President's Letter

Dear Members,

As you may recall from the last newsletter, WAAC is without a president this year, so the members-at-large are filling in to write the president’s letter for each issue until Sue Ann Chui takes over. I am honored to be able to do so, having been a board member, past president, and WAAC member for many years.

Our current MAL’s, Samantha Springer and Jennifer McGlinchey, will be writing the next letters and will bring you a fresh perspective on the ever-evolving face of WAAC. Our newest MAL’s, Tish Brewer and Rowan Geiger, are stepping up to the plate in planning the next meeting. We will miss our outgoing MAL’s, Seth Irwin and Christina O’Connell!

I would like to start by thanking last year’s president Randy Silverman who made our annual meeting in Salt Lake City both successful and memorable. His blend of personal charm, composure, and acumen paved a smooth way for one of the most delightful WAAC meetings – affordable, seamless, and entertaining. We were very lucky to have him as president and value his future participation.

Last year’s meeting was the first time we filmed live streaming video of all the speakers. I hope you had an opportunity to look at the talks at the University of Utah’s Marriott Library: epubs.utah.edu/index.php/waac. And, as usual, abstracts of all the talks are included in this issue.

One of the best things about going to WAAC meetings is the opportunity to explore the surroundings. In Utah’s cases the manifest charms of Salt Lake City (the reception at the Natural History Museum of Utah was one) were almost outdone by the utter gorgeousness of Utah’s state parks. After the meeting was over, we drove through 800 miles of some of the most spectacular scenery and breathtaking vistas. How could we resist seeing Goblin Valley State Park where the rock monster scene in Galaxy Quest was filmed? Please.

We have another wonderful venue to look forward to for this year’s meeting. Through the efforts of Susan Barger and other enterprising WAAC members in New Mexico, we will be convening at Ghost Ranch. Ghost Ranch is a 21,000-acre retreat and education center near Abiquiu in north central New Mexico. The name apparently arose from cattle rustlers spreading rumors that the land was haunted in order to discourage people from looking around for stolen goods. It was called “Rancho de los Brujos” or Ranch of the Witches, which evolved into Ghost Ranch. It was the home and studio of Georgia O’Keeffe, as well as the subject of many of her paintings and has been used in many film shoots.

The ranch is about an hour outside Santa Fe and is amidst a landscape emblematic of the Southwest: vast views, mesas, red and yellow cliffs, and the cottonwood studded Rio Chama. In addition to the manifest pleasures of hearing our colleagues speak, there will be many activities to be enjoyed, including hiking, kayaking, horseback riding, and massages.

We are also in the process of arranging an Angel’s project – participants will make padded boxes for fossils from the late Triassic period digs at the Ranch – one of the most important dinosaur quarries in the Northern Hemisphere. The angels will be working with Gretchen Gurtler and Axel Hungerbeuhler from the Mesalands Dinosaur Museum in Tucumcari. The museum is home to the only 2-year paleontology degree where they train paleontology preparators.

The meeting will take place from Wednesday September 26th to Sunday, September 30th. More details to follow in the next newsletter!

It is an excellent time to start thinking about giving a paper…

Susi
Alaska

Helen Alten and staff at the Haines Sheldon Museum completed finding aids for six unprocessed archival collections and posted them on the museum website. 2017 marked the sesquicentennial of the purchase of Alaska. Funds from the Alaska Historical Commission, Haines Borough, and the Alaska State Museum’s Grant-In-Aid helped fund research and production of Everything From Afar Drifts Ashore, an exhibit focusing on the last half of the 19th century and how that pivotal period changed the Chilkat Valley. 188 people attended the opening on October 20, two days after the first American flag was raised 150 years earlier in the Chilkat Valley—hours before it was raised in Sitka. The most commonly heard word was “amazing!”

Museum staff learned that borrowing from outside Alaska becomes prohibitively expensive when a third party art handler becomes involved and that museum staff in Pennsylvania have no idea how bad the roads are in northern Canada. This spring the museum will improve collection security with the installation of new recording security cameras that include face recognition software, funded through a grant from the Museums Alaska Collections Management Fund. The museum will also continue work on the digital collection, improving its storage with a new solid-state server.

Since the grand opening of the new Alaska State Museum in summer 2016, the entire collection in the storage vault has moved twice to accommodate the construction of a mezzanine level as well as oversized compactorized shelving. The impending loss of off-site storage means totem poles, canoes, aircraft engines, canny equipment, and other large items are moving in. All these collections moves have provided Ellen Carrlee with substantial object packing and condition reporting duties.

In the fall of 2017, Alaska celebrated its 150th anniversary. The museum featured historic maps, documents, paintings, and a paper conservation display explaining the work done by Seth Irwin. Also in the fall, Fran Ritchie and Lisa Imamura helped with the lining treatment of a model gut sail for a model open skin boat.

After many years of planning and preparation, on September 15, 2017 the Rasmuson Wing (a new addition) and the Alaska Exhibition opened to the public. Encompassing over 32,000 sq ft, the two spaces are a culmination of many hours of careful conservation, framing, mount-making, and installation work. Since the opening, Sarah Owens and Claire Sumner have been continuing to examine and treat the many objects that were on display for 30 years and are now in storage.

Two weeks after the opening, the Anchorage Museum hosted the annual Museums Alaska/Alaska Historical Society meetings, where Nancy Fonicello (with help from Sarah) taught a workshop on feather structure and conservation. Monica Shah, Sarah Owens, Nicole Peters, Gwen Manthey, Nancy Fonicello, and Kim Cullen Cobb presented papers on the conservation work for the new exhibitions.

Monica and Sarah continue to support and participate in Materials Traditions, a series of programs that bring Alaska Native artists and conservators together to learn about specific materials. This year’s focus is on smoked moosehide. Working with Den’ina Athabaskan elder Helen Dick and artist Joel Isaak, Sarah and Monica brain tanned, scraped, stretched, and smoked a moosehide. During the residency in Anchorage, they were joined by Ahtna Athabaskan artist Melissa Shaginoff and conservator Lara Kaplan. In addition to examining collections objects, they experimented with moosehide sewing and beadwork.

Nicole Peters is currently working on a comprehensive collection condition survey of all archaeological and historic objects housed at Klondike Gold Rush National Historical Park (KLGO) in Skagway, Alaska. Nicole recently completed a pesticide and hazardous material survey of KLGO’s taxidermy, natural history, and historical artifact collections with a portable Bruker Tracer IV-SD XRF spectrometer; the instrument was loaned from the Alaska State Museum in Juneau, AK. Nicole also
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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Sue Ann Chui

**VICE PRESIDENT**
Sue Ann Chui

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Denise Migdail

**TREASURER**
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Chris Stavroudis

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Individual Membership in WAAC costs $40 per year ($45 Canada, $50 overseas) and entitles the member to receive the WAAC Newsletter and the annual Membership Directory, attend the Annual Meeting, vote in elections, and stand for office. Institutional Membership costs $45 per year ($50 Canada, $55 overseas) and entitles the institution to receive the WAAC Newsletter and Membership Directory. For membership or subscription, contact: Denise Migdail secretary@waac-us.org

Regional News, continued

spent one week in November conserving the Raven Shark Totem Pole at Sitka National Historical Park (SNHP). The totem pole has recently been returned to SNHP from the Anchorage Museum, where it had been exhibited on a long-term loan.

**Regional Reporter**
Ellen Carrlee

**2018 Annual Meeting**
September 26th to September 30th
Ghost Ranch, New Mexico
(never too early to gather treasures for the silent auction)

**Arizona**

This winter Marilen Pool continues her work with the Archaeological Perishables at ASM and has conserved a number of pieces for the Tucson Museum of Art. She also continues coursework towards her PhD in Arid Lands at the U of A.

Conservator Ron Harvey worked on sculpture maintenance in January at the Heard Museum and ASM with assistance from Nancy Odegaard, Dana Hemmenway (new senior conservator at Center for Creative Photography- University of Arizona), Gina Watkinson, Betsy Burr (ASM Kress Fellow), Hallye Becker (UA undergraduate), Tim Lewis and Matilde Rubio (Tohono Restoration), Luke Addington (furniture conservator).

The ASM lab continued with several large repatriation projects.

Lab members completed conservation treatment for objects in the Along the River archaeology exhibit. Steady work progressed on an IMLS grant, Conserving American Indian Archaeological Fiber and Basketry, involving treatment and rehousing of over 4,000 items in 2017 as well as several presentations and publications (Marilen Pool is the senior project conservator).

Betsy Burr has completed testing of samples in a charred material consolidation study funded by an FAIC Take-A-Chance award, and she and Nancy Odegaard will complete treatments on cataloged charred textiles. They are also working on a technical study to identify the top-bottom-front-back of Navajo textiles.

Wendy Lindsey is completing a study of tobacco residue analysis under a NCPTT grant.

Nancy Odegaard received the Chancellor’s award from the University of Canberra (Australia) for outstanding career impact and achievement. She attended the last day of the AICCM conservation meeting prior to the award ceremony. She was also on the doctoral disputation committee for Kristin Kausland’s defense at the University of Oslo. Nancy also participated in special tribal consultations during fall 2017 at the American Museum of Natural History regarding the Hall of Northwest Coast Indians and at the Field Museum regarding repatriation and human remains.

In the second half of 2017, Teresa Moreno worked to prepare a collection of 269 archaeological objects for display in a new ASM exhibit entitled Life Along the
**Regional News, continued**

**River: Ancestral Hopi at Homol’ovi.** She is currently working on a group of 60 katsinas for another exhibit that will open on March 9, Hopi Katsina Dolls: Changing Styles. Teresa continues her work to improve storage conditions for ASM’s anthropological photographic media collection. She will participate in the Image Permanence Institute’s photo process identification workshop that will be hosted by the Center for Creative Photography, March 14-16.

The conservation team at the Western Archeological and Conservation Center (WACC) has been working on treatments for Faraway Ranch at Chiricahua National Monument, Wupatki National Monument, Navajo National Monument, Gila Cliff National Monument, and Grand Teton National Park. They are happy to welcome baby Sasha Hill-Kipling into the family, and welcome Maggie Hill-Kipling back to the lab after family leave this fall!

*Regional Reporter*
Dana Senge

**Hawaii**

As major construction projects at Shangri La restrict activities around the campus, attention has turned to planning new exhibitions, both internally and externally. Conversion of the dining room into a gallery for display of textiles has brought long-standing consulting conservator Ann Svenson from California for several productive visits. She is re-designing mounting systems and preparing a new series of textile rotations, allowing some pieces to be displayed for the first time in many years.

Kent Severson continues work on the in situ tiles, a project nearing completion, and has begun planning for work on hanging lamps and other features in the living room.

Following years in Hawaii museums as a collections manager and at the University of Hawaii at Manoa (UHM) Library’s Preservation Department, in December Malia Van Heukelem started her new role as art archivist librarian for the Jean Charlot Collection, also at the UHM Library. The collection is an extensive archive of art works and documents relating to the artist and writer Jean Charlot (1898-1979) and to other artists, intellectuals, and friends he worked with or knew in his long career in France, Mexico, the mainland United States, and Hawaii.

**Dawne Steele Pullman** was once again the official paintings conservator for Art Basel Hong Kong in March. She continues to work on contemporary Chinese paintings in Asia and other artworks from the growing interest in Western art while also maintaining her studio for clients in Hawaii and the USA. Some works she has recently treated were by Dubuffet as well as Wang Guangle, Zao Wou-Ki, and T’ang Haywen.

**Mari Hashimoto** has joined Larry and Rie Pace as an intern on a 6-month grant from the Japanese Asian Cultural Council. Mari has been getting hands-on experience on a variety of paintings and an introduction to the conservation problems of termite damaged paintings. Last August a client had a disastrous fire in their house which was full of 17th- and 18th-century European paintings and musical instruments. Rie, Mari, and Larry worked with the recovery crew to remove, examine, photograph, and stabilize the paintings and works on paper. They remain busy with numerous paintings from the Honolulu Museum of Art, the Hawaii State Art Museum, and numerous private clients.

**Los Angeles**

LACMA’s Conservation Center welcomes their new chemical hygiene officer, **Carlos Aponte Vazquez**, who started his position on February 1. Charlotte Eng is now the Rosa Liebman Mellon Senior Scientist and Head of Conservation Research at LACMA. Laura Maccarelli is now an assistant conservation scientist at LACMA.

