch the surface will not be effective.

Remember that these solutions should kill mold that is wetted by them. The solutions are not 100% effective but seem to be the best that can be used around artwork. Multiple applications are more effective than a single spray, so multiple applications interspersed with HEPA vacuuming will be most effective.

### Application methods

Hydrogen peroxide is catalytically decomposed into water and oxygen in the presence of many metals and metal ions. (That's why drugstore hydrogen peroxide bubbles so satisfyingly on a bloody wound -- I've always assumed it was the iron in the hemoglobin causing the reaction.) So, the use of a metal sprayer is not advised.

I found that an inexpensive garden sprayer -- 1 or 2 gallon capacity with a plastic body, hose, wand and pump unit -- worked surprisingly well. Some have a metal spray nozzle tip, which is probably okay. Avoid sprayers with metal wands, tanks, or pumps. The ones I have purchased recently ran between \$18 and \$35.

### Removing dead mold

The dead mold still poses a health risk, so its removal by HEPA vacuuming remains critical. [Obviously, you must wait to vacuum until after the solution has evaporated completely.]

The general recommendation is to HEPA vacuum first, then spray, possibly multiple times, and then vacuum again. [My inclination would be to spray first, HEPA, spray, and HEPA again at a minimum.]

After spraying and vacuuming, soot sponges (eg. Absorene) and/or Groom/stick can be used to remove more difficult to get at mold residues. Remember that the sponges and Groom/stick will be contaminated with the fungal bodies and spores, so handle and dispose of them properly.

For non-art surfaces that are porous, or porous artwork that are not attacked by an oxidizing bleach, a much more aggressive solution can be made by substituting 30% hydrogen peroxide for the 3% in the above recipe. This gives a final concentration of 2.1% hydrogen peroxide.

### Trapping / encapsulating residues

My further recommendation is to apply dilute shellac to non-art, wooden surfaces. (I have used commercial bleached shellac solution (Zinsser) cut 1:6 with denatured alcohol.)

However, Marc Williams, much more knowledgeable than me in these matters, suggested "a coating of dewaxed, non-bleached shellac." He further notes that "bleached shellac is



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## Frontline Advice for Dealing with Mold and Salvaging Electronic Devices, continued

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chemically degraded and does not last as long. Yes, it may impart less of a color, but not only is its degradation accelerated, but an unknown amount of bleach residues exist that may affect substrates.

The ideal solution is super blonde dewaxed shellac flakes dissolved by the user in ethanol. It imparts very little color, is much more stable, and has high resistance to softening with heat. Most woodworking suppliers sell this. If a commercial (big box store), off-the-shelf product is needed, orange shellac is a better choice than bleached (white) shellac, but is significantly inferior to dewaxed shellac.”

The additional application of alcohol will help kill any mold (and certainly will not activate it as would a water-based sealant). The solution will penetrate relatively deep into the wood (as opposed to water-based materials or low polarity polymers in solvent solution).

### Sources and comments on the recipes

The recommendation of 70% isopropanol or 70% ethanol is from Mary-Lou Florian. Higher and lower concentrations of alcohol are less effective than 70%. See her book *Fungal Facts: Solving fungal problems in heritage collections*. Archetype Publications: London. 2002.

The other recipe is a slightly modified version posted to the CIPP NEWS list by Elise Rousseau (Art Conservation de Rigueur et Anoxia Abatement Solutions, Conservator Textiles & Historic Objects, San Francisco) in late November in relation to Superstorm Sandy response. [My modification was to increase the total alcohol content in the solution she listed from 60% to 70% based on Mary-Lou Florian’s research.]

Elise Rousseau’s original post on the CIPPNEWS list was (here slightly edited):

“Last year I participated in a course being offered by the Page and William Post-Graduate School at Mount Sinai School of Medicine in conjunction with the 6th International Scientific Conference on Bioaerosols, Fungi, Bacteria, Mycotoxins in Indoor & Outdoor Environments & Human Health.

Nearly all of the current scientific and medical research shows that fungicides are ineffective in killing mold, or branching mycelium. It only appears to kill the mold topically, however, while the blooms may shrivel or be vacuumed from the surfaces, the mycelium branches are actually shocked into an accelerated reproduction phase.

This is why when people use mildew stain removers or bleach in their showers at home--it returns two weeks later. Just as we have created super bacteria with antibacterial soaps and hand sanitizers, we have done the same with supposed anti-fungal agents.

Please refrain from using Thymol, Dimethyl Ammonium Chloride, Borate, and bleach--and UV exposure is really only good for your own bed sheets.

“The solution I have found most effective in treating active mold growth is the same as what is now the accepted formula used in hospital surgical rooms that must be kept as close to sterile as is possible. After the initial HEPA-vacuuming of all surfaces in a quarantined and isolated space... Of course it is not intended for painted surfaces, but this formula can be used on some non-colorfast textiles or other cellulose materials.

“Recipe for pressurized air pump spray bottle: set spray volume to very small aerated mist, smooth into surface with a soft disposable brush.

3 oz. 91% isopropanol

2 oz. ethanol

0.5 oz. hydrogen peroxide (3% if bleaching is a consideration, 33% if deep wood penetration, unfinished, is the objective)

1.5 oz. distilled h2O

“After the surface has evaporated, repeat treatment, perhaps up to 3x. Once completely dry repeat HEPA-vacuuming, clean all of the vacuum tools with this solution, including the long hose which should also be flushed with very hot water, blow out with a hair dryer and flush again with pure 91% isopropyl alcohol.”

[You will notice that the above recipe appears to be 70% alcohol, but it doesn’t account for the water present in the isopropanol and ethanol. My assumption is that the hospital folk were shooting for 70% but got it wrong. Their formula is actually 60% alcohol. I would strongly recommend the 70% alcohol recipes above.]

### Salvage of Machines with Electronic Controls

(Thanks to Polly Darnell who co-wrote the following)

#### General notes

While written specifically in response to a question on electronic control systems for power equipment, the following tips can be applied to many water-damaged electrical devices. Keyboards (soda spills), computers, cell phones with removable batteries, etc.

First and foremost: Do not use any of these techniques on anything with a CRT (cathode ray tube). The very high voltages can quite literally be lethal.

It’s always best to contact the manufacturer first, especially if the equipment is under warranty or the manufacturer will

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## Frontline Advice for Dealing with Mold and Salvaging Electronic Devices, continued

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deal with it gratis due to the circumstances. An alternative is whoever has serviced the device recently. They will usually recommend that the whole unit be replaced. With older equipment this may be difficult or cost-prohibitive.

It is worth noting that most manufacturers and electronics folk don't know about distilled water rinsing, which we have outlined below. I would further venture to guess that they don't really know what distilled water is and have only ever tried rinsing with tap water which has too much ionic content to work.

In general, if an electronic component wasn't wet for too long and it doesn't contain certain problematic components - which many devices don't - **the electronics can often be salvaged as long as they are not powered up until after treatment.** If they are turned on and short out - all is most likely lost.

The majority of the problem for water damaged electronics is the salt content in the water - even tap water. It allows short circuits to form between the very closely spaced traces on circuit boards and between the pins on ICs. Dust and dirt on the components make this problem much worse

### To attempt to salvage an electronic device:

- Make sure it's unplugged!
  - Open the device as much as possible. Void warranties and remove access covers, panels and even escutcheon panels (with the exception of hard drives).
  - Remove any batteries/internal battery backup/clock batteries/power-on circuit batteries.
  - Any hard drives should be removed and treated very carefully separately. Follow all rules for avoiding static discharge while handling the drive.
  - Remove as much dust, mud and crud as is possible. A soft brush, preferably static free, can help. Do not scrub aggressively as there are often small wires and fragile traces were you least expect them.
  - Rinse everything thoroughly in distilled water (not tap water). If they were heavily inundated, rinse in two or three baths/sprays. If salt water, perhaps even more. The exposure to the distilled water doesn't have to be long, just thorough.
  - Make sure all dust and mud has been washed away. If not, remove and rinse again.
  - When rinsed, allow to dry. Probably blowing with air or the canned air for cleaning computers is a good first step.
  - Allow to dry for a long time - perhaps a week or two. Warming with a hair drier may speed things along. Drying in a sealed container with desiccated silica gel should also speed the final drying process.
- (My theory is that the capacitors absorb small amounts of water and the water has to be given time to diffuse

out. I've seen this effect on timing circuits where the interval was way off at first and after some time returned to normal.)

- If possible, plug the device into a GFCI outlet or plug-in unit. Make sure the GFCI has a rating high enough for the appliance. If you can't use the GFCI, just plug it in while standing back, ready to shut the power off if something should spark, smoke, or obviously go wrong. Don't touch any part of any of the equipment when performing this initial test.
- Once you are convinced that nothing really bad has happened, touch the equipment quickly to make sure there is no current leak to ground.
- Then, if everything seems okay, try turning it on. Again, don't touch the equipment for any longer than necessary in case there is a short to ground.
- Hopefully, you will be back in business.

### Hard drives

If the information on the drive is critically important, send the drive to a facility like Drive Savers and have them duplicate it onto a new drive. (This is horrifically expensive.)

If a hard drive is going to a vendor for recovery, only do what the vendor says, which is usually absolutely nothing.

If you are trying it on your own, follow the guidelines above. Never open the drive, this is sure to destroy it. Be really careful with the washing. Tape up any breather holes you can find and focus the washing on the circuit-board side of the drive. Definitely dry with pressurized air or canned "air". Avoid shaking the drive (i.e., to remove excess moisture).

If it's a PC/Mac drive, best practice would be to test the drive in an external drive enclosure -these can be purchased for between \$20 and \$60. Make sure you get an enclosure to match your drive type, the older IDE/EIDE or the currently-used SATA.

Attach the external drive to a computer: Mac drive to Mac, PC drive to either PC or Mac. If the information looks like it's still there, power the drive down. Install a replacement drive and use software to copy the entire contents of the drive onto a new drive. On a Mac you can use SuperDuper!, Carbon Copy Cloner, or similar. I suspect the same type of software is available for Windows PCs.

The goal is to get all the information off the drive as quickly as possible with as few movements of the heads as is possible. For this reason, you don't want to test the drive by using it as a start-up drive or copy the files off one at a time.

[This is all based on my very limited experience with these sorts of devices and my misspent youth as an amateur computer hardware geek. RCA CDP1802 COSMACs rule!]

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# The Nippon Kan Curtain

## Encapsulation and Installation of an Asbestos Stage Curtain

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### Summary

This article is an expansion of a talk I gave at the WAAC conference in Palm Springs in 2012. While it is a treatment synopsis for a specific object, I hope that a description of the treatment and administrative process of dealing with an asbestos cultural object will be informative for conservation professionals encountering this material in objects or architectural environments related to their work.

### Asbestos

Asbestos occurs as a fibrous mineral and is categorized into several types. Once these fibers are airborne, they are very dangerous as lung irritants. All asbestos types are characterized by a fibrous structure, usually occurring as veins of soft or fluffy silicate material in a harder rock matrix. The extraction, milling, and commercial processing of asbestos, and its application and subsequent degradation in products and building materials, is an ongoing health threat. Asbestos has been mined since at least 100 B.C.E. and has been documented since that time for both its health risk and its useful properties, namely strength, surface area, lightness, non-flammability, and lubrication.

The industrial use of asbestos in the U.S. reached its highest point by the mid-20<sup>th</sup> century, where it found its way into roughly 3000 American products. It was eventually banned in the U.S. by the last quarter of the 20<sup>th</sup> century after increased examination of its health threats, culminating in a Federal settlement to the Libby, Montana class action suit. While the attached legislation stipulated that mining and production of asbestos would stop that year, existing stocks and materials were in permitted to be used until 1986.

Asbestos continues to be mined and processed into products worldwide, with varying degrees of oversight on environmental release and public safety. In the U.S. it continues to be legally processed into non-friable products such as tires, brake pads, cement, and laminates.

Asbestos is a lung irritant as opposed to a toxin. The fibers of asbestos are extremely light and fracture into smaller and smaller spicules. A single fiber will remain airborne for hours. In a hermetically sealed room, a fiber requires >80 hours to settle 9 feet.

With this loft duration and with ambient air circulation, the fibers can be inhaled readily to lodge deep at the back of the lungs, where they embed and ultimately generate malignant tumors and asbestosis. The primary cancer type, mesothelioma, is nearly always fatal and has a latency period of as long as twenty years. The respiratory threat is not restricted to the asbestos worker or the building inhabitant. Fibers can be carried on clothing or equipment to other environments and transmit the risk of inhalation to other persons.

### The Curtain

The object I treated was an asbestos stage fire curtain, measuring 17 by 35 feet and weighing 156 lbs. The curtain had

been painted and repainted with a gridwork of numerous advertisements, in varying paint types, primarily friable and powdery distemper and poorly bonded oil. With heavy metals and silicates in mind I took numerous paint samples as well as thread samples. The composition of the textile was 83% chrysotile asbestos and 17% cotton.

In subsequent reading I learned that asbestos fire curtains are common and indeed continue to be used, though at this time they are required to be encapsulated to prevent fiber release as they stay rolled, ready to be dropped, from the top of the proscenium.



### The Nippon Kan

A rough translation of *Nippon Kan* might be “Japanese Community House.” This entity, established in Seattle’s Japantown in 1909, served as a hub for the Japanese population in Seattle and included housing, business interests, a community hall, travel agency, and bank. The main hall of the Nippon Kan contained a stage as a location for travelling shows, many from Japan, and a site for weddings, banquets, and community and business functions.

The stage curtain was painted with advertisements for businesses in Seattle, mostly Japanese. Advertisement was paid by subscription. If the business did not continue to pay for the advertising space, the section would be painted out or replaced by a new subscriber. The result is a layered series of advertisements in Kanji and Hira-gana, with graphics. Many of the surfaces have deteriorated to reveal traces of underlying businesses.

The Nippon Kan was closed in 1942 after the Japanese attack on Pearl Harbor, and most of the Japanese population of Seattle was interned for the duration of World War Two. Nearly all of the businesses advertised were closed, and Seattle’s Japanese community would never regain the coherence and economic presence it had in Seattle prior to the war.

### The Wing Luke Museum

Named after the Washington State Assistant Attorney General who proposed it, the Wing Luke Asian Museum was



founded in 1967 to register the immigrant experience of all Asian cultures in Washington. It was located in two smaller facilities until 2008, when it moved into the newly adapted Kong Yick Building, which had served as a tenement building, commercial presence, and Chinese family house. I was approached by the Wing Luke Asian Museum to stabilize and install the Nippon Kan Curtain there, in the Tateuchi Story Theater, as a fixed backdrop to the stage. As a document of the Japanese culture in Seattle the curtain was considered an important part of the museum's collection.

### **Project Administration: Personal and Environmental Protection**

Washington State and Federal law require that all asbestos items and environments containing asbestos be treated in a regulated manner to eliminate fiber release to the environment and to fully protect associated asbestos workers against fiber release and inhalation. In Washington this is overseen by the State Department of Labor and Industries, which enforces the highest standards of compliance. By following their standards, I remained in compliance with those of other entities such as the Asbestos Hazard Emergency Response Act (AHERA) and the Puget Sound Clean Air Act.

Preliminary training consisted of a five-day asbestos supervisor course at a hazardous materials training company. This certification allowed me to work on the curtain on my own schedule, without supervision.

In Washington, asbestos workers also can take a three-day course. However, this would not allow me to work without supervision, which would have made the project unmanageable logistically, as an asbestos supervisor would need to be present any time I was in the work enclosure. A similar but more intensive ten day asbestos contractor course was also available. However this represented more training and consisted of more administrative aspects of asbestos project maintenance and record keeping than were necessary for the project.

After the course and associated testing was completed, I was cleared to work on the curtain. Asbestos certification must be renewed annually.



### **The Work Enclosure**

In addition to contracting my conservation service, the Wing Luke Museum contracted an asbestos abatement contractor to create a compliant work enclosure within an empty warehouse in downtown Seattle.

The working enclosure consisted of visquene walls and an area of roughly 1500 square feet, which allowed room to work on the curtain flat on the ground, and adjacent floor space to accommodate tubes, work bridge, materials, mock-ups, and a consolidant preparation area. The enclosure was fully sealed at all seams, kept at negative pressure, with two apertures: an entry/exit door with small shower and decontamination room at the outside and an exhaust at the other end.

The exhaust was fitted with large fans, two-stage HEPA filtration, and an exhaust tube which exited the building. The exhaust fans and negative pressure were maintained continually for the duration of the project as prescribed by law. While I focused on the curtain, the asbestos contractor maintained the enclosure, performed periodic release tests, and provided trainable personnel for steps requiring help, such as turning the curtain when necessary.

### **Personal Protection**

Personal protection equipment consisted of a disposable hooded tyvek worksuit with feet, taped at the wrists over nitrile or latex gloves. Half-face organic vapor respirators were used, with HEPA prefilters worn at all times in the work enclosure. In keeping with regulations, periodic air samples were taken from both the ambient and breathing zones to register asbestos fiber release while working with the material. This release was found to be minimal at all times, including at the early vacuuming and turning phases.

All materials entered the enclosure one way, and could not be removed until the project was complete, the enclosure was cleared for fiber release, and those materials were decontaminated by thorough wiping with wet cloths. All waste generated during the project –asbestos thread trimmings, wet rags, tyvek suits, fabric scraps- was kept in specialized, pre-labeled hazardous waste bags, sealed, recorded and disposed appropriately in hazardous waste sites.



## The Nippon Kan Curtain, continued

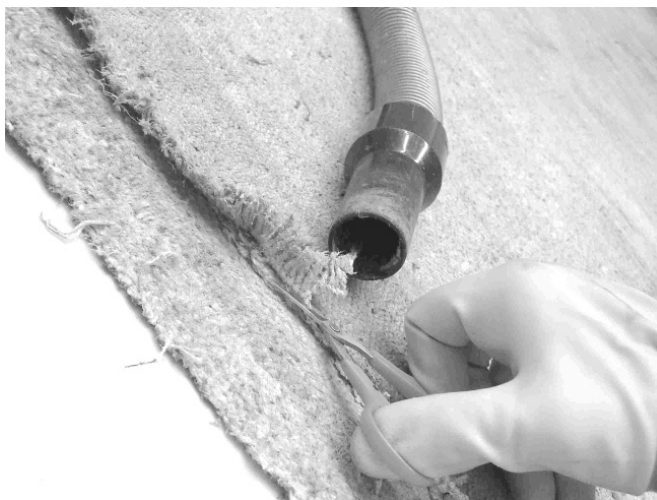


### Treatment

#### Testing and selection of materials

Once compliance was satisfied, the curtain could be unwrapped and testing of materials could begin. The asbestos abatement industry uses two categories of encapsulants, those which saturate the matrix, and those which bridge, or form a film across the top of the matrix. The challenge was to find an adhesive which would successfully bind the asbestos fibers, as well as bind the highly friable pigments in an optically acceptable manner. I decided to apply an encapsulant which would saturate the entire matrix.

Current policy does not stipulate what resins or paints are used as asbestos encapsulants, provided that the selected material provides ongoing protection against fiber release and can be shown by aggressive release tests to hold fibers in place. This allows the asbestos abatement and mitigation industry to select from a range of bridging and penetrating encapsulants, including paints, polymers, commercially prepared proprietary resins, etc. The absence of material specification allowed me to select legally from a range of conservation adhesives which would meet the same safety criteria.





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## The Nippon Kan Curtain, continued

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Using a mockup, I tried familiar conservation adhesives, primarily Jade PVA adhesives, the BEVAs (especially 371), and Aquazol. I rejected animal and cellulose type adhesives as being too water-dependent, too hygroscopic, and potentially too pest-nutritive at the quantity involved. I eventually selected Aquazol for its lack of odor, slight hygroscopic properties, control of application, minimal toxicity, and potential reversibility. Such reversibility would consist of a tissue membrane over the surface and suction behind, gradual flushing of solvent through the front, with extraction through the reverse.

After trying various application methods, including spray and brush, I settled on a paint roller, as careful application did not disrupt surface properties and allowed uniform control of quantity and penetration. As long as the quantity of consolidant in the roller was correlated carefully to the intended application zone, and the application was limited to a single pass in one direction without rerolling or other reworking, the powdery pigments and deteriorated paint films stayed in place and were not removed or redistributed.

### Cleaning

The curtain was rolled out, face up. I vacuumed the front gently to remove a heavy layer of dust, free pigment, and asbestos. While this step inevitably removed some free pigment and previously fully dislodged paint fragments, the appearance of the images and text remained unchanged and loss of paint material was not perceptible. This was also a necessary step for compliance, which required that I remove free asbestos fiber whenever possible.

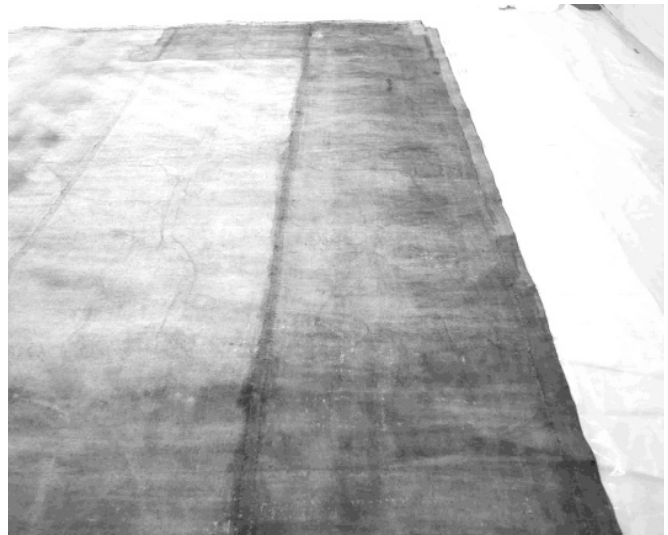
After the front was vacuumed, the curtain was rolled face down using sonotubes, and the reverse was vacuumed vigorously to remove a heavy dust layer and as much free asbestos fiber as possible from the reverse. It was then re-rolled back to face up in preparation for surface consolidation.

### Consolidation

I applied two thin layers of Aquazol 50 to bind the front surface without disturbing the optical properties of the original paint layers. Two applications were necessary due to the varying porosities of different paint zones to ensure pigment and asbestos binding. After drying, swab tests showed very good pigment binding regardless of paint type, and no variation in sheen from original paint surfaces.

Successfully binding the front required 1.5 pounds of Aquazol solids, melted in a crock pot double boiler in a combination of distilled water and ethanol.

After these applications were dry, I rolled the curtain back to face down, and applied a heavier application of Aquazol 500 and 200 to the reverse, to penetrate the thick fabric and bind fibers. Saturation of the reverse and successful asbestos binding required 5.5 pounds of Aquazol solids. The combined Aquazol solids in the curtain totaled 7 lbs. This was shown by aggressive release testing to be adequate. The curtain remained flexible, slightly saturated in color but without a sheen or film visible on either side.