Scientist emeritus **Terr y Schaeffer** presented a talk on the “Use of cudbear by a Victorian carpet manufacturer” at the recent 36th meeting on Dyes in History and Archaeology, in Hampton Court Palace. The LED retrofit of Chris Burden’s *Urban Light* at LACMA was completed (all 309 bulbs!) last fall thanks to the efforts of Terry, Mark Gilberg, and Charlotte.

UCLA Library is excited to have several items on exhibit in the Pacific Standard Time LA/ LA exhibits. And they are happy to announce that their move to the new location at 20 Powell Library went smoothly.

In spring 2016, thanks in large part to audiovisual materials specialist **Yasmin Dessem**, the UCLA Library was awarded a $40,000 grant from the John Randolph Haynes and Dora Haynes Foundation to digitize all audiovisual and photographic materials in the Golden State Mutual Life Insurance Company records. Thanks to this grant more than 2,000 items are now available online (as of fall 2017). **Shani Miller**, a graduate of the UCLA Moving Image Archives Studies, has been essential in her role of project coordinator, managing digitization workflows, inputting metadata, and uploading content to Calisphere.org.

**Regional Reporter**
D. Thor Minnick
Regional News, continued

UCLA contracted with photo conservator Tram Vo to stabilize historic photos from the African-American-owned Golden State archives. Digitized archival photos were presented to enthusiastic former Golden State Mutual employees (who still meet monthly and keep a newsletter running), and conservators look forward to hosting the group to a tour of the library conservation facilities soon.

Hannah Moshier has moved into a new position at UCLA, as the newly created digitization and loan conservation coordinator, with registrar responsibilities. She is currently working with conservator Tomokatsu Kawazu of Studio Sogendo to coordinate exhibit stabilization for a Chiura Obata sumi painting on silk. The traveling exhibit will take the Obata painting to Japan and the Smithsonian Museums before the piece comes home to LA.

Collections conservator Wil Lin has been building connections with the UCLA East Asia Library to help care for their unique materials. He has also been collaborating with the university bindery to produce legible and accurate non-roman titles for library bindings. UV cured ink on the spine means they are no longer tied to metal fonts used to stamp book cases in the past, and can move away from transliteration of author/title information.

Department head Dawn Aveline will be traveling to Cuba in February with AV specialists Yasmin Dessem and Allie Whalen (the newest AV colleague, a recent graduate of the NYU Moving Image Archiving and Preservation program) to collaborate with colleagues there as part of the ongoing UCLA Library International Digital Ephemera Project. This trip will focus on magnetic media preservation.

In July Chela Metzger presented on the topic of bound record-keeping structures at the Society of Bookbinders education and training meeting in Manchester, UK. The visit also included meetings with book conservators at Trinity College and the Chester Beatty in Dublin, Ireland to discuss issues related to rebinding of medieval manuscripts.

Buffalo State art conservation program third year intern Amanda Burr was awarded a Mellon fellowship at LACMA this fall. Her work on a unique collaged civil war diary and a heavily illustrated baroque science book can be seen if you search in the UCLA preservation blog.

Kress/FAIC conservation fellow Christina Romanowski Bean, a recent graduate from the Camberwell paper conservation program in London, has had an active and productive year at UCLA. Her work on an 18 foot printed Armenian scroll can be found on several UCLA preservation blog posts. Her other projects have included a challenging set of heavily damaged Indian health posters, a group of phrenology ephemera, pigment consolidation of sumi ink on pressed leaves, and pigment consolidation on Armenian manuscripts. She has an interest in multispectral imaging which has been to the benefit of UCLA collections as they strive to translate faded and lost media.

Her research on the UCLA French Resistance newspapers has taken her to the Getty to work with scientists on their microfodometer, and will lead to a better understanding of the material culture and storage/exhibit specifications for the hastily created WWII materials.

This summer UCLA Library hosted rising first year WUDPAC student Madison Brockman during her summer work project. Madison worked to safely dismantle and remove attachments from a massive, shattered, and already digitized UCLA marching band scrapbook. She also created specialized housings for two Bruin bear paws.

Sculpture Conservation Studio had a fulfilling 2017. They completed the de-installation, conservation, and re-installation of over 45 artworks, including a 60’ wooden clock tower, on the outdoor Fulton Mall in Fresno, CA, after 18 months of incredibly hard work and tough weather. The grand opening of the new “Fulton Street” with the installation of the conserved 1960s fountains and sculptures was in October.

SCS also completed the conservation of the 17 First Street tile panels mural on the new Alliance Charter school in East LA. The panels were built for the First Street Mercado, which was torn down to build the charter school. The community would not let the charter school be built unless the panels were saved and put into the facade of the new school. The murals look great in their new arches on the facade with lights at night to enhance the tile panels. Photographs of the mural were at LACMA at the Art LA Chicano exhibition.

Dawn Jaros recently traveled to Chennai, India as the Academy of Motion Picture Arts and Sciences representative for the film preservation conference organized by the Film Heritage Foundation and International Federation of Film Archives. The conference covered both theory and practical classes for the preservation and restoration of film-based and paper-based materials and had daily screenings of restored classics from around the world. Dawn presented on preservation and basic conservation techniques for photographs in library and archive collections.

NHMLA conservators Tania Collas and Marina Gibbons have been working on new additions to the museum’s Becoming Los Angeles exhibition, including an early California period saddle and a stunning red tutu worn by Betty Grable in the 1945 film Diamond Horseshoe. The renovated exhibition opens on June 1, 2018. Marina is also treating a Middle Kingdom Egyptian painted wooden coffin, among many other projects.

In January, the conservators hosted a tour for members of the Emerging Conservation Professionals’ Network to show current lab projects as well as the museum’s Mineral Sciences lab and Anthropology collections.

Jane Bassett has been appointed senior conservator and head of Decorative Arts and Sculpture Conservation at the J. Paul of a Getty Museum. Arlen Heginbotham is working on the publication of a forthcoming online catalog of French Rococo furniture which will include substantial technical
essays. Jessica Chasen, a recent Winterthur grad and current intern, is contributing analytical interpretation of Asian and European lacquer to the catalogue. She is also studying an outdoor sculpture by Joan Miró for upcoming treatment.

Work on the Stark Sculpture Collection is ongoing with pre-program conservation assistant Magdalena Solano focusing on the treatment of sculptures by Elisabeth Frink. Kellie Boss is working on contract to re-wax the outdoor bronzes and to treat a number of the outdoor painted sculptures. Julie Wolfe continues her testing of home-made versions of Incralac and is currently finishing a manuscript on the materials and techniques of Roy Lichtenstein’s outdoor sculpture.

In September, Paintings Conservation welcomed graduate intern Kat Harada, who completed her third year at the National Gallery of Art, Washington and graduated from Buffalo State University in September.

The department is also hosting this January Line Clausen Pedersen, curator, head of modern department at the Ny Carlsberg Glyptotek, Copenhagen, Denmark. She is an Edgar Degas scholar and brought with her two paintings, one by Degas, the other by Vincent Van Gogh, for study, treatment, and display. Though known for their sculpture collection, the Glyptotek has an outstanding collection of 19th-century paintings as well. Devi Ormond and Laura Rivers are working with Line on the paintings.

Antiquities Conservation at the Getty Villa would like to share a few exciting events coming to the Getty Center and the Villa. The conservators, mountmakers, and preparators are busy with the final stages of reinstalling the Villa collection. The Villa Reimagined will fully open to the public by mid-April.

Coinciding with the Villa reinstallation, Museum staff are active with several new exhibitions: Plato in L.A.: Contemporary Artists’ Visions, April 18–September 3, 2018 in the Villa’s temporary exhibition galleries, and Beyond the Nile: Egypt and the Classical World on view March 27–September 9, 2018, at the Getty Center, which will highlight the multi-faceted connections between Egypt and the Mediterranean over two millennia. Erik Risser and William Shelley are actively restoring a large granite obelisk, from the Museo del Sannio, Benevento, Italy which will be exhibited in the Getty Center rotunda.

The department is also preparing for the exhibition Palmyra: Loss and Remembrance, on long-term view at the Villa from April 18, 2018–May 27, 2019. This exhibition will highlight the important collection of ancient Syrian funerary relics from the Ny Carlsberg Glyptotek collection in Denmark.

Susan Lansing-Maish travelled to Copenhagen for the ICOM-CC conference last September and had an opportunity to examine the limestone objects prior to shipping to the Villa. At the conference, Susan presented her and Eduardo Sanchez’s four-year-long conservation treatment of the Berthouville treasure of ancient Roman silver which belongs to the Bibliothèque Nationale de France, Paris. In mid-October, Susan was invited to present the Berthouville treasure project at a Gallo-Roman symposium at the Musée Départemental Arles Antique, France, marking the culmination of the Getty’s involvement in this extraordinary collaborative project.

Antiquities Conservation welcomes 2017-18 intern Julia Commander of the Winterthur conservation training program. Julia hit the ground running last September and has been involved in all Villa activities – mainly the reinstall as well as several technical studies on ancient gilded silver, ceramics, and ivory.

Marie Svoboda travelled to Athens, Georgia, to the University of Georgia, last October, to give a lecture to students on the APPEAR project – an international collaboration on the study of Roman-Egyptian mummy portraits. Susanne Gänscike weathered the “bombogenesis” and travelled to Boston for the AIA conference, where she participated in a panel discussion on conservation and archaeology, in the field and in museums.
to touch a work of art with gloves and under guidance. This initiative is part of the museum’s dedication to creating an inclusive and inviting environment for all visitors. Across the museum’s departments they are also attempting to improve communication about why museums ask other visitors not to touch the art, with signage and interactive stations.

In January, Morgan Hayes joined Samantha for a week of work in the gallery on a Mary Corse painting that will be travelling across the country to DIA: Beacon on loan. They used the public moment as an opportunity to highlight conservation at the museum on a Facebook live event.

Samantha is continuing work on the AIC-Wiki’s Oddy test database and will be co-teaching a workshop at the AIC annual meeting in Houston. A variety of contemporary Northwest works of art have crossed Samantha’s bench in preparation for a biannual rotation of those galleries including the stabilization of delaminating masking tape from a Judy Cooke hanging. When possible, artists are consulted with the curator, Grace Kook-Anderson, to build the institution’s knowledge of works within the collection.

Corine Landrieu has been working on a range of sculptures and objects from different private and public collections, including the treatments of a Tennis Whiting plaster sculpture, a Doris Chase maquette, a ceramic fountain by Namm, and the assessment of a large Buddha collection. She also treated a diving suit from 1944 for the Naval Undersea Museum.

In October 2017, Andrew Wyeth: In Retrospect opened at the Seattle Art Museum, and SAM’s conservation and museum services team had the pleasure of studying and caring for 105 remarkable and delicate works by Wyeth. They give their sincere thanks to the Brandywine River Museum staff and also to Joyce Hill Stoner and Julie Ream for their terrific preparatory work and for generously sharing their knowledge of the artist.

Geneva Griswold went to Florence where she took part in the conservation of Massimiliano Soldani Benzi’s Lamentation over the Dead Christ together with Florentine conservator Ludovica Nicolai. The project has been supported by The Samuel H. Kress Foundation, the Bargello, and other foundation and individual supporters.

In Seattle, Nick Dorman completed conservation treatment of Shipwreck Off the Coast of Alaska by Louis-Philippe Crépin, 1806 for it to be exhibited at SAM in the installation Extreme Nature. Elizabeth Brown continued her work on preservation strategies for the time-based media works in SAM’s collection.

SAM received the Andrew W. Mellon Foundation implementation grant to establish an Asian paintings studio; preparations for the development of the department and studio have commenced and authorization was given by the Seattle City Council for the broader Seattle Asian Art Museum construction project to proceed. In addition to the new studio, the project adds gallery, public meeting, and education spaces. Seismic safety measures will be implemented and new HVAC systems will be incorporated within the historic art deco Asian Art Museum building.

Geneva and Nick gave short talks about the Asian Art Museum project at the regional conservation group meeting at the Portland Art Museum in November, and they are currently teaching a preservation of collections course at the University of Washington Museology MA program. Elizabeth and Geneva are evaluating object checklists in preparation for the new installation of the galleries at the Asian Art Museum, once it reopens.