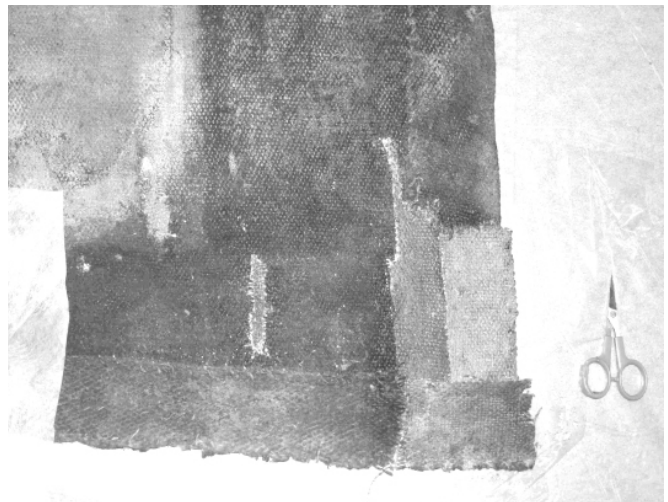


Considering the small exhibition space and potential for public contact, I applied a layer of BEVA film to the entire reverse and kept the mylar release layer for this product in position. This would ensure a complete barrier to any asbestos fibers which might dislodge from the reverse.

### Loss Compensation

As the curtain had been rolled up and down during its use at the Nippon Kan, it had developed large weak zones and losses along the top. The fabric was quite coarse and woven in a manner such that similar surfaces were impossible to replicate with materials other than the original.

After backing the losses with Hollytex, I created inlays by tracing the losses and finding corresponding sections of folded seams at the reverse of the curtain, where I trimmed and re-grafted fabric into the losses. The absences in the source seams were replaced with folded and shaped Sunbrella fabric of the same depth to be sure the plane and climatic response in these areas would remain the same.





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## The Nippon Kan Curtain, continued

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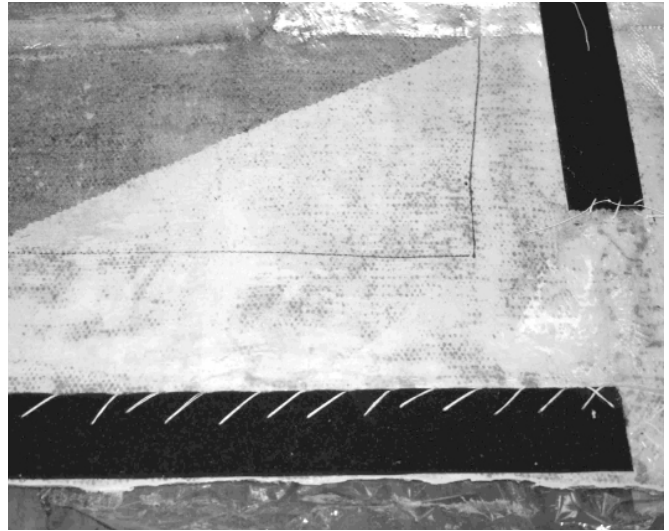
### Preparation for hanging

At 156 pounds, weight distribution was important. I applied a thin layer of polyester fabric to the top of the curtain. This piece of fabric also contained 8" "reachers" which extended downward onto the seven vertical seams crossing the curtain. These seams also served as columns where I glued and stitched the wooly side of Velcro in sections measuring 2" x 12". A horizontal, 4" strip of Velcro was applied along the heavy double seam top of the curtain, as a primary weight support.

### Hanging

The prepared curtain was rolled face inward onto a reinforced, 18" sonotube, and driven to the museum. There, we raised it into position on three coordinated lifts to the top of the back wall of the stage, where the top edge was stuck onto the strip of hook Velcro which had been screwed into position there.

As the curtain was gradually lowered, hook Velcro sections were screwed to the wall. This method of applying the final hang points allowed for minor sag-based adjustments and satisfactory tension maintenance as the curtain was unrolled down the wall.



A final protection for the curtain consisted of a 5' glass wall placed in front of the bottom of the curtain. As the stage is narrow, this permitted protection of the curtain and the public from accidental contact.



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# iPad Condition Reporting 2.0

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by Yosi Pozellov

*“As with all art forms, we must accept the limitations of the medium as we revel in the advantages.”*

Ansel Adams, July 1978  
about the Polaroid process of  
instant photography.

## Introduction

It's been a year since the publication of my first article for the *WAAC Newsletter* on the condition reporting of artworks using tablet technology [1]. In that article I mentioned, “The time is right to experiment with newer technology and deliver in the promise of a truly portable solution that would allow for freestanding image marking and note taking while doing condition reporting in front of an object.” Well, experimentation has turned into implementation, and the promise is fulfilled. This article intends to review the development and approach followed by the Conservation Center at LACMA in the use of iPads for producing not only image-based condition reporting, as defined in the previous article, but its integration to a paperless document environment.

Over the past year I observed how my colleagues in the Conservation Center embraced the use of the iPad, from the day to day operation in the labs to condition reporting of various large outgoing exhibition loans.

In some cases the iPad was used as a large repository of reference images, including high-resolution multiple view images for almost all the objects in a show, allowing for de-

tail examination of artworks by conservators at the time of departure and arrival to and from different venues.

Case in point was the *India's Universe* exhibition with more than 200 Southeast Asian objects on tour through Mexico and South America. Having the ability to access hundreds of images on an iPad was of great value. Each object was represented, on average, by four views at a resolution of around 2100 pixels on the long side, allowing for zooming into an area of interest in the image and thus enabling comparison and the determination if any changes had taken place in the condition of an object.

This approach becomes even more attractive when several conservators each have their own iPad at the time of performing the condition reporting. Each iPad can have the same amount of information without any extra cost and very little extra effort. It goes without saying that this approach avoids the bulky, costly, and cumbersome (and some would say environmentally unfriendly) use of binders. Binders contain a limited amount of fixed images and have shortcomings that are well known by anyone reading this article.

Another objects-heavy exhibition was *California Design* with over 150 objects. Since a multi-venue tour of exhibitions is programmed for this show, a large amount of photography was made during its deinstallation. Images will be placed on iPads that will supplement the traditional loan binders that had already been generated by the Registration Department and used during the inaugural installation. The images on these iPads will then be used to track changes, if any, on the objects and generate layered mapping information if needed on an object's image.

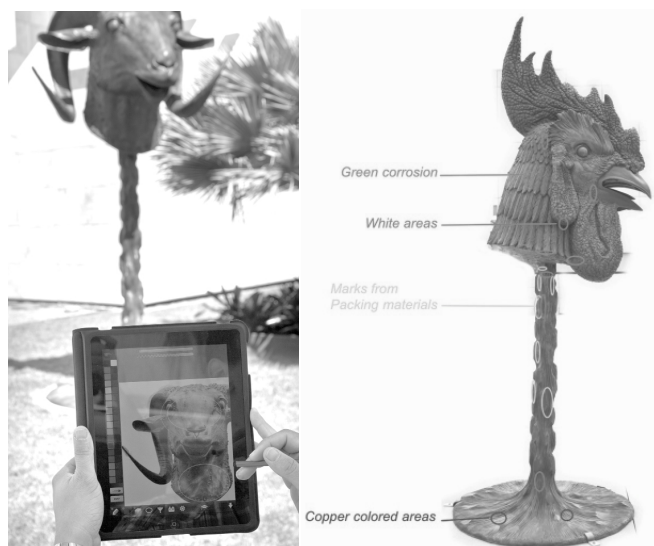


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## iPad Condition Reporting 2.0, continued

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As a separate example the iPad was also used to track and document the condition of loaned artifacts to the museum, like in the case of Ai Wei Wei's *Zodiac Circle*. These large bronzes presented conditions that were of concern to the conservators. In order to keep track of any possible changes, detailed imagery was generated and augmented with the addition of condition mapping using the iPad, in this way facilitating the artwork's periodic inspection and monitoring.



In the past year we have been able to corroborate the assumption, made in the previous article, that the iPad had an organic nature to its use. Having our finger, and the sense of touch, as the main means of inputting information into the tablet makes the transition from pen and paper to digital documents a very natural one.

The use of the tablet very quickly becomes second nature, so much so that many colleagues (including myself) find ourselves touching, unintentionally, the screen of our laptops hoping to move, open, pinch, or interact in any way with the inanimate screen. So, yes we are the touchy-feely kind even if we don't like to admit it. Due to the easy transition, the migration from paper forms to digital ones was satisfactory even from the most traditionalist at the Center.

### The Logistics and Hardware

To get the necessary hardware, we need to spend money, and the good news here is that the costs listed in last year's article remain about the same for the iPad and peripherals as well as for the applications. Additionally, the fourth generation iPad (the current device at time of publication) has more than double the computing power and almost quadruple the screen resolution of the first generation iPad. In effect this constitutes a reduction in price if viewed from the technological standpoint.

Continuous advancements in both the operating system by Apple (iOS), and the Apps we use by its developers, have made the use of the iPad a less cumbersome experience and a more practical one too. The iPad since iOS v5.0 has become a computer-independent device (meaning that its set-up and use never require a computer) capable of running various programs simultaneously in the background, known as multitasking.

An important part of the logistics is dealing with the administration and maintenance of the tablets in a multi iPad environment like the one at our Center.

The creation of an account under a credit card and email address, as explained in the first article, became impractical the minute we bought our sixth iPad. This is because Apple allows the sharing of Apps on a maximum of five iOS devices (iPad, iPod, and iPhone all included in this policy) in what they refer to as, "sharing in a household among family members." Although, yes, we are like a big family, this was not the right way to be managing our iPads.

Right about the time I was faced with the dilemma of the extra devices and providing them with the necessary software, Apple came up with a possible solution. Realizing that many corporations and institutions were adopting iPads as working tools and that all were facing the same problem of administration, Apple started offering the option of corporate accounts. These accounts are designed to be managed by the institution's Information and Technology Departments (IS) allowing for the purchasing, licensing, and distribution of the Apps for more (way more) than five devices.

So I tried enlisting the help of our IS department to establish a corporate account; a process that should have taken a week to get accomplished dragged on for months. This resulted in a worse situation, as we had now lost control over the iPads, and we were tied to the availability and motivation of the IS personnel to help with our needs. Needless to say this approach was a complete debacle and was abandoned.

In an effort to regain control over the iPads, I took a page from a recent change in policy regarding mobile phones at LACMA. The institution had given phones to managers, providing a fixed monthly stipend to help cover the monthly expenses. In that same spirit I suggested to the head of the Conservation Center, Mark Gilberg, that we mimic this policy for the iPads and conservators.

In this way we could assign an iPad to a specific conservator, and in lieu of a recurrent monthly expense, the Center would reimburse the conservator for the onetime cost of purchasing the necessary Apps needed for work. The only commitment from the conservator would be to have the iPad ready and available for work by all in the lab. We are moving forward with this initiative, and it should make life easier. At least I hope so.



## iPad Condition Reporting 2.0, continued

### The Apps

The *Artstudio* App continues to be at the center of our image-based condition reporting, or image mapping. This App, though, has gone through a complete overhaul at the user interface level with the release of version 5.0. This version also changed the inner workings of the program and the amount of memory and computing power that it uses. (This meant for us that our first generation iPads would not be updated and would remain running *Artstudio* v4.6.) This latest version of *Artstudio* allows for higher resolution images and editable text, but at a cost in the number of layers that can be created for an image.

We had gained a good amount of experience working with and using images for over a year, but when it came to working with condition report forms, we were lagging behind. The LACMA Registration Department provides the conservators with the condition report forms on paper, and until recently this remained unchanged.

A few months ago I established a workflow based on the use of a second App called *Notability*. This App lets us import a blank PDF form that contains only the tombstone information for the object that needs to be conditioned. This form is generated directly from our newly established collection managing software, the well known TMS (The Museum System).

With *Notability* we can fill out the form as if we were doing it on paper. (I was going to say “by hand” but actually that describes the iPad method much better). We can check boxes and mark diagrams using the pencil tool. We can also

type editable text (which beats handwriting). We can insert images from a variety of sources which can be resized, marked, and captioned. We can also add extra pages to the document and record voice annotations and other useful functions. The end result is a professional looking condition report form in a PDF format that we can export, print, email, or archive.

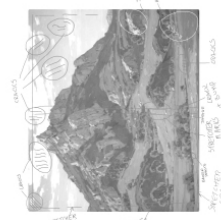
### Sharing and Managing Information

Having figured out the working logistics (Apps, workflows, etc.) inside the iPad, the next big challenge was getting information in and out of the iPad. For many, these two operations are the bottlenecks in the process of using the iPad.

In general we are used to physically moving information from one device to the other, and the iPad is designed to function mostly untethered from any device. Moving information wirelessly through the air is something we needed to adapt to since this is a new way of transferring data.

One of the easiest ways to share information with the iPad is via email, but this really works only when a limited number of documents or images are being transferred. It becomes more complicated when we need to deal with a larger amount of information. However with the use of different strategies this process has improved, although not flawlessly.

The methods I will discuss involve the use of a wireless connecting device called *Airstash*, the use a cloud base system like *Dropbox*, the attachment *Camera Kit*, and the *iTunes* program. Depending on whether we are working with images or documents, we will need to use different approaches.



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## iPad Condition Reporting 2.0, continued

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Let me first quickly explain what *Airstash* is. It is a small (comparable to a large pack of gum) device capable of connecting to a computer's USB port functioning as a thumb-drive. Its memory capacity is defined by the SD card that is inserted into it, allowing it to function as a card reader as well. *Airstash* also has the ability to connect wirelessly through wifi to devices like the iPad. Not only that, it can connect to up to 8 devices at once all sharing information at the same time.



A persistent complaint among people regarding the iPad is the fact that it does not have a USB port to connect thumb-drives to. Well *Airstash* fills this deficiency letting us transfer images and documents to and from the iPad. *Airstash* works using a protocol called WebDAV (Web Distributed Authoring and Versioning) which allows for writing of files over a wireless connection.

I should also offer a short explanation regarding “cloud storage services” such as *Dropbox*. This kind of internet based service provides its members with a certain amount of storage space (the amount depends on the type of account we have). This is like having a virtual hard drive accessible from anywhere a wifi connection to the internet can be established. *Dropbox* is by no means the only cloud service out there, others are: *Box*, *Google Drive*, *SkyDrive*, *WebStorage*, etc. All work similarly. (Go to their websites for an explanation of their differences.)

To transfer large numbers of documents, like PDF forms, we can use *Dropbox* and *Airstash* (via *WebDAV*) directly from inside the *Notability* App. We should have previously uploaded all the documents that are going to be used on the iPad through our computer station using the *Dropbox* website via our internet browser. However, we can download the files to the iPad via *Dropbox* only when connected to the internet. *Airstash* can be used anytime the iPad and *Airstash* are connected directly to each other wirelessly, and the document should already be in the memory of the latter, just like we do with a thumb-drive.

To transfer images we cannot use the *Artstudio* App directly since this App does not have *Dropbox* or *WebDAV* capabilities. So if we have the images (uploaded via the website) in a folder within *Dropbox*, we can use the free *Dropbox* App to access our account and the folder that

contains the images we want. Unfortunately we can only download one image at the time. A better option would be to use the free *Airstash+* App and access the images in a folder inside *Airstash*. From here we can download the full content of that folder, making it easier to download a large number of images.

We can also download images directly from a camera using the *Camera Kit*. In all these cases the images are saved inside the *Photos* App (*Camera Roll*) on the iPad. Lastly, if we need to keep an arrangement of image subfolders organized by artifacts in which the iPad will create an album per subfolder inside the *Photos* App, we need to sync that folder via iTunes to the iPad. In this case we can physically connect the iPad to the computer using the USB cable included with the iPad.

### Conclusion

This article is not intended as a step by step guide for condition reporting with the iPad. Its purpose is to give an overview of how we at the Conservation Center at LAC-MA have implemented a very satisfying workflow that is allowing us to move into a paperless condition reporting environment.

The advantages of moving in this direction, as I see them, are the following:

- the iPad can hold a very large number of images and documentation that can very easily substitute for the use of large, expensive, and cumbersome binders;

- the iPad can hold the information of several binders for several exhibitions;

- iPad generated documentation looks professional and, being in a digital format, makes it easy to share and archive;

- the iPad is “recyclable” and can be used by several people.

There are still things that need to be ironed out like standardizing the image size in *Artstudio* to get a fair number of layers; establishing an archiving protocol and workflow to include new condition reports in the repository of images; establishing protocols to connect and generate forms and information directly from TMS to the iPad.

The iPad has left the door wide open for allowing us to change practices that have been stagnant for a long time. It has helped us move condition reporting into the digital world, joining the ranks of all of the other digital assets used widely by the Conservation Center.

### References

- [1] “The iPad: Condition Reporting for the XXI Century or The use of the iPad as an image-base tool for condition reporting and location marking for scientific analysis” by Yosi Pozeilov (Posilev - in error), *WAAC Newsletter*, Vol. 33, Num. 1, Jan 2011.

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# Annual Meeting Abstracts

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*The 2011 WAAC Annual Meeting was held October 22 - 25 in Palm Springs, CA.*

*The papers from the meeting are listed below along with summaries prepared by the speakers.*

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## ANALYSIS IN DIVERSIFYING MUSEUM STUDIES: AMERICAN INDIANS IN CONSERVATION

Martina Michelle Dawley

Why do so few American Indians become conservators? An attempt to answer this question through an internship, Internet resources, a literature review, and conversations with local conservators, led to the observation that there are very few conservators of American Indian ethnicity.

As the topic of the author's dissertation research, locating and interviewing American Indian conservators is a major component of this study. I will present my preliminary findings with a particular emphasis on the difficulties American Indians face becoming the custodians of their own cultural material and human remains. The broad questions this study seeks to explore include: why there are so few American Indian conservators? Are there American Indian conservators who oversee American Indian cultural material and human remains in both tribal and mainstream museums? And how might practicing American Indian conservators help to empower Native nations?

## CONSERVATION BEYOND THE LOST COAST

Rachel Freer-Waters

The far northernmost costal corner of California is remote in spite of the presence of a minor highway. Both the Native cultures and cultural materials have been preserved as a result of the isolation and inaccessibility. This presentation looks at climate, materials, and treatments. A combination of climate and extreme regional economic depression makes conservation of large items particularly challenging. Examples include two large basketry items treated for conservation

and restored over fifteen years ago, and recent treatment of a seal gut raincoat on display for over twenty-five years in this far corner of the country.

## NEW INSIGHTS INTO ALASKA NATIVE OBJECTS

Ellen Promise & Daniel P. Kirby

A unique Alutiiq kayak was recognized in 2003 by native Kodiak Islanders Sven Haakanson and Ronnie Lind while they were examining artifacts at the Peabody Museum of Archaeology and Ethnology at Harvard University. This discovery provided the catalyst for a grant-funded project to study and conserve four Alaska Native kayaks in the museum's collection and roughly 100 related objects such as paddles, gutskin clothing, and kayak models.

Collaboration with members of the Alutiiq community and with Boston-area conservation scientists has been central to this project. Dialogue with artisans and museum personnel from Kodiak Island imparts traditional knowledge and insights about the materials and techniques used to create Alaska Native objects. Skin and sinew components of the objects are being characterized in partnership with the Straus Center for Conservation and Technical Studies.

Matrix-Assisted Laser Desorption / Ionization Peptide Mass Fingerprinting (MALDI-PMF) can be used to distinguish skins from closely related species. The MALDI-PMF technique uses enzymatic digestion of the sample to cleave the protein structure at sites of specific amino acids, forming characteristic marker ions that are recorded as peaks in a spectrum. The marker ions are then compared to markers obtained from known samples to determine the species.

Micro-samples of skin from two Alaska Native kayaks in the Peabody's collection have yielded very different mass fingerprints. One matches fairly well with a reference for bearded seal. The other is thought to be skin from a Steller sea lion, an identification that may be supported once a reference sample is analyzed. Building a more complete MALDI-PMF reference database of Alaskan species will facilitate future study of these artifacts.

This paper will provide an overview of the Harvard Peabody Museum's Alaska kayak preservation project and the ongoing, related MALDI-PMF analysis. The authors hope to demonstrate that the collaborative nature of the project helps to generate a more complete understanding of the objects. Additionally, the successful application of MALDI-PMF to the study of ethnographic materials serves as an example of how the technique can become a more routinely-applied tool for the analysis of cultural heritage.

## THE A. J. GODDARD: CONSERVING A VERY PERSONAL SHIPWRECK

Valery Monahan

At the end of the 19<sup>th</sup> century, the Yukon remained one of the remotest places on earth. Surrounded by mountains to the south, east, and west and hostile to agriculture, it had resisted the immigration and settlement taking place across North America. This changed when gold was discovered in the Klondike in 1896. By the summer of 1897, thousands of newcomers rushed to the Canadian Territory to make their fortune panning the creeks.

Albert J. Goddard was a Seattle businessman with a different strategy. He rushed orders to a San Francisco shipyard for two small, pre-fabricated steel sternwheelers the *A. J. Goddard* and the *Kilbourne*, had them hauled over the mountains from Skagway, Alaska, and started transporting men and goods on the Yukon River. On June 21 1898, the *A. J. Goddard* became famous as the first vessel with supplies and mail to arrive on the Dawson City waterfront after the stampeder's first long Yukon winter. Just three years later, the little sternwheeler was on the bottom of Lake Laberge, wrecked in an October storm that killed three of the five men on board.

Divers, historians, and archaeologists searched for the wreck for decades, but its exact location remained a mystery until 2009, when a Canadian/American, National Geographic Society funded archaeological team released beautiful images of the preserved vessel, submerged in forty feet of cold green water. A media furor followed, and the *Goddard* was



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## Annual Meeting Abstracts, continued

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deemed “Archaeological Find of the Year” by a vote of National Geographic Magazine’s on-line readers.

Since then, underwater archaeological work, including the first-ever application of underwater sonar scanning to record a ship wreck, archival research, and the conservation and analysis of a small group of recovered artefacts have proved that the *A. J. Goddard* has much to tell us about the everyday life (and death) of working men involved in one of largest mass migration events in the history of human industrialization.

An *A. J. Goddard* exhibit is planned to open at the Yukon Transportation Museum for the summer of 2013. It will feature the artefacts conserved in the Yukon Museums program lab (Whitehorse) by Valery Monahan and several that were treated at the Canadian Conservation Institute’s labs (Ottawa) by Tara Grant. Highlights include several pairs of men’s shoes and a shirt, a full bottle of vanilla extract, and a small gramophone and three records, including one found *in situ* on the player’s turntable.

### A CONSERVATOR’S REFLECTIONS ON THE INSTALLATION OF PACIFIC STANDARD TIME AT THE J. PAUL GETTY MUSEUM

Julie Wolfe

The seminal exhibition at the Getty Museum called *Pacific Standard Time: Crosscurrents in L.A. Painting and Sculpture, 1950-1970* brought attention to numerous Southern Californian artists after the second world war until 1980. The sculptures on loan were varied in materials that included traditional ceramic, assemblages, and hard-edged minimalist plastics.