The RBCM conservation labs are delighted to announce the arrival of a new archival conservator, Lauren Buttle. Lauren holds a M.A.C. from Queen’s University with a specialty in paper. She most recently worked as a Kress Fellow at Trinity College in Dublin, conserving papyrus. Her experience includes working with Yukon Archives, City of Edmonton Archives, Art Gallery of Ontario, as well as the British Museum. They feel very fortunate to welcome Lauren to the workplace. They also were fortunate to host Katie McEvoy, Fleming intern, in the fall. Katie was instrumental in getting them through a very busy exhibition and loans period. She is currently working on contract, assisting with the move of the palaeontology collection.

In November, the RBCM launched the much anticipated Kwâday Dán Ts’inchí: Teachings from Long Ago Person Found, edited by Richard J. Hebda, Sheila Greer, and Alexander P. Mackie, documenting the story of the “Long Ago Person Found” in a northern BC ice patch. The comprehensive and collaborative publication interweaves the scientific analysis, conservation treatment, and cultural knowledge of an individual and his world. A chapter in the book was written and another co-authored by Kjerstin Mackie of the RBCM, chronicling the work that she did on the associated artifacts. Other conservation contributors included Kate Helwig, Tara Grant, Jane Sirois, Michael Wayman, Greg Young, Jennifer Poulin, and Val Monahan.

Lisa Bengston travelled to Bogota, Colombia to deliver artifacts and install the First Nations Masterworks exhibit in the Museo del Oro. She continued on to explore the Andes, Amazonia, and beaches of Colombia and Peru. She was even able to connect with former RBCM conservation intern Sarah Confer and to take a traditional dying workshop.

UBC Museum of Anthropology conservator Heidi Swierenga led the way, with the assistance of Kasey Lee and George Field, as well as other BC conservators, to lay the foundations of the BC Heritage Emergency Response Network. At the time of this submission, six British Columbia cultural institutions have signed on to the Statement of Cooperation, a training workshop was held, and emergency kits have been developed for use by BC institutions on Vancouver Island and the lower mainland. Work continues with support from the BC Museums Association for the development of a sustainable province-wide model for emergency response and collections salvage.
Regional News, continued

Colleen Wilson presented her work on mannequins at the Fall Pacific Conservation Group meeting as well as a RBCM staff meeting.

Regional reporter: Corine Landrieu

San Diego

The Balboa Art Conservation Center (BACC) welcomes three new conservators to its staff: Bianca Garcia, assistant conservator of paintings; Jacinta Johnson, assistant conservator of paper; and Morgan Wylder, assistant conservator of paintings.

Bianca earned her M.S. in art conservation from the Winterthur/University of Delaware Program in Art Conservation. She received her B.A. in art conservation from the University of Delaware. Bianca’s training includes internships at the Cleveland Museum of Art, Museo Nacional Centro de Arte Reina Sofía, and Western Center for the Conservation of Fine Arts.

Jacinta earned her M.S. in art conservation from the Winterthur/University of Delaware Program in Art Conservation with a focus in paper conservation. Her training includes internships at the Conservation Center for Art & Historic Artifacts, the National Gallery of Art, and the Cleveland Museum of Art.

Morgan earned a dual undergraduate degree in fine art and art history at Cornell University. She received her graduate degree in conservation of easel paintings from the Courtauld Institute of Art, London. During graduate school, Morgan interned in the paintings conservation department at the Victoria and Albert Museum, London. Before her fellowship at BACC, Morgan worked as the NEH fellow in paintings conservation at the Chrysler Museum of Art.

Julie McInnis recently presented at the Coronado Historical Association’s inaugural curatorial workshop as a guest speaker. The theme was “caring for your family photographs.” Attendants learned the basics of safely handling photographs, how to buy archival materials, best practices for housing photo prints and negatives, and when (and how) to contact a conservator. Example housings were shown from the Historical Association’s own collections, and everyone went home with a goody bag of cotton gloves and a few archival supplies.

Regional Reporter Frances Prichett

San Francisco Bay Area

Big changes have taken place in the textile conservation lab of the FAMSF. Highly skilled volunteers Jean Scardina and Barbara Nitzberg have retired as of 12/2017. They have each donated well over 35 years of textile expertise to the lab and can never be replaced. Head textile conservator Sarah Gates is not quite sure what she will do without their generous support, both personally and professionally. Over the decades Jean and Barbara have cheerfully stepped up to help with a wide range of tasks, from maintaining the sewing machines and fixing the serger to analyzing costume modifications and undertaking weave analysis – not to mention their skill with “seat of your pants” dyeing and cookie-baking. Associate conservator Anne Getts and Sarah wish them all the best with their “extra” day of leisure each week! They are and will be sorely missed.

The Bay Area Conservation Guild organized a visit to the di Rosa Collection in Napa. The timing was fortuitous as the tour and lunch took place just prior to the devastating fire in the area. BAACG is making a donation to help the collection recover from fire damage.

The Conservation Center of the Asian Art Museum is preparing for an extension to the museum, a new outdoor terrace, and exciting changes to the collection galleries beginning in the spring of 2018. As a result, they have some surplus materials, including approximately 1000 used Gore Tex silica gel tiles available for free. They are 6” X 6” X 1/2” and each can condition 1.5 cubic feet. Come and take as many as you like, but let us know when you’d like to come and how many you want. Call Kathy Gillis (415-581-3540) or Mark Fenn (415-481-3541). The museum will remain open during this expansion project, and they welcome you to visit the thought-provoking spring exhibit, Divine Bodies, opening March 9, 2018.

Kathy Gillis attended the VoCA (Voices in Contemporary Art) summit at SFMOMA in January, 2018. Shioho Sasaki will attend the workshop, “The Use of Chelating Agents in Paper Conservation” held at Stanford in March. Mark Fenn will attend the Forbes Symposium at the Freer Gallery in March. The topic for this year’s program was research on early Chinese lacquer buddhas.

Denise Migdail will be traveling to Ottawa in preparation for the 2019 NATCC conference to be held there. Recent courier and research trips have taken conservators to Suzhou, China (Mark Fenn), New York City (Kim Taira), Chicago (Kathy Gillis), and Seoul, South Korea (Shioho Sasaki).

At SFO Museum, Alisa Eagleston-Cieslewicz is eagerly awaiting the move into the museum’s new building, set to happen in a few short weeks. The new building will have a dedicated conservation lab, as well as expanded collection’s storage and exhibit preparation areas. Alisa recently returned from maternity leave after welcoming a baby boy in October, and she is currently working on the conservation needs for an exhibit of historical radios.

Regional Reporter Alisa Eagleston-Cieslewicz

Texas

In late January, a group of over 40 museum professional from all across Texas met at the MFA Houston to begin disaster preparedness training for...
collecting institutions. The free training, organized by the Foundation of the American Institute for Conservation of Historic and Artistic Works (FAIC) in collaboration with TX-CERA, the Texas Cultural Emergency Response Alliance, is designed to equip collections professionals in Texas with the skills to respond to emergency situations in the region’s museums, libraries, archives, and historic sites.

The program began with two days of in-person training in Houston on January 25 and 26. During the subsequent four months, participants will be asked to take part in an 8-part webinar series that will include presentations on material-specific salvage techniques. In June, the program will wrap with an additional two days of in-person training in Houston.

The Texas Heritage Responders training is based on the curriculum used for the National Heritage Responders team, including damage assessment exercises and a disaster response scenario. Participants completing this training will be asked to make an effort to respond, when requested, to disasters that jeopardize Texas’s cultural materials.

Karen Pavelka traveled to Puerto Rico in January as part of an AIC/National Heritage responder team which also included team leader Laura Hertz Stanton and conservators Beverly Perkins and Jason Church. The team surveyed seven institutions including libraries, archives, and museums and held a workshop at the Museo de las Americas to demonstrate salvage techniques.

A second team included Bob Herskovitz, Anne Frellsen, and Susan Duhl. The teams were organized by Rebecca Elder who continues to oversee NHR activities. The teams were organized by Jess Unger and Rebecca Elder.

Regional Reporter:
Ken Grant

Conference Announcement

APPEAR: Ancient Panel Painting, Examination, Analysis, and Research
May 17–18, 2018
Getty Villa, Los Angeles

In 2013, the J. Paul Getty Museum’s Department of Antiquities Conservation launched the APPEAR (Ancient Panel Paintings: Examination, Analysis, and Research) Project. A four-year Getty collaborative initiative on the study of ancient panel painting from Roman Egypt involving many international partner institutions, the project goals are to investigate and increase the understanding of ancient painting technology, its production, materials, clues to workshop and artistic practice.

Participating institutions research their collections and contribute results into a shared database. The collective information obtained from numerous entries not only promotes comparison between the artifacts but helps develop a broader understanding of materials and technology in the ancient world.

The J. Paul Getty Museum will be hosting a two-day conference marking a significant outcome of this collaborative effort. The presentations and posters given by project participants will highlight the collaborative work, investigations, observations, and data collected to date. The conference is open to the public, however it is targeted towards a scholarly and engaged audience interested in ancient panel painting methods and materials.

For more information visit: http://www.getty.edu/museum/research/appear_project/

WAAC Publications

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. Paperbound and printed on acid-free stock.

Price: $10.00
($8.00 copy for orders >10 copies)

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.

Prices include shipping and handling. Make checks payable to WAAC drawn in US dollars on a US bank.

For information please contact the WAAC Secretary:
Denise Migdail

Send prepaid orders to:
Donna Williams

I haven't failed.
I've just found 10,000 ways that don't work.

Thomas Edison
Great Aspirations

A conservator’s dream would be to treat surfaces contact-free, with as little mechanical impact as possible. The technique of micro-aspiration has shown some promising results in this direction and has recently been experimented with by the conservators at the Fondation Beyeler.

The innovative Swiss conservator Benno Wili has been working with micro-aspiration since 1997 and has continuously been modifying the equipment to the needs of conservators for the past 20 years. Currently about 25 of his prototypes are in use in conservation studios throughout Europe. Similar techniques have been used by other conservators, however modestly and with other application approaches (Heiber, Nikolaus, 1998; Hausamann et al. 2010, Pfister 1999, Cremonesi 2017).

The micro-aspiration method described here is a “micro-cleaning,” where small surface areas are treated locally under magnification with regulated suction from a vacuum pump. The generated vacuum is so strong that liquids and gels can be completely and immediately removed, leaving the surface dry again.

The Micro-Aspirator

The device is a mobile vacuum membrane pump from the medical field modified for use in conservation. Liquids and solvents are sucked in through a glass nozzle tip with a diameter of less than 1 mm, together with the ambient air. As the solvents travel through the three meter riffed tubing and a three liter residual air volume vessel, they are evaporated, so liquid solvents do not accumulate within the vessel. The use of additional fume extraction is still recommended.

The device has a particularly high throughput, almost three times as high as other vacuum pumps, which results in considerably faster solvent/liquid removal from treated surfaces. The vacuum can be regulated with a bypass gauge. The finger control on the hand-tool allows for an immediate and easy start / stop of the suction.

A large variety of tips, nozzles, and brushes attached to the vacuum tubing allow for diverse and precise treatment options, especially when combined with a syringe fitted with a brush tip which allows controlled dispensing of liquids.
The technique has shown to be convincing for both wet and dry surface cleaning.

**Solvent Cleaning**
A painting by Claude Monet was tested for removal of a poly(butyl acrylate) varnish which distorted the matte, pastel-like surface and color harmony. Highly concentrated xylene was found to best remove it, however, a removal with cotton swabs was not possible. Mechanical swabbing affected the original paint layer, and the varnish could not easily be reached within the impastoed paint layer.

Micro-aspiration was found to solve both problems. The solvent was applied with brush syringes by gently moving the tip of the brush over the surface in an area of several millimeters. Almost simultaneously, the solvent and dissolved varnish were extracted with the micro-aspirator.

The cleaning could be controlled by the ability to finely regulate the solvent dosage with the hand-held brush syringe and the positioning of the vacuum nozzle closer or further away from the brush syringe, thus decreasing or increasing the solvent action time. Working with both tools simultaneously, a flushing effect was produced, streaming solvent and air turbulences over the surface.

**Dry Surface Cleaning**
An Andy Warhol silkscreen painting in which the artist covered the wet silkscreen paint with diamond dust (actually crushed glass), suffered from extreme, almost disfiguring soiling from “house” dust. The affected black paint in the background is an unusually soft acrylic emulsion. Conventional dusting methods were not possible without affecting the soft original paint surface and disturbing the only lightly adhering diamond dust particles.