Looking back on the conservation challenges, this talk will walk through the varied sections of the exhibition and focus on some of the mounting and treatment issues involved during the installation. Judy Chicago, Stephan von Heune, and Ed Boreal are some of the artists who will be discussed. Chicago’s *Car Hood* arrived with pre-existing structural problems that were worsened during shipment and required stabilization of flaking paint prior to the next shipment.

An acoustical sculpture by von Heune arrived at the Getty with the electrical components not functioning, and the greatest mounting challenges were for DeWain Valentine’s large - over eight foot - polyester castings.

### INSTALLING LOS ANGELES: A NEW PERMANENT DISPLAY FOR NATURAL HISTORY MUSEUM’S WPA MODEL OF DOWNTOWN L.A.

Tania Collas

The relocation and installation of the Natural History Museum’s WPA model of downtown Los Angeles presented a unique challenge because of its large size, significant weight, composite structure, and inherent fragility. Contract conservator J. Claire Dean had largely completed the successful treatment and extensive documentation of the model. Now, the in-house conservation and exhibits team would undertake its installation.

We were determined to lift the model without incurring damage or undertaking additional disassembly; at the same time, we were committed to installing it in such a way that it could be safely de-installed with relative ease at some undetermined time in the future. After months of planning, we reconciled the constraints of the object with the laws of physics to install this multi-component model in its new case as part of the museum’s upcoming permanent history exhibit, *Becoming Los Angeles*.

### CLEAR OBJECTIVES: LONG-TERM STUDY OF CONSERVATION ADHESIVES FOR ART AND DESIGN MADE OF PMMA

Donald Sale

The aim of this paper is to establish a framework for long-term investigations of conservation adhesives for poly (methyl methacrylate) (PMMA) sculpture, architectural models, furniture, paintings, and photographs. Treatments are presented alongside unresolved conservation challenges to demonstrate the need to develop robust assessment methodologies for useful long-term investigations. Samples of 20 year old adhesives on PMMA that were exposed

to different artificial and natural environments are compared for changes in color and tensile strength in order to inform future studies. An important aim of this paper is to initiate dialogue to identify conservation treatment needs for PMMA and other rigid transparent synthetic polymers.

### ENCAPSULATION AND STABILIZATION OF A PAINTED ASBESTOS STAGE CURTAIN

Peter Malarkey

During the early 20<sup>th</sup>-century the Nippon Kan was social, economic, and community hub of the close knit pre-internment Seattle Japanese population. A central auditorium that was used for weddings, meetings, and cultural events contained a 17’ x 35’ asbestos stage fire curtain painted with advertisements by local Japanese businesses, most of which would be later closed for good during internment.

In an effort to preserve this important local document, in 2009 the Wing Luke Asian Museum contracted Peter Malarkey to stabilize the friable paint layers at the front of the curtain and render the 156-pound, 83% chrysotile asbestos object safe for public viewing. Using aquazol as the primary stabilizer proved effective for encasing asbestos fibers, stabilizing paint while preserving its varying optical properties, and providing a theoretically reversible and slightly flexible matrix. This project may have pertinence to those encountering asbestos both in objects and their surrounding architectural contexts.

### A SUMMARY OF MICROFADING RESEARCH AT THE GETTY CONSERVATION INSTITUTE

Andrew Lerwill, Ph.D.

Microfading enables the light sensitivity testing of actual objects. This has led to a new paradigm in assessment as it was previously not possible to directly test the light sensitivity of an object itself. In response to continuing changes in cultural heritage conservation’s relationship with microfading, a new micro-fading tester has been developed at the Getty Conservation Institute.

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## Annual Meeting Abstracts, continued

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The new instrument was thought necessary for maximum simplicity and portability, meaning a greater number of people from different sections of the conservation community can access the technique with minimal training (a requirement echoed within many institutions worldwide). The overriding aim being to make microfading applied more broadly by non-specialists in more varied locations.

Some of the barriers to achieving highly accurate predictions of an object's future are covered, within a greater discussion of the ever increasing evidence of the useful information the technique provides.

### LIGHT SENSITIVITY ASSESSMENT OF COLLECTION ITEMS USING THE MICROFADOTESTER IN ORDER TO SUPPORT DECISION MAKING RELATED TO LIGHTING

Christel Pesme

On one hand, light is needed to see, read, and visually appreciate a work of art. On the other hand, light is also one of the major environmental causes of collection items' degradation. Therefore, assessing light sensitivity is a key parameter in order to make proper decisions related to the display of light sensitive collection items.

Twenty years ago, Paul Whitmore from the Carnegie Mellon University designed a Microfadotester (MFT), in order to test the response to light exposure of an individual collection item. Microfadeometry is a light accelerated aging technique. A tiny spot of the surface of the collection item is exposed to a very intense light while the induced color change is simultaneously recorded. Considering the size of the tested spot and the control of the induced color change, the technique is virtually non-destructive.

Before the MFT, light sensitivity of a given item was assessed based on the evaluation of the materials with which the item was made. The light sensitivity of surrogated materials, similar to the ones used for making the item, known thanks to classical light accelerated aging tests was then assigned to the item. Thanks to the MFT for the first time it

became possible to measure the actual color change induced by light exposure on the very surface of a collection item. It has been almost ten years now that Microfadotester is regularly used at the GCI in order to assess light sensitivity of specific collection items. The results of the test are used to support the exhibition and loan policies of both the Getty Research Institute and the J. Paul Getty Museum.

The presentation will focus on presenting the method used at the GCI for carrying out microfadotesting to assess light sensitivity of collection items. How the results are integrated in a collection risk management approach will also be presented showing how they can be used by conservator and curator to inform the decision-making related to the display of light sensitive items.

### A TALE OF TWO EARTHQUAKES

Lynn Campbell

At 4:35 am on Saturday 4<sup>th</sup> September, 2010, the Canterbury district in New Zealand was shaken by a 7.1 magnitude earthquake. The epicentre was located 40 kilometres west of Christchurch and had a focal depth of 10 km causing widespread damage which affected the whole of the South Island with vibrations felt as far away as Auckland in the North Island. No one died during this earthquake but buildings were badly damaged including many heritage buildings. On December 26<sup>th</sup> there was another big aftershock but again with no loss of life.

However, on the 22<sup>nd</sup> of February at 12:55 pm there was a 6.3 magnitude aftershock centred in the Port of Lyttelton that devastated central Christchurch and killed 262 people, most in the central city district in relatively modern buildings. The severity of this quake was caused by the fact that its focal depth was only 5 km deep. It was the shallowness of the shake that caused the major wide-scale destruction.

After being extensively involved in the salvage of heritage collections throughout the series of earthquakes, it became immediately apparent to me that cultural institutions were not prepared.

Having formed the Canterbury Disaster Salvage Team in 1987 and producing annual workshops and stressing the importance of preparation and awareness of possible threats to collections, I was horrified to discover how ill prepared particularly the small cultural institutions were despite regular training. My Getty research project is based around methods and processes to help smaller institutions in New Zealand find cost effective preventive measures that lessen the amount of damage in major disasters such as earthquake.

This paper will discuss the immediate after effects of the two major earthquakes and relate this to a case study from each event.

### RESULT! CHRISTCHURCH EARTHQUAKES TEST MUSEUM'S QUAKE-PROOFING

Sasha Stollman

The Canterbury Museum, established in 1869 in Christchurch, New Zealand, currently holds over two million collection items of national and international significance, specializing in Maori, European settlement, Antarctic exploration, and New Zealand natural history.

The original building and subsequent three additions were designed in Gothic Revival style by Benjamin Mountfort. It was built in 1870-82 and remains the oldest purpose-built museum building still in use in New Zealand. Further additions were made, and significant earthquake strengthening was carried out in the latter half of the 20<sup>th</sup> century. The original 1870 wing, referred to as the Mountfort Gallery, which housed successively the Skeleton Hall, the New Zealand Room, and the Canterbury Colonists Galleries, currently exhibits an extensive European decorative arts and costume collection.

This talk focuses on the building strengthening efforts and the collection installation techniques which contributed to the survival of the majority of these decorative arts objects on exhibition during the unprecedented 2010-11 earthquakes which devastated the Canterbury Region of New Zealand.

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## Annual Meeting Abstracts, continued

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### THE ARTIST MATERIALS COLLECTION AT THE SAN FRANCISCO MUSEUM OF MODERN ART

Theresa Andrews, Michelle Barger,  
Paula De Cristofaro, Martina Haidvogel,  
Amanda Hunter Johnson, and Jill Sterrett

The artist materials collection at the San Francisco Museum of Modern Art (SFMOMA) is vital to the mission of the museum's conservation department. More than simply an archive of 20th and 21st-century materials, it contextualizes contemporary art practice and celebrates the department's ongoing and active relationships with artists.

312 and counting, the rapidly growing materials archive includes items like Katharina Fritsch pigments and Jay DeFeo's painting trowel, mock-ups of Eva Hesse's resin sculpture, and refabricated versions of Richard Tuttle installations.

This talk will describe the artist materials collection, how this archive underpins the artist collaborations that are at the very heart of contemporary art conservation, and how it is being envisioned as a dynamic and accessible resource in the SFMOMA expansion scheduled to open in 2016.

### A BRIEF HISTORY OF REVERSE PAINTING ON GLASS AND THE TREATMENT OF AN UNUSUAL SHADOW BOX PAINTING

Susanne Friend

ConservArt Associates has treated a number of reverse paintings on glass (Hinterglasmalerei) over the years, but the most recent acquisition into the studio was of particular interest. The piece defies simple categorization, falling between the cracks of objects, paper, and painting conservation. The artwork consists of layers of spaced painted glass that are viewed against a panel painting in a shadow box. There are also painted paper collage elements adhered to both sides of the glass panes. The treatment of this layered painting will be put into context with other more typical conservation problems with hinterglasmalerei. A brief history of this unusual painting technique will also be presented.

### ALTERNATIVE TWINING FOR PAINT- ING CONSERVATORS: DEVISING A MOUNTING SYSTEM FOR A SMALL DOUBLE-SIDED PAINTING

Linnaea E. Saunders

This talk will focus on the treatment of a small double sided painting by Marion Kavanagh Wachtel, a California impressionist painter known for her watercolor and oil paintings depicting the landscape of Southern California. More specifically, this talk will focus on the method of mounting this painting, as it posed challenges not typical of a small canvas painting. The talk will also emphasize ways in which methods and techniques drawn from areas outside of conservation training can provide valuable solutions and insights to our practice.

The double-sided painting measures 13 3/8 in X 17 1/4 in. The paintings are executed on cotton canvas, and the oil paint covers all four edges of the canvas on both sides of the painting. Hence there are no tacking margins.

The painting came to the studio as it had been previously mounted between a double-sided rebate using small wire "nails", double-sided tape, and what appears to be glue gun adhesive. The mounting allowed for the owners to display either image they preferred, but the canvas was tenuously held in this mount, and there was no glazing or backing board. The canvas had developed mechanical cracking and an undulating surface and was detached at several areas of the mount.

Treatment included safe removal of the canvas from the mount system, removal of a synthetic varnish and extensive retouching, re-establishing planarity to the canvas, and discrete inpainting of losses.

Requirements for devising a new mounting system included:

- effective mount for the long term that is easily reversible in the future;
- a system that would provide a buffered environment to mitigate changes in relative humidity and therefore extend the period of time the painting would maintain planarity;
- a system that would provide protection of the painting during periodic handling

by the owners as they changed which side of the painting is on display.

Modifications of approaches more traditionally used in painting conservation were evaluated, but ultimately a system utilizing twining-traditionally used in basket making-was employed to establish a safe mounting system for the piece.