Microaspiration gave an ideal alternative method to treat this sensitive surface. Individual dust fibers were easily removed with the right amount of suction strength without having to rub the surface. Most importantly, precision control with the glass nozzle made it possible to accurately work around the tiny diamond dust particles in which the fibers were entangled, without dislodging them.

The accurate and lightweight tools as well as the quiet motor, made the laborious and time-consuming treatment easily manageable.

**Up Close**
The possibilities of micro-aspiration are promising, however, there is no research on how this method affects paint surfaces on a micro-level. To get a preliminary idea, test panels were treated for a varnish removal (aged dammar) with traditional cotton swabs and micro-aspiration. Both methods showed similar results optically while working. The cleaned surfaces were then compared under UV and high magnification, and differences were apparent.
Micro-aspiration can leave “smears” and pooling of dissolved varnish residues, while the areas cleaned with cotton swabs are evenly clean.

Although the varnish was solubilized, working on a micro-scale with fluids and air pressure can form tide lines, strongly depending on individual working style and hand skill experience. Cleaned areas should be checked in UV and treatment repeated several times when using micro-aspiration, since the surface dries almost immediately after each application.

SEM images of porous test surfaces also show fine residues of varnish partially still present within the deeper microstructure of the paint compared to the more thoroughly swab cleaned areas. One reason might be cotton’s adsorption ability. Possibly a better adjusted solvent choice when working with micro-aspiration could counter this affect.

On a macro level, micro-aspiration is clearly more efficient and precise when cleaning heavy impasto or cracks. The strong and accurately positioned vacuum pulls unwanted material out of interstices, while swabs can hardly reach into deep impasto cavities and even tend to push material further into cracks while cleaning.

On fragile paint layers, micro-aspiration shows positive results. The unavoidable mechanical friction of cotton swabs (left) can quickly attack sensitive surfaces, while micro-aspiration allows gentler working (right).

These initial tests suggest that not all surfaces and cleaning problems are suitable for micro-aspiration treatment. Testing needs to be continued and supported by further analyses in order to fully understand the role of micro-aspiration within the complex issue of surface cleaning.

In Summary:

Benefits
• minimal to no mechanical surface impact
• easy access to all surface structures (impasto, cracks)
• precise control over working time of solvents; quick dry time
• precise working on a small-scale
• no pushing of materials into paint structure
• quiet machinery and large variety of tools

Challenges
• even and thorough cleaning needs practice and experience
• potential of varnish residues, depending on manual dexterity
• larger amounts of solvents necessary, as no mechanical action is involved
• testing/analysis and structured comparison of swab and micro-aspiration cleaned surfaces not yet available to establish clear conclusions

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The Conservation of Two Human Hair Wigs of Baroque Holy Child Sculptures

by Kimberleigh Collins-Peynaud

Introduction

It is widely accepted by historians writing about the origins of the devotion to the Holy Child that the first image of the Infant Jesus, used in the first nativity scene, came from the vision of St. Francis of Assisi on the night of Christmas 1223.

This isolated image of Jesus as a fragile infant, cared for and protected by St. Francis, underlines the human aspect of Jesus, particularly humility and poverty, creating an intimate link between the faithful and God. Over the centuries, Holy Child sculptures have had many functions with the main goal being to bring the faithful closer to God through contemplation and meditation using the senses and imagination of the individual.

Numerous songs, poems, and material offerings of jewelry, richly decorated clothing, and even human hair wigs made from hair of the faithful are evidence of this intimate interaction with the sculpture. These practices are still common in several Catholic communities around the world today.

Briefly put, these sculptures were used as tools for divine intervention (protection, benediction, healing or guaranteeing fertility to young women, for example), pedagogical objects to teach young noble girls to care for their Holy Child, preparing them for their future role of mother, and symbols of social status in the community when a faithful family was allowed to host the Holy Child sculpture of the church in their home for a limited amount of time.

They were also used for propaganda, indirectly reinforcing the idea of obedience, respect, dependence, and reverence of the people to its government in some situations, and for converting some communities to Catholicism during the seventeenth and eighteenth centuries in particular.

Additionally, one of the most important functions of the Holy Child, if not the most important, since the majority of these sculptures originate in monasteries and convents, is that they served as a symbol of the mystical marriage between a young nun and God.

During the seventeenth century in Spain, it was common for a male member of a noble family (father or uncle) to commission a Holy Child sculpture that he would offer to his daughter or niece upon her entrance into the convent, to protect her virginity and guarantee her education. According to tradition, the girls, aged from 2 to 6 (they were married between 13 and 17), received 3 objects: a basket of sewing notions, a crucifix, and a Holy Child sculpture.

For many of these very young girls, the sculpture represented the only contact she would have with a man, either until marriage or death, not having outside contact with family once in the convent. If the young girl prepared herself for marriage, the Holy Child symbolically represented her virginity and implied that she was ready to raise children. When the young fiancée left the convent she could keep the Holy Child as a souvenir of her link to her family or as a pedagogical tool to raise her own future children. Often they were donated to the convent because the husband refused to take them into his home.

If the young girl remained in the convent, destined to become a nun, she kept and cared for her Holy Child sculpture (which became a symbol of her mystical marriage with Jesus for her stature was the equivalent of the wife of God, Father and Son). In this way, the sculpture, often called “Husband”, became symbolically the husband and the son of the nun.

The nuns invested themselves both physically and psychologically in the care of their Holy Child sculptures. They made and repaired rich silk clothing and accessories for them that were embroidered with gold and silver thread, including shoes, socks and underwear, to clothe the sculpture. In Flanders, Germany, Italy and Spain the nuns were encouraged to caress them, cuddle them, kiss them, bathe them, walk them and play with them.

Many different rituals and religious festivities and processions during the Catholic calendar implied preparations of these sculptures, much like ones still practiced today.

One example of these practices includes a seventeenth-century sculpture of the Virgin Mary from the Cathedral of Tudela in Northern Spain. There are documented accounts of two different wigs used for this sculpture: the everyday wig was made of blond hair cut from Maria Rosa Arregui when she was 7 years old and the processional wig was made of brown hair from Maria Alava, cut when she was 15 on May 31st, 1921. A silk ribbon sewn into the wig bears a poem written by her uncle to dedicate the offering of her hair to the Virgin Mary, asking for protection in return.

Human hair wigs can be extremely important symbolic offerings to these objects of devotion, tangible evidence of the very intimate bond between the sculpture and the faithful. The fact that these sculptures are still displayed and used in similar contexts in many countries today underlines the significance of these Holy Child sculptures and their wigs.

At the end of the seventeenth century, the hair of devotional sculptures, was more frequently added on than sculpted. These sculptures were completed by wigs made of horse hair, human hair and silk, and made by artisans, nuns, or monks. Many of these wigs and accessories in religious settings have been replaced over time, much like the clothing, in order to maintain the overall appearance of the sculptures.
The Conservation of Two Human Hair Wigs of Baroque Holy Child Sculptures, continued

The Holy Child Sculptures

The two Holy Child devotional Baroque sculptures that were conserved belong to the collection of the Musée d’Art et d’Histoire de Chaumont in eastern France, acquired from the collection of Miss Lucie Jacquinot in 1971. No documentation exists as to the origin and date of their manufacture; the Jacquinot family acquired objects over many years from various sources including antique shops, public sales, well-known flea markets, and sales of art objects belonging to local abbeys after the separation of Church and State.

The first wig belongs to the Holy Child under a Canopy, a composite wooden polychrome sculpture assembled during the twentieth century, consisting of a late seventeenth to early eighteenth-century polychrome wood Holy Child sculpture and an eighteenth-century Italian wood polychrome altarpiece with attached fragments of seventeenth-century gilt leather from the Netherlands. The assembly of these elements created a new work of art and therefore conditions its interpretation and conservation. The first element of the ensemble is a Holy Child of the Passion wearing a human hair wig without its typical accessories: the cross, a basket with the symbols of the Passion, and possibly clothing. The technical and artistic quality of the Holy Child is remarkable when compared to the majority of Holy Child sculptures produced during the Baroque period.

The country of origin of the sculpture itself could not be determined as the iconographic theme was very popular in Spain and Italy during the seventeenth and eighteenth centuries, and it exhibits stylistic traits and materials found in both countries. Both materials, artwork, and artists circulated very frequently between the two regions.

In this case, there is some evidence that the wig is not original. There are several holes at the top of the head (one of which is 1 cm in diameter and 4 cm deep) where typically the stem of a precious, decorative metal halo, nimbus, or crown would be inserted, as seen on earlier seventeenth–century sculptures. As well, four smaller holes following a central line from forehead to crown exist, possibly made to attach a wig or other accessory to the head. No holes are found in the fabric structure of the wig.

In addition, there is a number stamped on the interior of the fabric, possibly corresponding to a size, suggesting that this wig was made in an artisanal workshop. The wig is therefore likely a later addition, possibly to replace an earlier one that had gone out of style or that was in poor condition.
Condition of the Wigs
Prior to treatment, both sculptures had been stored for approximately 30 years in an uncontrolled environment exposed to dust and pests. The wigs were askew and distorted. No evidence of former interventions was noted during observation under microscope at 50–200X magnification.

Materials and techniques of fabrication
Microscopic examination confirmed that the hair used in both wigs is human. The ends of the curls examined show that they were cut straight with scissors.

The wig of the Holy Child under a Canopy consists of brown human hair, cotton thread, and iron wire. The mass of shoulder–length curled hair, varying from 5 to 17 cm in length, is attached to a wire structure, approximately 15 cm in diameter, in the general form of a flower that fits the form of the crown of the head of the Holy Child.

This wig is held in place with an iron nail 1 cm in length protruding from the top of the head behind the hairline.

Curling the hair was most likely achieved using tools of the period such as a curling iron or curlers. Samples of the hairs were sent to the Musee d’Histoire Naturelle in Paris where Catherine Orliac, objects conservator, noted traces of a very fine transparent substance on the hairs corresponding most likely to a spray applied to the hair during or after curling, to preserve the form of each curl.

The wig of the Holy Child Savior of the World consists of blond curled human hair at shoulder length with a slight part down the middle. The hair was attached by cotton thread to a cotton textile base made of more than one piece of fabric sewn together to form the base. This stitching appears to be made by machine. The presence of a stamped number (10?) in black ink on the interior base of the wig, as well as the regularity of the stitching, suggests that this wig was produced in different sizes by an artisan wig–maker.

A greenish powder–like substance was observed on the hair, in particular on the top of the head. This could possibly be a substance used to clean the hair prior to use on the wig or residue of a treatment using indigo in the prevention of yellowing of light–colored hair, a technique documented by colonial wigmakers in Williamsburg, Virginia during the eighteenth century. This same account mentions the use of fine sand and saw dust, among other materials, and the boiling, drying, and even baking of hair wigs in rye bread loaves, in order to completely clean the hair for use in wigs. The green powdery substance was not analyzed.

Both wigs exhibited similar soiling and deterioration. A great deal of dust and debris was found, in particular on the tops of the wigs and throughout the curls. Signs of pest infestation were evident in the form of several carcasses and dried traces of larvae of hair–eating insects in both wigs. As a consequence, many hairs were broken, very fragile, and extremely dirty.

The traces of spray on the Holy Child under a Canopy was possibly a factor leading to even more stress on the hair, provoking further breakage and a certain stiffness. Many broken ends of hair, roughly 1–2 cm in length, were observed at the feet of both sculptures.

In the case of the wig of the Holy Child under a Canopy, whole sections of hair, starting at the base of the wig, were detached as a consequence of insect attack. These pieces were simply lying on top of the mass of dirty hair. The iron wire of this same wig, as well as its cotton thread, seemed to be in stable condition despite the presence of dirt, dust, and small areas of rust on the iron wire. The fabric base and cotton threads of the wig of the Holy Child Savior of the World were also in good condition despite dirt and dust collection.

Conservation Treatment
Both wigs were first given anoxic treatment to kill any larvae.

Because of the very fragile state of the hair of the Holy Child under a Canopy, each curl was noted on a drawing of the wig in order to mark where any detached hair belonged if removed during cleaning. The strands of hair, some broken half way, some near the metal base, were being held in place only by being slightly entangled with other curls. The breakage appeared to be a result of insect attack. The Holy Child Savior of the World did not present evidence of the same problem.