### IMPACT OF LIGHT SOURCE CHOICE ON COLOR AND COLOR CONTRAST RENDERING OF A SURFACE

Christel Pesme

In Western societies vision is very often the dominant sense used to apprehend the surrounding world. Color and color contrast play a major role in value appreciation of cultural artifacts. It is also one of the reasons why colors and color changes play such a major role in conservation.

Color is the product of the physical interactions between light, the lit surface, and the human vision system. It is well known that the appearance of a given surface can be dramatically different depending on the conditions setting the mentioned interactions. For instance, the perception of a surface observed under UV light will be drastically different than if it is observed under visible light. Conservators are also well aware that when retouching a work of art it is important to take into account the potential metamerism of the pigments used.

The presentation will discuss an innovative approach that allows us to quantify the changes -in the rendering of both the colors and the color contrasts of a selected surface- which are induced by switching the nature of the light source used for display.

This approach should be further tested. Hopefully, the presentation will open a discussion on how to improve the approach and also on which criteria to use in order to select a light source for the display of a collection item. Also, future applications of this approach, such as recording and documenting the appearance of an item in specific conditions of display should be opened to discussion.



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## Annual Meeting Abstracts, continued

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### TRADITIONAL TECHNIQUES AND MATERIALS FOR MODERN CONSERVATION

Nancy Fonnicello

The conservation treatment of Native American ethnographic materials often requires carefully considered loss compensation so that damaged objects may be safely handled or displayed. Though modern materials can be useful for such treatments, they do not always easily blend with the traditional materials and aesthetic value of such objects, and in some cases their use may be unacceptable to the object's owner or custodian.

This presentation examines the use of traditional materials in combination with modern conservation methods to produce effective preservation treatments which remain true to the artist's intent while maintaining the high standards of good conservation practice. Techniques for loss compensation using custom-tanned leathers, beadwork, and porcupine quillwork for the treatment of Plains Indian art objects are discussed.

### AN EXAMINATION OF LIGHT-INDUCED COLOR CHANGE IN ANOXIC ENCLOSURES

Vincent Beltran

As a part of its Museum Lighting initiative, the Getty Conservation Institute explored the effects of anoxia on light-induced color fading for a wide range of colorants. This study builds upon the limited sample sets of previous research and greatly widens the scope of materials subjected to examination to better define the advantages and limitations of lighted display in the absence of oxygen.

The experiment examined 125 paired samples including dry pigments, dyed textiles, organic and aniline-based dyes, gouaches and watercolors, fluorescent inks, and natural history specimens. Each sample was exposed to ~17.5 Mlux-hours of halogen lighting in air and near-anoxic conditions with temperature and relative humidity tightly controlled. Color change was determined for each sample by pre- and post-exposure spectrophotometric analysis.

113 of 125 samples (90% of the sample set) exhibited less color change when exposed to light under low-oxygen conditions compared to its behavior in air. Of this subset, 39% displayed color change in anoxia that was between two and four times lower than that observed in air, and 47% showed color change in anoxia reduced by a factor of four or more. In contrast, six samples exhibited greater color change in anoxia than in air, including three samples of Prussian blue watercolor, and six samples showed similar color change in the two environments.

Current research seeks to incorporate use of the micro-fading tester with the environmental control and monitoring provided by the previous experimental setup to allow for more rapid assessments of lightfastness and an examination of color change kinetics in air and anoxic environments.

### THE TREATMENT OF A NEW IRELAND TATANUA MASK

Siska Genbrugge

In the summer of 2009 the Los Angeles County Museum of Art (LACMA) made preparations to display its collection of art from the Pacific Islands. One of the objects is a New Ireland Tatanua mask (M.71.73.149) that required treatment prior to display.

The object is made of a cane framework tied together with strings, covered with barkcloth, and decorated with white lime, shells, fibers, and pigment in red, white, and black. A fragmentary light colored fibrous cloth is attached to the base of the mask and covers the neck of the wearer. This cloth has been identified as barkcloth derived from Mulberry tree inner bark.

The fibrous cloth fragment was twisted and only attached to the mask by a couple of fibers. Images of the mask dating from 1989 show the barkcloth hidden inside the mask to hide the damage.

For the installation of 2009, curators and conservators agreed that the barkcloth

was a part of the object and needed to be displayed. This meant that the fragile barkcloth needed to be unfolded and stabilized. Cheesecloth, a lightweight cotton textile with open weave was selected because of its similar visual properties, workability, and compatibility with the original barkcloth. The treatment was successful and the object is currently on view at LACMA.

### CULTURAL STUDIES AS A COMPONENT OF CONSERVATION RESEARCH: THE CASE OF CALIFORNIA FEATHERWORK

Ellen Pearlstein, Molly Gleeson, Christel Pesme

Native California featherwork is the focus of an important collaborative research project involving UCLA/Getty faculty and alumni and members of the Museum Lighting team at the Getty Conservation Institute. This project began with the goal of understanding color producing mechanisms for feathers used in California regalia and baskets, their susceptibility to fading, and the impact that color loss may have on cultural value.

Unlike many artists' materials, feathers derive their colors from a number of biological pigments, from the nanoscopic feather structure, or from both of these working in combination. Feathers differ in their response to light and ultraviolet energy, yet in many museum collections, feathers are not identified, despite the fact that feather selection represents culturally significant decisions central to the meanings and values of regalia and baskets.

Furthermore, interpreting color loss on feathers is not straightforward, as the color is often not uniform and because the feathers experience damage during bird lifecycle, indigenous use, and exposure while in the museum.

These issues prompted the project team to focus on working with native community members, conservators, curators/ethnologists, and ornithologists to facilitate identification, shared descrip-

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## Annual Meeting Abstracts, continued

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tion, and interpretation of California indigenous featherwork. A project goal is to develop an online scholarly resource dedicated to California featherwork, which has already received commitments from staff at six major US museums, four Native California featherworkers, and two nationally recognized forensic ornithologists.

Various components for this resource have been developed and piloted, including a feather survey instrument, visual glossaries designed to standardize technical and condition description, and high resolution scans of culturally significant feathers to aid in identification.

Development of a digital repository will increase access and advance research, cultural revitalization, and preservation of these significant collections. These measures will also promote data sharing, an important trajectory within conservation research.

### THE CONSERVATOR'S COMPASS: NAVIGATING A MORE COLLABORATIVE ROLE FOR CONSERVATORS IN THE CARE OF OBJECTS OF INDIGENOUS PATRIMONY

Nicole Marie Loya Talamantes

Museums as institutions of education have long stood as the absolute authorities on the protection, interpretation, and representation of Indigenous peoples' cultural materials within museum collections, despite the continued assertions to the contrary of the communities from which those materials originated. Working within these institutions conservators have historically focused specifically on the physical preservation of these materials with little input from source communities.

Recent years have seen the passage of important legislation such as the Native American Graves Protection and Repatriation Act (NAGPRA) and international recognition of the rights of Indigenous People (International Decade of the World's Indigenous People; United Declaration on the Rights of Indigenous Peoples) which emphasize Indigenous

communities' unique ties to their material culture and the often forced separation of a people from it.

What laws like NAGPRA stress is "consultation," yet it will be argued in this presentation that more than just "consultation" should be employed in the conservator's toolbox. "Collaboration" is necessary when caring for collections. While there are a number of obstacles to true collaboration, this presentation seeks, through a discussion of these obstacles and examples of successful collaborative partnerships, to explain the difference between consultation and collaboration and to show the benefits of collaboration to conservators, museums, and Indigenous source communities.

In conducting the research for this presentation I found that the level of collaboration currently being practiced in museums has increased dramatically in the last twenty years and shows impressive potential. Only with a thorough understanding of what constitutes "collaboration" and a continued emphasis on these partnerships can we continue to benefit from them.

### BUILDING A CONSERVATION INSTITUTE FOR OBJECTS, MONUMENTS, AND ARCHAEOLOGY IN IRAQ

Nancy Odegaard, Vicki Cassman, Lois Price, and Jessica Johnson

The Iraqi Institute for the Conservation of Antiquities and Heritage has been preparing Iraqi museum professionals to integrate conservation into the core of the museum mission since 2008. With the blessing of the Iraqi State Board of Antiquities, Institute participants reside at and study a specialized curriculum of conservation methods and theory from international conservation experts in a state-of-the-art facility that includes resident accommodation.

This paper reviews the challenges of building professional capacity in museums through conservation. The Institute serves to unite Sunni and Shia, Muslim and Christian, Kurd and Arab, women and men, in the vital purpose of preserv-

ing their shared heritage. The institute has overcome many physical, financial, cultural, and professional obstacles in order to begin to add to Iraq's existing professional capacity within museums and preservation.

By early 2011, 34 museum professionals from a variety of institutions across Iraq had participated in two tracks, artifact conservation and architectural preservation. An advanced class was added in 2012. Currently, a program for archaeology is under consideration. Sustainability is a major challenge the Institute faces. The rewards and the difficulties of this effort will be discussed.

### A BASKET BY BASKET CASE: COLLABORATING WITH COMMUNITIES IN CONSERVATION EDUCATION

Christian De Brer, Lily Doan, Siska Genbrugge, Dawn Lohnas, Robin Ohern, and Ellen Pearlstein

Since the establishment of the UCLA/Getty Master's Program in the Conservation of Archaeological and Ethnographic Materials in 2006, the students in each cohort have collaborated with the Agua Caliente Cultural Museum (ACCM) in Palm Springs as part of their coursework.

This presentation will provide an overview of the past three classes' experiences collaborating with the ACCM, including an introduction to the course, the ACCM, and the program's goals. It will also briefly discuss collaborative projects such as harvesting plant fibers and basket weaving lessons with members of the community, in addition to discussions about, and treatment of pieces in the museum's collection. These treatment projects further led to the development of two exhibitions (one at UCLA and one online) created jointly with the ACCM.

The treatment of several baskets from the collection will be discussed, with focus on how consultation was incorporated into conservation methodology, and the benefits provided to the museum through discussion of important preservation issues.

### **“YCBA Plans Conservation Exchange in Haiti,” *Yale Daily News*, 09/12/2012**

Following the devastating earthquake in Haiti in 2010, the Smithsonian Institution began a program to recover and restore artworks marred in the disaster based out of the offices of the United Nations Development Program. Now, the Yale Center for British Art is hoping to create a cultural exchange program to teach Haitian artists restoration techniques that the artists can apply to damaged works in their home country.

One participant in the Smithsonian’s Haiti Cultural Recovery Project was Mark Aronson, the chief conservator at the British Art Center, who worked on the project with two Haitian artists and professors, Franck Louissaint and Jean Menard Dernoncourt. When conservators at the Yale Peabody Museum uncovered 15 forgotten portraits of Haitian political figures in the museum’s storage facilities last year, Aronson said he invited Louissaint and Dernoncourt to New Haven to learn restoration methods that could apply to artwork in Haiti, as the pieces were being examined for restoration purposes by a team of conservators from the Yale Center for British Art.

The Peabody artworks were brought into the United States by renowned abolitionist Frederick Douglass in his capacity as Haiti’s commissioner for the Chicago World Fair in 1893. Aronson said that he hopes to turn the restoration project into a teaching tool by inviting young Haitian artists and would-be conservators to collaborate on the project.

### **“Van Gogh’s *Flowers In A Blue Vase* Damage Seen in X-rays,” *BBC News*, 09/15/2012**

Researchers have spotted a never-before-seen chemical effect in Vincent Van Gogh’s *Flowers In A Blue Vase* that is dulling the work’s vibrant yellows. It seems a layer of varnish added later to protect the work is in fact turning the yellow to a greyish-orange colour.

High-intensity X-ray studies found compounds called oxalates were responsible. But atoms from the original paint were also found in the varnish, which may therefore be left in place.

The new work was begun during a conservation treatment in 2009, when conservators found that the yellows in *Flowers In A Blue Vase* - from a pigment called cadmium yellow - had turned greyish and cracked. Normally, cadmium yellow grows paler and less vibrant as it ages. So the team took tiny samples of the work to some of Europe’s largest sources of X-rays: the ESRF in France and Desy in Germany.

The purpose was to determine not

only what was in the samples in terms of atoms and molecules, but also the precise structures in the interface layer between the original paint and the varnish. That is where the team was shocked to find a compound called cadmium oxalate as the cause of the grey-orange pallor. Oxalates are commonly found in much older works, and in association with different pigments.

This is the first time that cadmium has been seen to form oxalates within the varnish - a protective measure that was added much later. That some of the Van Gogh’s paint has been drawn into the varnish creates a troubling problem for conservators, who of course want to prevent any further degradation but are duty-bound not to remove any original material.

### **“Search For Mysterious Lost Da Vinci Aborted,” *Discovery News*, 09/22/2012**

A longstanding Leonardo da Vinci mystery -- the fate of a lost masterpiece known as the Battle of Anghiari -- will remain unsolved. The ambitious project to find the long-lost artwork has been put on indefinite hold.

The scaffoldings have been standing for nearly 10 months in front of a frescoed wall in Palazzo Vecchio, Florence’s 14th-century city hall, in the imposing Hall of Five Hundred. Behind a mural known as the “Battle of Marciano,” would lie Da Vinci’s masterpiece, according to art diagnostic expert Maurizio Seracini, director of the Center of Interdisciplinary Science for Art, Architecture and Archaeology at the University of California, San Diego.

Created by Giorgio Vasari (1511-1574), the mural has been at the center of Seracini’s research since the 1970s. Finally, in late 2011, Seracini identified 14 small areas in the frescoed wall that could be explored by endoscopy and asked for permission to investigate them. To ensure that no damage would be done to Vasari’s mural, areas were chosen that were either free of original Vasari paint or were cracked or previously restored.

In January, Seracini’s team drilled six tiny holes into Vasari’s fresco, inserted a 0.15-inch-wide probe and micro-cameras and collected samples of red, white, orange and black material. “None of the six points of entry chosen by the Opificio Delle Pietre Dure was among the 14 original points identified by Prof. Seracini. Nevertheless, he and his scientific team were encouraged by the results,” said National Geographic, who sponsored the Battle of Anghiari Project, in a statement.

SEM analysis revealed the black material had an unusual chemical makeup of manganese and iron that, according to Seracini, corresponded to the black pigment found

in brown glazes on Leonardo’s “Mona Lisa” and “St. John the Baptist”

This would suggest that Vasari created it intentionally to preserve Leonardo’s masterpiece. Cecilia Frosinini, mural paintings section director at the Opificio, immediately resigned in protest from the project. “It’s an ethical question. I’m supposed to protect the artworks, and here there is an invasive intervention on the painting,” Frosinini wrote.

Following her reaction, many art historians signed a petition asking to stop the drilling and even questioning the possibility that the fresco was indeed hidden behind Vasari’s mural. “Vasari would have never covered a work by an artist he admired so much in the hope that one day someone would search and find it. You would expect such a hypothesis from Dan Brown, certainly not from art historians,” Tomaso Montanari, an art historian at the University Federico II in Naples, said.

This summer, the saga of the lost Da Vinci’s fresco took its final twist. Cristina Acidini, superintendent for the Polo Museale Fiorentino, replied to Renzi by authorizing the endoscopic investigation of a seventh hole in a paint-free area originally identified by the OPD, but ruled out the possibility of carrying out further holes as requested by the scientific team. In response, Renzi decided to put the project on hold.

In a highly polemic letter to culture minister Lorenzo Ornaghi, Renzi, now a candidate for Prime Minister in the center left party’s primary elections, stated: “if the government is afraid to authorize this restoration, which would be authorized anywhere else at any point of time, we will wait until the government changes.”

A few days ago, Acidini gave the go ahead to fill in the six holes in Vasari’s fresco and dismantle the scaffoldings. “This is how it ends, with strokes of stucco and paint, the search for Leonardo’s mythical work,” the daily La Repubblica wrote.

### **“BNSF Awards \$10K Grant to Conserve Murals at Kiva,” *BCDemocratOnline.com*, 10/01/2012**

The Burlington Northern Santa Fe (BNSF) Railway Foundation has awarded a \$10,000 grant to the Koshare Foundation. The grant will enable the Koshare Indian Museum to proceed with efforts to conserve the historic Velino Herrera murals, on the walls of the museum’s Kiva.

The Herrera murals were painted and placed in the Kiva in 1949 and are the only known large murals remaining of this renowned Zia Pueblo artist. The conservation efforts will be led by Koshare Museum



Executive Director, Jeremy Manyik, and Conservator Victoria Ryan of Art Care Services in Colorado Springs.

Herrera completed the murals after they were adhered to the Kiva's adobe walls with wallpaper paste. The Koshare Kiva, along with Herrera's murals, were placed on the Colorado State Register of Historic Sites in 1995. It was listed as an example of the Pueblo Revival style.

There are only two known large scale works by artist Velino Herrera still in existence: the ten murals in the Koshare Indian Museum's Kiva and frescoes in the Department of the Interior building in Washington, D.C.

The paintings appear to be structurally stable but are visually compromised by planar distortions, discolored varnish, and grime. The adhesive is degrading. This deterioration is causing obvious areas of delamination of the fabric from the wall. The murals are in a very public area which is extensively used. There are and have been times when a fire is lit in the center of the Kiva room as part of ceremonies. In addition, visitors were allowed to smoke inside the Kiva for several decades.

**"Heritage Conservations: Restoring Art,"**  
*Times of India*, 10/07/2012

Vaidehi Savnal bends keenly over a 1963 acrylic painting by Harikishan Lall. She is assistant conservator at The Museum Art Conservation Center (MACC). Her colleague Dilip Mestri is using a microscope to click microphotographs of damages on a manuscript from Emperor Akbar's atelier. In a corner, assistant conservation scientist Shilpa Kamat is working on a pigment database that can help restoration experts match colours on ancient paintings.

This workforce led by art conservation consultant Anupam Sah is behind the ambitious 30-month-long Art Conservation Resurgence Project (ACRP) that will cover nine states across India, namely Maharashtra, Jammu and Kashmir, Tamil Nadu, Arunachal Pradesh, Gujarat, Karnataka, Kerala, Goa and Rajasthan.

By the middle of next year, conservators from the museum will train people from these nine states on preserving their heritage. The centre will create exhaustive directories of the damage done to historic and artistic works. This material will then be made available for reference.

In the second stage, a series of volumes of conservation treatment procedures and systems will be compiled and implemented. But the real change is likely to happen on field. In addition to acquiring information

from locals, the real challenge before the team is to turn locals from varied ethnic communities into independent restorers.

In the spirit of going local, the project intends to adopt the crowdsourcing model, and upload all data collected for anyone to access online. "It will be like Wiki in nature, and up by December. Anyone who has a restoration technique to share, for instance, can add it. This is how we will proceed until all key content crystallises into a publication," says ACRP member Isaac Matthews.

**"Kimbell Art Museum Creates iPad App Featuring Permanent Collection,"**  
*Dallas Art News*, 10/07/2012

The Kimbell Art Museum announces the creation of a new iPad app that features conservation information on 32 works in the Museum's collection. The free app will be available on 20 iPads, which Museum visitors can borrow and use in the galleries during the anniversary exhibition *The Kimbell at 40: An Evolving Masterpiece*.

"Conservation is one of the most important and fascinating things we do here at the Kimbell, and it's so rare that we have the opportunity to share this type of behind-the-scenes information with our visitors," commented Eric M. Lee, the Museum's director. "With the iPad app, we're able to deliver in-depth research, descriptive images and intriguing discoveries too extensive to be included on the gallery wall labels, in an innovative format that allows for personalized exploration of the collection."

In addition to the restoration of paintings carried out by Claire Barry, director of conservation, and her colleagues, extensive technical studies have been conducted on many of the works in the Museum's collection. An impressive selection of conservation discoveries are featured on the app.

**"Defacing Rothko Painting 'Not Vandalism',"**  
*BBC News*, 10/08/2012

A man who claims responsibility for defacing a painting by Mark Rothko at the Tate Modern has told the BBC: "I'm not a vandal."

The painting, *Black on Maroon*, one of Rothko's Seagram murals, was written on with black paint on Sunday. Vladimir Umanets, founder of a movement he calls Yellowism, claims to be responsible but denies criminal damage. Mr. Umanets compared himself with the surrealist artist Marcel Duchamp. He said: "Art allows us to take what someone's done and put a new message on it." However, he acknowledged he was likely to be arrested shortly. He added that he was

a big fan of Rothko.

After the incident, Tate Modern was shut for a short period. But a spokesperson for the gallery told BBC arts correspondent Will Gompertz that it would not change its policy of allowing people up close to the art.

Conservator Julia Nagle said on Radio 4's *Today* programme that she had "every faith" the defaced painting could be restored. "The first thing you need to know is what the painting was originally made of, in order to distinguish between the solubility of what you want to get rid of and the original painting. "Fortunately, in the case of Rothko, there's a massive body of research into his techniques - and a great conservation department at Tate."

**"Restorers Tackle Obscene 17th-Century Graffiti On Rediscovered Frescoes,"**  
*The Guardian*, 10/08/2012

The beautiful 15th-century frescoes hidden behind a false roof in the cathedral of Valencia, eastern Spain, were a spectacular find – a remarkably well-conserved example of work by the Renaissance master Paolo da San Leocadio.

Restoration came with a set of unique problems. A 17th-century workman, for example, had added his own graffiti touches to the frescoes before covering them over, including one that is familiar to school toilets across the western world: a depiction of a full set of male genitalia scratched into an angel's wing. "The truth is that we have barely advanced over the centuries," Carmen Pérez, head of Valencia's conservation institute, told *El Mundo* newspaper.

The graffiti was only part of the damage inflicted on the frescoes by those who covered them up in 1674 – when damp was already deemed to be making them grubby and worthless. Workmen also tested their plaster-flicking accuracy on the Renaissance masterpiece, aiming at angels' eyes, mouths and other targets.

The frescoes were rediscovered eight years ago, when Pérez and her team started restoring the 17th-century baroque vault built underneath them. A hole in the vault gave way to an 80cm (2ft 6in) deep air chamber where pigeons had been nesting. Above the pigeons were the smoke-blackened remains of the once-colourful Renaissance frescoes featuring a dozen angels playing harps, pipes and other medieval instruments. These have now been restored, and the graffiti removed, as art historians rewrite the history of Renaissance art in Spain.

**"Restored 'América Tropical' Mural Unveiled on Olvera Street,"**  
*NBC News* 10/09/2012

One of LA's most famous murals,

originally considered so controversial that officials painted over it with whitewash, has been fully restored and was unveiled Tuesday on Olvera Street downtown.

*América Tropical*, painted in 1932 by David Alfaro Siqueiros and considered his greatest work, has a long and troubled past, including initial outrage at its shocking visual imagery. It depicts a brown-skinned man crucified under a massive eagle. City officials considered the mural so offensive at the time that they ordered it covered over.

The mural made its comeback Tuesday after a nearly \$10 million restoration project funded by the City of Los Angeles and the Getty Conservation Institute. A cultural center devoted to the mural's history and Siqueiros' work also opened.