The wigs were then mechanically cleaned with soft brushes and a micro–vacuum cleaner on very low power in order to remove dried larvae and carcasses of insects, superficial...
debris, and the tiny broken pieces of hair measuring 1–2 cm in length. Stubborn traces of insect matter stuck to some strands of hair were removed with dampened cotton swabs.

Consolidation of the broken strands of hair was not attempted because of the likelihood of entrapping the dust and hairspray residue. The location of detached curls was noted and they were preserved wrapped loosely in acid-free tissue paper.

Dirt, grime, and residue on both wigs remained after a preliminary cleaning, leaving the curls stiff and dull in appearance and texture. To minimize handling during cleaning, the wigs were attached very loosely to small plastic sieves using nylon string in a few pre-existing holes. The plastic supported the hair, allowing the strands to hang vertically while drying and for air to circulate freely.

Tests were carried out in order to find the most appropriate cleaning methods. They included:

- baby shampoo (suggested by Florence Cherbetian of the Musee de la Poupée in Paris) - which removed grime and left the hair shiny and flexible but introduced the risks of residues;
- white spirit, followed with a rinse of isooctane - had no effect on the grime;
- isopropanol - had a very subtle effect on the hair, leaving it slightly shinier and flexible but the scales on the cuticle seemed more visible, possibly due to the action of rubbing the swab on the hair;
- a mixture of water and ethanol 50/50 - had the same outcome as the isopropanol;
- water alone - proved to be effective, leaving the cotton swab dark gray with dirt and the strands of hair supple and shiny.

A drop of non-ionic detergent Triton X100 was added to the water for a cleaning test giving the best result. All of the dust and dirt were removed in one action leaving the hair shiny and very flexible, even revealing the true color of the hair: a lighter reddish brown, rather than dark brown. This was chosen to be the cleaning method.

To avoid abrading and damaging the cuticle by rubbing, it was decided to perform the cleaning by bathing each curl in the fluid receptacle of an ultrasonic humidifier. This method avoided all mechanical action on the strand of hair and allowed for cleaning without pulling on already damaged hairs, avoiding breakage or detachment.

The wig of the Holy Child Savior of the World was in much better overall condition in terms of strength and flexibility of individual hair strands. Although the curls had become deformed, there were very few breaks in strands and no loose strands lying entangled in other strands. For these reasons, a test by swabbing was undertaken on one curl and the cuticles of the hairs observed under microscope were unchanged.

The cleaning was performed by soaking the curls one by one in a receptacle. A light cotton swab was used when judged necessary using the same cleaning mixture, cleaning curl by curl. A sheet of absorbent paper was placed underneath each curl during cleaning and rinsing until the paper showed no more signs of dirt and grime. The cleaning mixture was renewed frequently. Rinsing and drying were performed in the same manner as for the first wig. The cotton support of the wig was superficially cleaned with demineralized water on cotton swabs and left to air dry on the plastic sieve support in order to conserve the shape.
The Conservation of Two Human Hair Wigs of Baroque Holy Child Sculptures, continued

The wig of the Holy Child Savior of the World was replaced upon the head of the treated Holy Child as well, now having a slightly better fit than before conservation.

Discussion

It is unfortunate that little documentation exists regarding the production and the stylistic and technical differences, according to date and region, of these Baroque devotional sculptures. This can be attributed to the fact that they are not considered to be on the same level as other devotional religious sculpture commissioned by the Church or the wealthy, so little effort has been made to include them in art historical studies.

As long as these objects are considered in this manner, it is difficult to gather information about them, including the provenance, date, and fabrication techniques of the human hair wigs. From a conservator’s point of view, guidelines for handling, storage, and treatment procedures of these hair objects would be very beneficial given the high number of similar objects in collections, churches, and monasteries, and given the impact they have on a large number of people who still use or display them.

After treatment of the wig of The Holy Child under a Canopy, the sculpture with wig was replaced in the altarpiece. A removable wedge was inserted beneath the foot of the sculpture to allow positioning of the figure to avoid contact of the wig against the gilt leather.
Annual Meeting Abstracts

The 2017 WAAC Annual Meeting was held September 25 - 28 in Salt Lake City, Utah. The papers from the meeting are listed below along with summaries prepared by the speakers.

Changes in Small Museum Professional Development and Outreach in the Internet Age
M. Susan Barger

Professional development in collections care offered for people in small museums has traditionally been offered through site visits, face-to-face conferences or workshops given by experts, and classes offered through various organizations. This is now changing to online contact offered through webinars, listservs, social media, and online courses.

Online contact offers the possibility of reaching a much larger audience for instructors and it can significantly lower the cost for participants. This talk will look at the changes in professional development for smaller institutions including the advantages and disadvantages of online professional development over face-to-face contact using real-world examples.

Revisiting the Treatment of a Pair of Malby Globes at the Marriott Library, University of Utah
Lorraine Bigrigg

Historic globes are fragile objects. Few survive without some evidence of change to the varied materials used in their fabrication, including damage to the globe shell, loss of the paper or design media, staining, entrenched grime, discoloration or loss of the protective varnish, or poor-quality repairs.

While an improvement in condition is the primary focus of treatment and the foundation of an improvement in appearance or legibility, filling losses to complete the cartographic record can have a major effect on the integrity of an historic globe. When designing a conservation treatment, it is critical to compare how a particular globe could appear relative to its individual condition, and how that globe should appear relative to other examples of the same edition.

This talk presents the use of digital photography, image manipulation, and archival printing as a means of filling losses on the surface of globes. It focuses on the pair of mid-nineteenth century large diameter Malby globes on view in the University of Utah’s Marriott Library. Purchased in England by F.D. Richards, an apostle in the LDS church, the pair was brought by pioneer wagon to present to the University of Deseret as magnificent educational tools and marvelous symbols of academic scholarship.

Cut from the Same Cloth: Comparing and Contrasting Two Pastels by Edouard Manet
Rachel Freeman

Over the past few years, the Art Institute of Chicago has focused on digital formats (online scholarly catalogues) as a methodology to systematically study and publish on its collection. The subject of one of the catalogues, Edouard Manet, offered the opportunity to complete a brief technical examination of the two artist’s pastels on canvas that belong to The Art Institute of Chicago, Man with a Dog and Portrait of Alphonse Maureau.

This paper compares and contrasts these two artworks. Previously thought to be dissimilar, the artworks actually present surprising correlations in terms of materials and methods of execution. In some cases, the insights gained though study of the artist’s materials overturn historical assumptions about Manet’s pastels on canvas supports and explain the peculiar condition issues that characterize these artworks.

Extensive Conservation Treatment of a Very Oversized Advertising Poster
Tish Brewer

Oversized paper materials present numerous logistical challenges to the conservator, particularly when space is tight, staff is small, budget is low, and geographical distance is far between treatment location and installation site. Many oversized pieces created for advertising were intended to be ephemeral and were heavily used, on display unprotected for long periods of time, rolled and unrolled frequently, and easily physically damaged.

This presentation will focus on the treatment of a seven by nine-foot Cracker Jack poster from the 1910s, a thin lithograph mounted on linen and stored in a Montana barn for years. Conservation over a 15-month period involved removal of the degraded linen, washing and lining of the poster, and a significant amount of fills and inpainting, as well as a partial secondary lining. There were hurdles at every stage of the process due to the massive size of the piece and its planned method of transport and installation. This talk will address those difficulties, and the details of treating and displaying this unique object.

Developing a New System to Remove Matrix and Clean Fossils from the La Brea Tar Pits
Tania Collas and Chris Stavroudis

The La Brea Tar Pits and Museum are part of the Natural History Museum of Los Angeles County family of museums. In addition to the La Brea Tar Pits Museum, which houses one of the world’s largest and most diverse collections of Late Pleistocene fossils, the Rancho La Brea site surrounding the museum contains the only consistently active urban Ice Age asphalt-see excavations in the world. The matrix, the material that is excavated, is a combination of tar, sediments, and ice-age fossils ranging in scale from mammoths to insects.

During excavation, matrix is removed from larger fossils mechanically and with locally applied solvent. To retrieve smaller fossils, a section of matrix is placed into a fine mesh sieve and the tar is dissolved and washed out with solvent, leaving the sand and fossils. Volunteers and staff remove small and micro-fossils from the washed sand for characterization and study.
Recently, we decided to re-evaluate our fossil cleaning methods and develop a greener, safer system that would help protect the health and safety of Tar Pits fossil preparators while aligning with the museum’s focus on sustainability. We are working in collaboration with Barbara and Edward Kanegsberg*, editors of the book Handbook for Critical Cleaning, to formulate a better strategy for both cleaning larger fossils and for separating the sediment and fossils from the matrix. Our goal is to replace the current cleaning protocol with a new, environmentally-friendlier and healthier system that will generate much less waste, allow for solvent re-use, and potentially speed the cleaning process.

*In the critical cleaning community, they are known as “the Cleaning Lady and the Rocket Scientist.”

The Conservation-Restoration of Two Human Hair Wigs
Kimberleigh Collins-Peynau

Through a case study format, this paper presents the examination, technical fabrication, and conservation of two human hair wigs belonging to a late 17th-century Holy Child from Spain/Naples (?) and an 18th-century Holy Child from Spain, elements frequently used on Baroque devotional sculptures found in Spain and Italy.

One wig, which sits atop a Holy Child’s head held in place by a nail, consists of an iron wire structure on which curled human hair is attached and secured by cotton thread. The other wig consists of a fabric base on which hair is attached by cotton thread. These objects, belonging to the Jacquinet Collection of the Musée d’Art and d’Histoire de Chaumont, were found in an alarming state of conservation. The structure was unstable (breaking hair possibly due in part to the presence of an unknown substance, insect infestation, and rigidity of materials) and the surface was very dirty (dust, insect carcasses, and grime).

Because of the close contact with iron and cotton, the treatment of the hair had to be approached with particular caution in order to avoid introducing water onto the surface of the iron and cotton. Restoring shape to the curled hairs also proved to be a delicate process. In order to better understand and conserve these objects, further research on fabrication techniques, regional styles, and conservation treatment of human hair would be very beneficial to conservators.

Reinventing a Museum: Celebrating Collections and Rethinking Engagement
Gretchen G. Dietrich

Closed for nineteen months, the Utah Museum of Fine Arts paused to replace the building’s vapor barrier to preserve the building’s structural integrity and to better maintain environmental controls for the collections. Additionally, HVAC systems were updated, building monitoring systems were improved, and heat trace was added to the windows to mitigate condensation. Consulting first with Michael Henry and Wendy Jessup to inform the University’s process around the specific needs of the collections, the University ultimately contracted with Simpson Gumpertz & Heger to design the project.

While closed, the Museum staff worked diligently to ensure the protection of the collections and set about to reinstall and rethink just about everything. The UMFA reopened in August 2017 with new installations and an improved visitor experience, but also with an increased ability to maintain industry-standard environmental controls without further damage to the Museum’s beautiful building.

Old School Meets New School: Fundamentals of a Successful Training Partnership
Debra Evans and Anisha Gupta

For over forty years, the paper conservation lab at the Legion of Honor has provided training opportunities for an international group of over sixty conservators. At the same time, these interns and fellows have brought up-to-date conservation information to the resident Legion conservators. This philosophy of mutual education is at the core of the program’s success, as is the idea that success will be greater if there are high expectations from students and mentors.

Important tenets of our program include: Concentrated treatment experience. An internship is the ideal time for focused expansion of treatment skills. Works conserved should be important. Confidence soars when interns are trusted to work on important objects rather than ones of lesser value in study collections. Connections with staff members. Interns are included in meetings and interactions with curators, registrars, technicians, development staff, etc. Outreach. Interns are expected to represent conservation in museum forums including tours, lectures, blogs, and social media. Professional publication and presentation. Interns are encouraged to present at conservation conferences. Lab legacy. Every intern is required to make a lab improvement that is useful for future lab denizens. This legacy is a way to honor our alumni. Conservation should be fun. We’re not in this for the money.

The two authors represent a training span of close to forty years and will describe the synergy that takes place when old school combines with new school, when new capabilities in analytical, digital, and preventive methodologies merge with long established treatment and connoisseurship skills.

Designing a Museum in an Active Seismic Zone
Sarah B. George

Salt Lake City is one of the most seismically hazardous urban areas in the interior of the United States because of its location along the Wasatch Fault, at the eastern edge of the highly faulted Basin and Range province. Living in an active fault zone requires significant thought about how to protect people and objects when designing a new structure.

The Natural History Museum of Utah’s new home, the Rio Tinto Center, was designed to fit into the hillside above the city, using a variety of engineering
solutions such as soldier piles and shear walls to minimize the potential for collapse in a magnitude 7 or greater earthquake. The architects also used the concept of seismic faulting as inspiration for the form and façade of this beautiful, award-winning building.

Looking Good at 150: The Treatment of the Alaska Treaty of Cession Documents for the Alaska Sesquicentennial
Seth Irwin

In the fall of 2017, to commemorate the 150th anniversary of the purchase of the Alaska territory from Russia, the Alaska State Museum will be putting on an exhibit of the documents that were integral of the purchase of the territory in 1867. This exhibit is the product of a joint effort between the Alaska State Museum, the Alaska State Archive, and the Alaska Historical Library. At the beginning of 2017, the Alaska State Museum brought up paper conservator Seth Irwin to the brand-new paper lab at the new Alaska State Museum, to ‘break in’ the brand-new paper lab and treat the documents. This talk will discuss the background of the exhibit, what was involved in bringing the new paper lab to up and running status, and the treatment of the documents for the exhibit.

Psychedelic Solutions: Unconventional Exhibition Displays for Rock Posters and 2D Materials from The Summer of Love
Anisha Gupta and Victoria Binder

As museums shift to displaying works on paper in unconventional formats and on a larger scale, conservators are forced to create innovative and possibly untested solutions. This talk will discuss the mounting and installation of over 200 psychedelic rock posters for the exhibition The Summer of Love Experience at the de Young Museum. Since the curator and exhibition designer wanted to display the posters unframed, the paper conservation lab strived to come up with a solution that was safe for the objects but also feasible within the time frame and budget. We tested a variety of mounting methods and materials for different concepts, all of which will be outlined.

This exhibition also included the mounting and installation of a 21’ x 10’ billboard that consisted of fourteen individual screenprints. The goal of this project was to create a safe installation and display method for the billboard. This included treatment to stabilize the artwork and preparation to mount the billboard with hinges and magnets, working closely with the carpenters and mountmaker.

Other challenges in this exhibition included determining how to display posters under flashing lights to simulate animation and creating a case that incorporated different material types such as thick illustration boards, printing plates, and acetate sheets and films.

Coming in from the Cold: Considerations for Equipment Selection, Operation, and the Development of Cleaning Parameters for Dry-Ice Blasting
William Hoffman

In the spring of 2013, conservators within The Batten Conservation Complex (BCC) at The Mariners’ Museum and Park (TMMP) in Newport News, Virginia began looking into the application of dry-ice cleaning for the removal of corrosion on wrought iron artifacts recovered from the wreck site of the Civil War Ironclad USS Monitor.

Although the technology had been used in industry for several decades and had started to be researched within the conservation field, detailed information was limited on the types of dry-ice blasting equipment available as well as the operating requirements and limitations of the machinery. Furthermore, research on blasting technique and a developed procedure to identify safe cleaning parameters was also unavailable.

Therefore, conservators at the BCC experimented with several blasting units and compressor systems along with investigating different blasting nozzles and various forms of carbon dioxide (CO₂) media. The results of this experimentation enabled the conservation staff to gain a better understanding of the dry-ice blasting process and design a blasting system adequate for its needs.

Once the blasting equipment was identified, a sample testing procedure was developed to determine safe clean parameters using a custom-made testing apparatus coupled with before and after cleaning photographs of sample material using a HYROX microscope.

Successful cleaning test results for corrosion removal on wrought iron led TMMP to seek grant funding to purchase a blasting system. Since April of 2016, dry-ice blasting has been regularly employed within the BCC with additional research being conducted to develop effective cleaning parameters for cast iron and copper alloys.

This presentation will provide an overview of the dry-ice blasting process and give insight into some of the considerations that need to be made when selecting and operating dry-ice blasting equipment. Additionally, a description of the method developed to identify safe cleaning parameters will also be given.

The Growth and Future of Conservation at the University of Washington Libraries
Justin P. Johnson

In 2012, the University of Washington Libraries in Seattle, WA began a project to grow and expand existing conservation capacities beyond the tiny basement facility that had existed for over 40 years, and have during those five years undergone a period of rapid growth and change. Sparked by an Andrew W. Mellon Foundation award to establish a Senior Conservator position, the UW Libraries completed a new 4,000 square foot hybrid conservation facility in April 2016, expanded our educational outreach with the addition of two internships, and successfully raised funds to endow a Senior Conservator position.

In 2017, we received a new Mellon award to support deeper collaborations and shared conservation services between the University of Washington Libraries and the UW campus art museum, the Henry Art Gallery. Since then we have hired a jointly appointed Photograph and Paper Conservator to conserve collections at both the Henry and the Libraries. This presentation will share what we learned.
throughout this process (from lab design to fundraising) and describe some of the challenges and successes we encountered along the way.


Stacey M. Kelly, Jodie Utter, Amy V. Walker PhD, Ashley A. Ellsworth PhD, and Jenny K. Hedlund

Jose Guadalupe Posada (1852-1913) was a prolific and influential Mexican printmaker; he produced thousands of images printed on a variety of poor-quality papers, often colored with vibrant but fugitive aniline dyes. The Amon Carter Museum of American Art has a large collection of approximately 400 prints attributed to Posada, many of which retain their bright color. A number of these are unstable due to oxidized pressure-sensitive tape residue, penetrating and weakening the short-fibered paper. In addition, aniline dyes are sensitive to solvents, complicating treatment.

Because aniline dyes have varying sensitivities to different solvents it is necessary to characterize them before an appropriate treatment protocol can be developed. A previous study of Posada’s prints identified several aniline dyes using Fourier Transform (FT)-Raman spectroscopy. Of these, the yellow dyes could not be fully characterized. In this study, time-of-flight secondary ion mass spectrometry (TOF SIMS) was used to discern the dyes present in the colored papers with particular focus on the yellow dyes.

TOF SIMS is a valuable analytical technique for the identification of organic and inorganic components. Its high sensitivity and small sample size requirements make it potentially useful for the analysis of dyes and works on paper. For this study, a selection of Posada’s prints in various colors from the Amon Carter’s collection were examined using TOF SIMS, producing significant data for all the dyes analyzed.

As part of developing a treatment protocol for the Posada prints, an experiment was set up using artificially aged paper and tapes to simulate the removal of oxidized tape from fragile dyed papers. A variety of methods were employed. Samples were created by applying Scotch Magic™ tape (acetate backing; acrylic adhesive), 3M 2214 paper tape (crepe paper backing; rubber adhesive), gummed brown paper tape (kraft paper backing; starch adhesive), and Slime rubber cement to several c.1900s dyed and undyed broadsides, mimicking the Posada prints.

The samples were then ‘treated’ with solvent and suction, rigid Gellan gum with solvent, and solvent through Gore-tex sandwich. The samples were imaged using visible light and Ultra-Violet (UV) light before and after treatment, along with spectrophotometer readings to monitor and record any changes in the samples.

Because aniline dyes are prevalent in many turn of the century objects, as are oxidized tapes, developing an effective treatment protocol has tremendous potential benefit.

Special Collections Exhibits and Opportunities for a Book Conservator

Bill Minter

As conservators, we are called upon to treat items for exhibitions. In some cases, we are the exhibits preparator and we might also be involved with the exhibit design. Fortunately, colleagues in The Eberly Family Special Collections Library at The Pennsylvania State University Libraries (aka Penn State University) have asked for assistance with their recent exhibits. These were great opportunities to expand our use of various materials for exhibit preparation and to also explore collaborations with other university departments.

Perhaps the most interesting project was the preparation of an exhibit of 17th- thru 19th-century toys. One 19th-century book, Stuwwelpeter, also known as Shockheaded Peter was to be displayed. While static images from the book could have been displayed, the exhibit visitor would miss the impact of pulling on the tab to experience the resulting image movement in these unique early books. We therefore turned to the University’s Center for Quantitative Imaging where a page was examined with x-rays.

The resulting images allowed us to determine the inner workings and the linkages that were used. An oversized digital facsimile was produced and this added to the interest and experience for the visitors. Other unique opportunities for collaboration between conservation and exhibits will be shared, such as the digital facsimiles of World War I glass stereo slides and another on “Flying Folios,” as well as others.

Kintsugi-repaired Ceramics in a New England House Museum? Analysis and Western-style Simulation

Colleen O’Shea

A cabinet at the Sleeper-McCann House, a Historic New England property in Gloucester, MA, contained five vessels apparently repaired using the Japanese kintsugi method. Kintsugi is a skilled and valued art of mending ceramics using Asian lacquer and sprinkling the joins with precious metals. The repairs are intentionally visible due to the line of gold or silver along the cracks or flaws in the object. The use of precious metals in repairs is meant to convey that the repaired object has its own beauty. A ceramic may be damaged, but mending it gives it new life, and beauty can still be found in imperfection.

When this technique is used, it imparts additional value to the object, in terms of both aesthetics and history. Two Western museums have recently mounted exhibitions on the topic of kintsugi repairs. Performing a kintsugi repair requires extensive training in the art of lacquer; the process of making the repair is exacting, time-consuming, and difficult.

It is possible to imitate kintsugi with modern materials by using metallic paint, bronze powders, or mica powders in a synthetic binder, which could be achieved by someone without knowledge of lacquer art. A forger could take an old vessel, perhaps already broken, and repair it with synthetic materials that have the...
Annual Meeting Abstracts, continued

Investigating Liquid CO2 to Clean Textiles and Basketry
Nancy Odegaard

This presentation illustrates the use of micron-sized snow particles to transfer and displace particles of surface soiling on delicate textile and basketry surfaces. Liquid CO2 from a tank (with syphon) connected to a valve and a nozzle expands without exchanging heat, thus becoming a mixture of gaseous CO2 and dry ice that surrounds the soil particles with a gas envelope which slides over the object surface, and then the CO2 volatilizes into the air. This momentum transfer and displacement system is dry, non-conductive, nonabrasive, and non-toxic. Our process of testing this technique is described.

Woman-Ochre, A Stolen de Kooning Painting Comes Home.
Nancy Odegaard

On Nov. 29, 1985, a Willem de Kooning painting, Woman-Ochre, was stolen from the University of Arizona Museum of Art. Decades later, on August 10, 2008, a routine Thursday afternoon at the University of Arizona Museum of Art, staffers were preparing for next season’s exhibitions when the phone rang. Arrangements for its quick return to Tucson from Silver City, New Mexico followed. The painting was unpacked and examined the following Wednesday. The nature of the theft, the discovery, the return, and the preliminary examination for authentication provide an interesting story that highlights the importance of a conservator.

On the Closure of Tears Using 3M Command Adhesive Strips
Steven Prins

A system of traction for the closure of torn paintings based on 3M Command Adhesive Strips is to be presented. Developed over the past five years in the painting conservation studio of Steven Prins & Company, this technology presents a number of desirable characteristics that have made it the default methodology for closure of tears in the author’s studio; in particular: low tech, low impact, low risk, readily deployed and removed, flexible and easy to work with. While developed for use in the repair of paintings the technology might have applications in others of specialization.

The Playhouse at Shangri La: A Case Study in Re-integration Using an Alternative Material
Kent Severson

This presentation will explore the reintegration of the mosaic tile façade of the Playhouse (poolside guest house) at Shangri La, Doris Duke’s Hawai‘i home (now a center for the study of Islamic arts and cultures), using materials dramatically different from the original. The original cut tile mosaics, commissioned in Iran in 1938, were executed using traditional materials and techniques, including a gypsum-rich mortar backing.

The tiles were installed in 1940 atop a steep sea wall above constantly breaking surf and exposed to harsh sun and salt-laden wind. By the late 1970s some sections of the decoration had deteriorated to the point of collapse. After numerous failed attempts at stabilization, the decision was made to de-install and replace approximately 30% of the tiles with a more durable facsimile. The decision-making process that led to the removal and replacement of this portion of the decoration was not taken lightly and was dominated by the structure’s location above the rocky edge of the tropical Pacific Ocean. “In kind” replacement was explored and samples were procured from Iran, where cut tile mosaics are still manufactured; however, the results were not entirely satisfactory and it was feared that the same kind of deterioration would only happen again.