Siqueiros was inspired by what he had seen in Los Angeles during the Great Depression -- a community that was far cry from the idyllic oasis that many believed it to be. Although the left and right sides of the mural feature rainforests and Mayan pyramids painted by Siqueiros, he left the final part of the mural unpainted until the night he chose to unveil it, seemingly in expectation of the reactions he knew it would elicit.

That image was front and center on Tuesday, as Mayor Antonio Villaraigosa and J. Paul Getty Trust President and CEO James Cuno cut a ceremonial ribbon at the center. At the accompanying cultural center, visitors will be able to learn more about the mural, the conservation process and the artistic legacy of its creator.

The mural will also have several brand-new layers of protection, including a canopy that spans the south wall of the Italian Hall, with sun shades on each side to prevent it from being directly exposed to sun and rain.

#### **"Restoration Planned for Carracci Gallery in Rome," *New York Times*, 10/10/2012**

Officials on Wednesday announced plans for the long overdue restoration of the Carracci Gallery in the Palazzo Farnese. With the bidding process for restorers now open, work is scheduled to start in January and take a year to complete.

The project will be the most ambitious and complete restoration of the gallery in centuries, involving the celebrated frescoes on the vault as well as its elaborate stucco frames and decorations, and scholars anticipate that vital information will be gleaned from the cleaning.

Even though the gallery is one of the most celebrated -- and studied -- monuments of Baroque art, it still harbors some secrets, "like determining which hands painted which section," said Rossella Vodret, an

Italian culture ministry official responsible for Rome's historical patrimony and its museums, which paid for the preliminary studies of the restoration.

The frescoes of mythological scenes were designed and painted primarily by Annibale Carracci, with some help from his brother Agostino, and several students from their workshop, including Domenichino and Giovanni Lanfranco, who went on to stellar careers in Rome. The restoration, she said, is above all a "scientific endeavor."

#### **"The Pope: That Painting of Pompei will be restored in the Vatican" (Il Papa: Quel Quadro Di Pompei Si Restauri In Vaticano)," *La Repubblica*, 10/12/2012**

Pope Benedict XVI wanted the restoration of the painting *Madonna of Pompei* to take place in Rome, consigned to the expert hands of Vatican conservators. In the next few hours the painting that Bartolo Longo brought to Pompei on the 13<sup>th</sup> of November 1875 will be taken down and placed in a custom crate for transportation to the Vatican.

One of the most venerated images of the Virgin in the world, the painting depicts the Madonna enthroned with the baby Jesus in her arms and at her feet Saint Domenic and Saint Catherine of Siena. The painting measures 120cm by 100cm.

Technicians of the sanctuary and pontifical experts noticed the painting's deteriorating condition. The painting was restored in 1965 when a sheet of Plexiglas was placed in front of it to prevent damage. According to one scenario, the presence of the Plexiglas combined with the heat of the candles and the bright light of the sanctuary over the years has led to the emergence of a condensate that has slowly altered the paint film.

Pope Ratzinger's haste in removing the painting has generated some dissatisfaction in Naples, as it means the traditional Kiss of the 13<sup>th</sup> of November will be missed.

#### **"X-Rays Reveal True Identity Of Subject In Holbein Portrait," *The Guardian*, 10/13/2012**

The true identity of a man whose face has been known in Britain for 400 years has been revealed by conservation work completed last week. Holbein's portrait, thought to be of a goldsmith called Hans of Antwerp, first came into royal possession in 1639, during the reign of Charles I, but early repair work obscured clues to the real name and trade of the man it depicts.

Now, using x-ray technology and infra-red photography, Royal Collection Trust conservators have discovered that Hans was

in fact a merchant working in London's steel-yards. The conservators found that the painting had been broken into pieces within the first 100 years of its life and then been glued back together.

Removal of overpaint and dark varnish has proved that, although the sitter may have been called Hans, he was actually a merchant. It is a finding that makes sense to Holbein experts since the painting is one of only seven surviving portraits produced by Hans Holbein the Younger between 1532 and 1533 and the rest are all of German merchants of the Hanseatic League.

The discovery came when the royal conservators spotted that the sitter's seal, in the foreground, had been altered to appear as a "W". In fact it was originally a merchant's mark -- a circle and crossed lines. The same mark can be seen in reverse on the letter held in the man's hand. The careful cleaning work has also exposed the gem-set rings worn by Hans, which also indicates the superior wealth of a leading merchant.

#### **"Enthroned Madonna and Child Painting Restored," *Times of Malta*, 10/26/2012**

A scientific conservation exercise on one of the finest and most significant Early Renaissance paintings in Malta has been completed. The exercise, with the support of Banif Bank (Malta), was carried out by the University of Malta's Research Programme for the Study of Late Medieval and Renaissance Art.

This undertook diagnostic analysis of the painting, and embarked on a conservation and restoration intervention to restore it to its former glory and give it back its original qualities. The work comes from the inner circle of Antonello da Messina and represents the Enthroned Madonna and Child.

It is the surviving central panel of a triptych, commissioned for the old parish church of Zejtun around the first decade of the sixteenth century. The delicate work was carried out by Recoop - The Restoration and Conservation Coop Ltd, which removed layers of over-painting and gave back the work a close approximation of its original appearance. The painting was first restored in 1672 by Pietro Nunez de Villavicencio who added his signature. The restoration exercise removed his over-painting.

#### **"NGV Artworks Languishing in Vaults," *The Age*, 10/24/2012**

Around \$630 million of state artworks held by the National Gallery of Victoria are languishing in overcrowded vaults and are not stored to an acceptable industry standard. Storage issues also plague Museum Victoria

where an important part of its collection sits in a Carlton basement that is prone to flooding, according to a report by the Auditor-General tabled in parliament yesterday.

The report raises concerns about the way the state's institutions store and manage \$5 billion worth of collections. Auditor-General Des Pearson said the bulk of the state's collection is not on display, with storage facilities near or at capacity. The National Gallery of Victoria and Australian Centre for the Moving Image's storage facilities have reached capacity, while 93% of Museum Victoria's storage facilities are occupied.

The report said cramped storage conditions were compromising the preservation of collections. Around \$15 million of funding allocated in the state budget will be used to address urgent storage issues at major institutions. The report said overcrowding was the reason why NGV reported that only 66% of its collection is stored to industry standard.

Robyn Sloggett, director of the Centre for Cultural Materials Conservation at Melbourne University said conservation and housing standards had progressed exponentially in recent decades, but so had the volume of material acquired.

#### **"New York's Art World Counts the Damage Done by Hurricane Sandy," *The Guardian*, 10/31/2012**

At the American Institute for Conservation, coordinator Beth Antoine says: "We're expecting a whole lot of damage to be reported for weeks ahead."

Outdoor art received special attention in the buildup to Sandy's arrival. The Museum of Modern Art removed statues, including Picasso's *She-Goat* and Katharina Fritsch's *Group of Figures* from the Abby Aldrich Rockefeller Sculpture Garden and wrapped and secured others. The Public Art Fund closed and secured Tatzu Nishi's scaffolding installation around the sculpture of Columbus at Columbus Circle. The Metropolitan Museum of Art took extra precautions with its roof sculpture by Tomás Saraceno.

Galleries in the Chelsea district of the city have been particularly hard hit. With water rising, paintings not removed from walls have been badly damaged. On the pavement outside Churner and Churner gallery on Tenth Avenue, soiled paintings in bubble wrap are piled up. The cleanup has barely begun.

Conservators will repair, salvage art will be sold at knock-down prices and insurance premiums will rise. Perhaps also, Hurricane Sandy will inspire new art. Wednesday was, by coincidence, the day that artist Michel De Broin's *Majestic* – a sculpture made from

street lamps damaged in Hurricane Katrina – was to be unveiled.

#### **"Chelsea After Sandy: MoMA Talk Sheds Light On Restoration Process As Galleries Recover," *Huffington Post*, 11/05/2012**

At an event held at The Museum of Modern Art, aimed to help those affected by Hurricane Sandy's unwelcome visit through New York City and its many museums and galleries a man asked whether freezing the work would stop mold from growing.

Experts from the American Institute for Conservation Collections Emergency Response Team (AIC-CERT) were there to give advice to befuddled artists and gallerists. Monona Russell, an independent conservationist, told the well-dressed crowd at the MoMA to put on Tyvek suits and rubber boots to enter flood-damaged areas.

The no-nonsense, self-described "industrial hygienist" said to make sure not to bring your boots back home with you, because you could track in waste materials and toxins from damaged sites into your living space.

Caitlin O'Grady, an art conservationist from the University of Delaware's Department of Art Conservation, took on a challenging issue facing many post-Sandy: insurance claims. She urged the audience to begin the process of gathering documentation for the Federal Emergency Management Agency (FEMA) and insurers -- and to freeze all paper records and receipts.

Salt damage is another factor, she noted. If salts crystallize, they can expand once the space returns to room temperature, which causes further damage to the art work. She advised keeping air circulating when drying out works, and keeping the lights on, since mold likes to grow in the dark.

#### **"Restorers Claim to have Uncovered Lost Giotto Frescoes in Quake-hit Chapel," *The Guardian*, 11/06/2012**

Art restorers working on frescoes in a forgotten chapel in Assisi believe they have stumbled across proof that stunning images found under layers of grime are the work of medieval artist Giotto.

The discovery of the artist's initials on the frescoes follows two years of restoration work in the Chapel of St Nicholas in the lower basilica of Saint Francis. The work was prompted by a 1997 earthquake that damaged the basilica.

Experts have argued that the frescoes in the chapel, which has been closed to the public and neglected for years, were at best the work of Giotto's followers in the 14th century. But restorers claim the letters

GB – standing for Giotto di Bondone, his full name – prove the cleaned-up images were his.

"This is one of the first works of [Giotto's] artistic life and is of great importance to reconstruct the chronology of his work and that of his workshop," said chief restorer Sergio Fusetti of the Assisi frescoes. The frescoes were painted when Gian Gaetano Orsini, a deacon, was buried.

#### **"Ancient Tunnels in Rome Reopen to the Public," *The Art Newspaper*, 11/21/2012**

Few people have ever visited the long network of underground tunnels under the public baths of Caracalla, which date back to the third century AD and are considered by many archaeologists to be the grandest public baths in Rome.

This underground network, which is due to be reopened in December, is also home to a separate structure, the largest Mithraeum in the Roman Empire, according to its director Marina Piranomonte. The Mithraeum has just reopened after a year of restoration work which cost the city's archaeological authorities around €360,000.

Mithraeums were places of worship for initiates of the religious cult of Mithraism, which was centred around the Persian god Mithra and practiced throughout the Roman empire from around the first to the fourth centuries AD. A Mithraeum would usually exist underground, either in a cavern or beneath existing buildings, and was traditionally dark and windowless.

The conservation problems began when skylights were installed. The presence of sunlight coupled with the circulation of air altered the underground microclimate and caused algae to grow on the walls as well as water gathering in the 25 metre-long central hall. During the work the skylights were sealed shut, a collapsed vault was restored and the walls and flooring were cleaned. A lighting system was also been installed to compensate for the closure of the skylights.

The Mithraeum was discovered a century ago and was almost entirely devoid of decoration. Only a small and poorly conserved fresco of Mithra remained, although the site had other significant features including the *fossa sanguinis*, a two-and-a-half-metres-deep square pit in which new initiates would be lowered to receive the blood of a specially sacrificed bull.

The Mithraeum is due to be connected with the other branches of the underground network to form a single visitors route, although two further adjacent spaces have still to be restored before this can happen. Restoration work is expected to take around two more years.