The search for a suitable replacement material eventually led to the replication of the crisp, brilliant appearance of the original mosaic in glazed porcelain. Using a combination of careful measurements and high-resolution digital photography, a full-sized, distortion-free photographic image was generated. To avoid imposing a grid on the composition by printing on square stock porcelain, the full-

appearance of kintsugi. The high prestige of kintsugi means that there might be a financial incentive to fake the method.

Other imitations may be done with less-nefarious purposes in mind: it is possible to buy a repair kit called “New Kintsugi Kit” that aims to “combine this lovely old technique with new technology,” so that the modern DIY-er can repair her broken ceramics.2

Because so little was known about the history of these objects, the five ceramics from the Sleeper-McCann House were investigated to better understand their composition, with the ultimate goal being the assessment of whether or not they have true kintsugi repairs. They were examined under ultraviolet radiation as a preliminary step in order to detect differences in materials.

Following this, conservation scientists Drs. Rebecca Ploeger and Aaron Shugar of SUNY Buffalo State analyzed the objects with x-ray fluorescence spectroscopy and Fourier-transform infrared spectroscopy. Finally, samples from break areas on two of the objects were removed and then mounted into cross sections in order to help discern the layering structure of the repairs. In all five cases, the repairs were found to be consistent with the materials and methods used in kintsugi.

A concomitant study was conducted in order to find a way to simulate kintsugi repairs using conservation-grade materials, in the case that conservation of a previously kintsugi-repaired vessel is needed. Broken stoneware ceramics belonging to the author were repaired with several different techniques in order to gauge the best way to imitate true kintsugi.


sized image was separated into smaller individual shapes along the lines of the pattern and the stock tiles were cut using a water jet into unique, jigsaw puzzle-like pieces. The individual pieces were then digitally separated into color layers which could be used to generate masks and stencils for application of the custom formulated glazes.

Each tile was fired individually for each color, up to as many as six times. The resulting tiles effectively replicate the overall effect of the original cut tile mosaic at a short distance, but are easily distinguished from the original on close inspection, but in a material with a good track record in a harsh, sun-struck marine environment.

Cold Never Bothered Us Anyway - An Arctic Conservation Adventure
Hays Shoop and Yasuko Ogino

In November of 2015 we were contracted to travel on-site to Barrow, Alaska (some 300 miles above the Arctic Circle) to treat a large oil painting on canvas, and to examine and prepare treatment proposals and cost estimates for the other five paintings in the collection of the Inupiat Heritage Center (IHC). The project occurred during the week in which the sun ceased rising above the horizon and the temperatures were in the minus 20-30F range.

The treatment of the large painting went well and as planned, though issues arose with the use of a relatively non-toxic solvent (EtOH) in the building, and a staffer’s extreme allergies. The intent was that the easel paintings would be shipped to Denver for treatment where we would have the full complement of equipment and supplies.

When IHC received funding to treat the five paintings in 2017 we began to advise the collections manager on properly shipping the paintings out of Barrow (no road access) would sink the project. We ultimately agreed to undertake some extensive treatments on-site (including infusing and lining a large painting), in a figure-it-out-as-you-go manner, during the opposite season when it was daylight around the clock and the temperatures soared to the 20 above zero range!

Putting the Wiki Platform to Work: Sharing Material Testing Results
Samantha Springer

Andrew W. Oddy first introduced an accelerated corrosion test used for evaluating exhibition case materials at the British Museum in 1973. The “Oddy Test,” as it has come to be known, continues to be used by museums as the primary litmus test for materials used in the display of artwork and cultural heritage materials. Several variations and improvements have been published since and almost every institution has their preferred method based on the equipment available to them. Although conservators continue to use the test and informally share results, there has been historical resistance to publicizing them.

One of the primary issues with publishing results is fear of manufacturer backlash or alternatively being held responsible for damage caused through use of an “approved” material. In addition, variations in Oddy testing protocol prevent the standardization of results. Finally, the accelerated corrosion test is only one of various methods of evaluation and results may be quickly voided by unannounced product manufacturing changes.

It seems particularly pertinent approaching the forty-fifth anniversary of Andrew Oddy’s initial publication that we address the topic of materials testing and sharing results, especially in light of the fact that the British Museum has published their results dating from 2009-2014 on their website. In 2012 conservators created a platform for others to do the same on the American Institute for Conservation (AIC) Wiki site.

It was established with the hope that colleagues would feel more comfortable sharing information on a collaborative platform, giving them safety in numbers. By establishing best practices for sharing results on the AIC Wiki, such as describing the testing protocol and imaging test coupons, the databases allow conservators to evaluate others’ results for themselves. This initiative began at the request of AIC’s Research & Technical Studies (RATS) Specialty Group, and in 2011 the J. Paul Getty Museum (JPGM) contributed the initial content to the newly established Materials Testing page.

This included a general explanation of Oddy testing, a description of their testing protocol, and a list of adhesives and tapes tested by the Getty Conservation Institute in 2000. Around 2011, the Cleveland Museum of Art’s renovation campaign prompted the authors, who were asked to test materials to build an internal reference library, to perform a review of their own Oddy testing protocols. The review included comparing protocols at other institutions, including information available on the AIC Wiki.

In January of 2012, after a call for Wiki contributions from AIC e-Editor Rachel Perkins Arenstein, the authors, along with objects conservator Elizabeth Homberger (now at LACMA), volunteered to create a materials database on the Wiki.

The project expanded the Oddy testing page, creating a searchable and sortable table of tested materials. In addition, any contributor who shared their protocol could easily add their results to the table. By publishing the results on a neutral site, such as the AIC Wiki, it is the authors’ hope that other institutions will see the benefit of such a resource and begin to participate in greater numbers. Most recently, the National Archives of Australia with PAT results and Autry National Center with a testing protocol joined the group of those sharing information.

The existing content consists of a Protocols page and four Materials Database pages divided into the following categories: Fabrics, Case Construction Materials (including storage and mount materials), Adhesives and Tapes, and Paints and Sealants. Links to manufacturer and supplier sites, related external sites, other published results, and pertinent literature are also provided.

Each page contains the important caveat that this information is a reference tool rather than endorsement. The database pages can easily be expanded or adapted.
based on contributor or user feedback. Recent feedback was solicited from the online mountmakers’ forum and then incorporated into the site. Current goals of the project include increasing the number of contributors, automating data entry, and integrating feedback from users. The ultimate goal is to create a resource that will aid staff at institutions of every size and type in choosing materials appropriate for their needs and collections.

**When Is the Big One Coming? Securing Museum Artifacts for Storage and Display in an Earthquake Zone.**

Bill Thomas

A close-up look at collections storage systems, storage mounts, and various ways of mounting and securing exhibit objects in visitor galleries, as done at the Natural History Museum of Utah. We will focus specifically on the extra measures that are required to keep things safe and secure in a seismically active area like Salt Lake City.

**Case Study: The Structural Conservation of a Painting Affected by Metal Soaps Formation**

Jia-sun Tsang

*Robbying the Eagle’s Nest* was painted in 1856 by Robert S. Duncanson (1821-1872), an African-American painter. The painting is from the collection of National Museum of African American History and Culture (NMAAHC) acquired in 2009. This striking landscape, infused with dramatic imaginary scenery, has been attributed to Cincinnati, Ohio.

The canvas was severely distorted and had craquelure on the entire painting surface. Extensive translucent protrusions covered the entire painting and the tacking edges. These protrusions have a white transparent appearance and are sensitive to water and solvent.

Non-destructive analysis was completed with XRF, XRF mapping, and minimum sampling of the protrusion was taken for FTIR and XRD analysis. Initial investigation indicated the zinc was isolated in the soap aggregates suggesting advanced migration of the zinc soap. A dry paint sample preparation method was developed to preserve the integrity of the soap within the paint cross-section with diamond paste polishing. No solvent or water was used in the polishing. The embedded samples were studied further with microscope and instrumental analysis with SEM, SEM-EDS mapping, SEM-CL, and single point EDS. After a long and thorough study, the small white transparent bumps were identified and confirmed as zinc soap.

Since the zinc soap aggregates break off easily and are sensitive to water and solvents, traditional methods of correcting the planar distortion involving heat, moisture, and pressure would destroy the zinc soap aggregates. In order to flatten this 150-year-old painting, the conservation team started to search for an alternative treatment without using heat, moisture, and pressure.

An innovative metal stretcher system was designed to tighten the slacked painting and minimize the distortion. A new stretcher, TWP2 was invented. This stretcher is made of sturdy aluminum, and the tension adjustment is achieved by moving the stretcher bars in each direction independently by turning thumbscrews positioned along the stretcher bars.

This newly designed stretcher was fitted as an insert into the original *Robbing the Eagle’s Nest* stretcher and the severe planar distortion of the canvas was corrected instantly. The finer prominent age cracks are still visible as expected. However, the painting regained the aesthetic intent and without disrupting the integrity of the zinc soap. The painting is currently displayed at the Visual Art Gallery of the NMAAHC.

**The Challenge of Paper Engineering: Conserving ‘The Map that Changed the World,’ William Smith’s 1815 Geological Strata of Great Britain**

Karen Zukor

A talk and film on the repair of Smith’s twelve-foot long, hand-colored engraved map, which expanded the field of geology and whose importance was celebrated on its 200th anniversary in 2015.
Chris Stavroudis, membership secretary

Almost hidden in the basement of the Museum of Fine Arts, Boston, beneath galleries of historical objects and masterpieces, is the Asian Conservation Studio, where Philip Meredith quietly toils.

Specializing in painting on paper and silk, Meredith, the Higashiyama Kaii conservator of Japanese paintings, has since 2004 worked on pieces in the collection that includes more than 100,000 Asian artworks constituting what the MFA describes as the “finest Japanese art outside Japan.”

Meredith, who lives in Swampscott, Massachusetts, with his wife, Pauline Webber, also an art conservator, says it was the spontaneity of Japanese paintings that appealed to him.

In the studio, alongside Tanya Uyeda, associate conservator of Japanese paintings, and Jacki Elgar, head of Asian conservation and international projects, Asia — and there are four other conservators and one collections care specialist in Asian conservation, which covers Chinese, Himalayan, Indian, Islamic, Japanese, and Korean art — Meredith stabilizes centuries-old artworks, particularly those on flexible materials, which covers Chinese, Himalayan, Indian, Islamic, Japanese, and Korean art — Meredith stabilizes centuries-old artworks, particularly those on flexible materials, particularly those on flexible formats such as scrolls, folding screens, and sliding doors.

“25 Million Images To Be Placed Online by 14 Art Institutions Around the World,” My Modern Met, 11/03/2017

Art history lovers already have several resources, like the Europeana database and Google Arts & Culture Institute, where it’s possible to view incredible art from multiple collections. What if you want to dig deeper?

That’s where Pharos comes in. This scholarly online archive has a wealth of participating institutions—New York’s Frick Collection, London’s Courtauld Institute, the National Gallery of Art in Washington, and the Yale Center for British Art, to name a few. The goal is to host 25 million images—17 million of them art and the rest supplemental materials.

And while Pharos certainly has the standard, high-resolution images of art, it’s the “extras” that really allow you to dive into the history of each piece.

For instance, the Frick’s vast photoarchives—which comprise the bulk of what’s online so far—allows you to trace the history of an artwork through the years. How has it changed over time through restoration? What other images are connected to it? All these questions, which researchers typically discover by going to an institution and asking special permission to view the archives, will now be answered online.

Another exciting feature is the ability to upload an image and have the database search for related artworks, something that would strip out the need for text searching. The project aims to have 7 million images online by 2020 and currently has more than 60,000 artworks and 100,000 images online today.


In a gesture that pays respect to the history of art, Chubb has donated a damaged sculpture to a conservation and preservation group.

Specifically, the insurer is donating “L’Esclave de Michel-Ange (S 20)” to the Yves Klein Archives in Paris, France. Chubb chose to donate the sculpture after it had sustained damage due to an accident during transit. The insurer took possession of the art piece after settling the insurance claim with the Canadian collector who previously owned it.

“Rather than manage the sculpture as salvage, we decided to donate it to the Yves Klein Archives for historical preservation and educational purposes,” explained Chubb Personal Risk Services Canada SVP Paul Johnstone. “Because of the damage sustained to the piece and the unique and rare materials Yves Klein used in his work, the sculpture could not be repaired, but it can continue to live on as part of the artist’s records with the Archives.”

“Going to the cleaners, Delaware Art Museum’s new exhibit gets some TLC,” WHYY, 11/10/2017

Many of the works in The Delaware Art Museum’s new John Sloan exhibit are at least 100 years old, and before they went on the wall, they went out for a good cleaning.

John Sloan lived from 1871 – 1951 and some of the pieces in this show have not been shown since the artist’s lifetime. “They need cleaning and care,” said Heather Campbell Coyle, chief curator at the Delaware Art Museum.

That means a trip to art conservator Mark Bockrath. “One issue with the Sloan paintings is that since they are 20th century paintings, there was a period where he was experimenting with different materials,” Bockrath said.

Those different materials didn’t necessarily work well together over time, the outcome being a more dingy, muted look to many of the paintings. Bockrath wants any painting he works on to look as close as it can to what would have come off the artist’s easel.

Coyle spends months or even years researching the paintings in the museum’s shows, but she learns new things about the artist from the conservator as well.
Bockrath doesn’t want you to think about the restoration work at all. He would rather you never thought of the painting as needing to be cleaned. “If you can see the restoration than I’m not doing my job properly.”

“The Van Dyck is long gone, but now, four decades later, the Gerald E. Buck Collection has grown to more than 3,200 paintings, sculptures and works on paper. Not only is the vast trove the finest holding of its kind in private hands, the collection is poised to anchor an ambitious new museum being launched at UC Irvine.

Chancellor Howard Gillman is expected to announce Wednesday the formation of the UCI Museum and Institute for California Art, or MICA, with the Buck Collection as its core.

The collection, much coveted by other museums, focuses on artists who emerged in California between World War II and 1980. In addition to postwar art, the collection includes plein air, Social Realist and important early Modern paintings from the first half of the 20th century, especially in Southern California.

Those holdings include metaphysical abstractionists Agnes Pelton and Henrietta Shore, Surrealists Knud Merrild and Lorser Feitelson, muralist Belle Baranceanu and colorist Oskar Fischinger. The gift is accompanied by 398 file boxes of art books, auction catalogs, the collector’s notebooks and acquisition records.

Researchers also examined both works with infrared photography to discover they both contained similar hidden changes that Malevich made during the composition process.

The painting, Suprematist Composition With Plane in Projection, went on to sell for $21.2 million at Sotheby’s New York headquarters earlier this year after a fierce bidding war. It was the fourth-highest auction price ever for a Malevich work.

Sotheby’s says it has established state-of-the-art laboratories in both New York and London and plans to expand to Hong Kong, as well.

“Scientists from UCLA, National Gallery of Art pioneer new way to analyze artwork,” Art Daily.org, 12/12/2017

Scientists from UCLA and the National Gallery of Art have used a combination of three advanced imaging techniques to produce a highly detailed analysis of a second century Egyptian painting.

They are the first to use the specific combination — which they termed “macroscale multimodal chemical imaging”— to examine an ancient work of art. The new technique enabled them to learn about the raw materials the artist used, and the order in which they were applied to the painting, and it uncovered insights about the painting’s connections to other work from the same era.

The approach, which is described in a paper published in Scientific Reports, integrates three existing techniques — hyperspectral diffuse reflectance, luminescence, and X-ray fluorescence — to examine the painting.

By combining data from the three modalities, the researchers were able to map the signatures of molecules and elements across the surface of the painting for each pixel of the image. The findings revealed important details on the painting’s composition and structure.

“Taj is a Grandiose Work of Art, Restoring it Will Take Time,” The Print, 12/08/2017

Fodor’s Travel Guide has included the Taj Mahal in its list of places not to visit in 2018, as the monument will be under restoration.


Efforts by Portland’s Heritage Conservation Group and the Abernethy Elementary School PTA to fund the $71,274 restoration project for artist Erich Lamade’s 1940 “Pageant of Oregon History” mural in the Abernethy School’s library got a boost in early November from a $20,000 Oregon Heritage Commission grant.

Nina Olsson, president of Heritage Conservation Group, says the grassroots effort would focus on the artwork’s place in history and its connection to today’s education.

For the past 10 years, Olsson and others have worked to uncover Lamade’s mural that was hidden beginning in the mid-1950s under at least six layers of interior paint. Lamade painted the mural as part of a federal Works Progress Administration commission during the 1930s and 1940s.

Olsson plans to begin during the summer of 2018 restoring pieces of the 300-square-foot mural on the classroom’s southeast and south walls, using cleaning and restoration processes developed through Portland State University’s Regional Laboratory for the Science of Cultural Heritage Conservation. More work would be done in the summer of 2019.

“A Storied Art Collection Shrouded in Mystery will Anchor New UC Irvine Museum,” Los Angeles Times, 11/15/2017

When real estate developer Gerald Buck was selling a rural farm near San Luis Obispo, land he bought in a failed oil-drilling scheme, a prospective buyer offered him an elegant Old Master painting by Anthony van Dyck in lieu of cash.

Buck had no interest in art, but neither did he have any other buyers in sight. So Buck plunged into researching the painting’s authenticity, history of ownership and market value — then agreed to the trade. And he was off.

The collection, much coveted by other museums, focuses on artists who emerged in California between World War II and 1980. In addition to postwar art, the collection includes plein air, Social Realist and important early Modern paintings from the first half of the 20th century, especially in Southern California.

Those holdings include metaphysical abstractionists Agnes Pelton and Henrietta Shore, Surrealists Knud Merrild and Lorser Feitelson, muralist Belle Baranceanu and colorist Oskar Fischinger. The gift is accompanied by 398 file boxes of art books, auction catalogs, the collector’s notebooks and acquisition records.

Researchers also examined both works with infrared photography to discover they both contained similar hidden changes that Malevich made during the composition process.

The painting, Suprematist Composition With Plane in Projection, went on to sell for $21.2 million at Sotheby’s New York headquarters earlier this year after a fierce bidding war. It was the fourth-highest auction price ever for a Malevich work.

Sotheby’s says it has established state-of-the-art laboratories in both New York and London and plans to expand to Hong Kong, as well.

“Scientists from UCLA, National Gallery of Art pioneer new way to analyze artwork,” Art Daily.org, 12/12/2017

Scientists from UCLA and the National Gallery of Art have used a combination of three advanced imaging techniques to produce a highly detailed analysis of a second century Egyptian painting.

They are the first to use the specific combination — which they termed “macroscale multimodal chemical imaging”— to examine an ancient work of art. The new technique enabled them to learn about the raw materials the artist used, and the order in which they were applied to the painting, and it uncovered insights about the painting’s connections to other work from the same era.

The approach, which is described in a paper published in Scientific Reports, integrates three existing techniques — hyperspectral diffuse reflectance, luminescence, and X-ray fluorescence — to examine the painting.

By combining data from the three modalities, the researchers were able to map the signatures of molecules and elements across the surface of the painting for each pixel of the image. The findings revealed important details on the painting’s composition and structure.

“Taj is a Grandiose Work of Art, Restoring it Will Take Time,” The Print, 12/08/2017

Fodor’s Travel Guide has included the Taj Mahal in its list of places not to visit in 2018, as the monument will be under restoration.
The Print asks: has construction made Taj Mahal lose its photo-op potential?

We have to look at the problem in two ways – one is air pollution. This is a problem for everybody: the tourists, the people of India, and therefore, the government.

The other part is the restoration of the Taj Mahal. One must account for the fact that it is a medieval building. Like all other monuments, it also needs to be restored. Modern cement, iron beams, and reinforced concrete cannot be used for its restoration. That would compromise the technology used during Mughal times.

The passion of Emperor Shah Jahan to build a grand structure with delicate inlay work led to the diminishing of the coffers of the Mughal Empire. Shah Jahan was jailed by his son to put an end to this self-destructive, extravagant obsession.

“Drip dry: Moca LA to restore Pollock painting in its galleries,” The Art Newspaper, 12/13/2017

An important drip painting by Jackson Pollock, Number 1, 1949, housed in the Museum of Contemporary Art in Los Angeles for nearly 30 years, is about to get a very public cleaning.

The nine-foot wide canvas will be restored in an open gallery at the museum’s Grand Avenue location from 4 March to 3 September, with a conservator from the Getty Conservation Institute on hand to take questions during set times.

The GCI’s head of science, Tom Learner describes the painting’s condition as “good for its size.”

The partnership with the GCI allows MOCA, which does not have its own staff conservator, to share the science of the restoration as it goes along. For its part, the GCI was looking for a “test case” to try out some of the cleaning systems they have been developing specifically for Modern paintings.

Another goal is to conduct an analysis to identify exactly what kind of paint Pollock flung or dripped in his celebrated fashion on this particular canvas. The GCI’s working assumption is that he used an “alkyd” or synthetic-resin-based house paint. MOCA’s label currently identifies it as “enamel and metallic paint on canvas”.

A very early test cleaning of one small area, done by Chris Stavroudis, a private conservator who will work with the Getty on the project, has already yielded good results.

“Cleveland Museum of Art Embarks on Radical Reconstruction of Cambodian Krishna Statue,” Cleveland.com, 12/17/2017

The Cleveland Museum of Art’s seventh-century Cambodian statue of the Hindu god Krishna, a broken masterpiece painstakingly reassembled in 1978, is ready for a yearlong radical makeover in the museum’s conservation lab.

The goal of the project, funded by a $70,000 Bank of America Art Conservation Project grant, is to dismantle and reconstruct the sculpture’s 11 pieces to re-create its correct pose for the first time since the fragments were unearthed in stages starting more than a century ago. The pose matters because it will help reveal the work’s true religious meaning at its time of origin -- a pivotal moment in the development of Hinduism.

The new restoration will show that instead of gazing straight ahead as he has in the museum’s galleries for decades, Krishna was designed to face down slightly, enabling him to gaze directly at worshipers to foster a form of Hindu observance known as Darsan. Darsan is Sanskrit for connecting spiritually and emotionally to an auspicious person or deity through eyesight. The restoration will also enable conservators to disassemble and reassemble the Krishna so it can travel to other museums.

“New Technology Aims To Slow Damage To Georgia O’Keeffe Works,” Santa Fe New Mexican, 12/29/2017

Chemical reactions are gradually darkening many of Georgia O’Keeffe’s famously vibrant paintings, and art conservation experts are hoping new digital imaging tools can help them slow the damage.

Scientific experts in art conservation from Santa Fe, New Mexico, and the Chicago area announced plans this week to develop advanced 3-D imaging technology to detect destructive buildup in paintings by O’Keeffe and eventually other artists in museum collections around the world.

Dale Kronkright, art conservator at the O’Keeffe Museum in Santa Fe, said the project builds on efforts that began in 2011 to monitor O’Keeffe paintings using images from multiple sources of light. The creeping problem of soap buildup in paintings looms not only over O’Keeffe’s paintings but also the vast majority of 20th-century oil paintings, in part because canvases from the period were primed with nondrying fats or oils, Kronkright said.

To develop imaging technology that can assess the growth of the protrusions, the NEH awarded $350,000 to the O’Keeffe museum and a collaborative art-conservation center run by Northwestern University and the Art Institute of Chicago. The project aims to create a web-based system that allows any art conservator to upload and analyze images of paintings in efforts to limit damage from soap formation.

and finally ...


During restorations of an 18th century wooden statue of Jesus Christ, Spanish workers discovered a peculiar note that appears to be a makeshift time capsule.

The most surprising and bizarre thing about this unexpected discovery is that the note was found in the buttocks of the statue.

The document was discovered by workers of a Madrid-based art restoration company who were restoring the wooden statue when they reportedly found two pieces of paper hidden inside the hollow wooden statue, after removing a piece of fabric that covered Christ’s behind.

According to the statue’s restorers, the note dates back to 1777 and is signed by Joaquin Minguex, a chaplain of the cathedral of Burgos de Osma at the time. The document found talks about life in the town in 1777, the author, the local economy, games and customs of the time, etc.” The newly discovered documents have been sent to the Archbishop of Burgos, where they will be archived.

Interestingly, a copy of the original document was created and placed back into the buttocks to preserve Minguex’s intent.