

## President's Letter

*Beverly Perkins*

After 11 years as a WAAC member, it is such a thrill to have the opportunity to serve as President for the next year. The big task, of course, is the annual meeting. I have been thinking about trying to get the annual meeting to come to Cody, Wyoming for years now – this is my lucky break! About ten years ago, I left the Brooklyn Museum to work as Chief Conservator at the Buffalo Bill Historical Center. When my husband and I left Wyoming and moved to California people used to ask us, “Don’t you miss New York?” Well, of course, but what we really missed was Wyoming. The expansive vistas, the dramatic mountains, the threatening skies – there are no words to explain it; one just has to experience it firsthand.

Take it from Debbie Hess Norris, an avowed city dweller who needs cafes and internet connections. Her family had planned a trip to Yellowstone and Cody. She grabbed me in a panic - how would she survive in the wilds of Wyoming for a week? Turns out she loved Yellowstone and Cody. She raved about the Plains Indian Museum at the Buffalo Bill Historical Center. Conservators who have been to Cody are already thinking of topics to present just so they can have an excuse to go back.

### EARLY ANNUAL MEETING IN 2005

As you may have guessed, next year’s annual meeting will be held on August 27-29 at the **Buffalo Bill Historical Center in Cody, Wyoming**. The meeting will take place a little earlier than usual so we can be sure that the East Gate to **Yellowstone National Park** will be open.



Yellowstone, the largest national park in the lower 48 states is only an hour’s drive from Cody. The road goes over a dramatic, high pass that closes early in the year for safety reasons. Yellowstone is filled with geothermal geysers, hot springs, steam vents, mud-pots, and historic structures. An abundance of wildlife live in this area that encompasses 2.2 million acres. The Grand Canyon of Yellowstone is famous for its colors, shapes, and waterfalls. For more information about the park, visit the official website at <http://www.nps.gov/yell/home.htm>.

In addition to all of the wonderful things to do in Yellowstone, there will also be many activities available for children and partner-grownups at the Buffalo Bill Historical Center and in Cody. We are working on providing children’s activities at the museum. In the surrounding area there are plenty of outdoor activities, including hiking, rafting, horseback riding, and geyser gazing.

Cody represents the Eastern Gateway to Yellowstone National Park. Named after “Buffalo Bill” Cody, the town has long been a symbol of the old American West and is a great launching point for outdoor adventure. The town is full of western-themed shops, restaurants, and a world-renown rodeo. The view from the town is all sky and mountains.

The Buffalo Bill Historical Center is home to five major museums, a great library, and a wonderful gift shop.

The **Plains Indian Museum** features one of the country’s largest and finest collections of Plains Indian art and artifacts. Explore the cultural histories, artistry, and living traditions of Plains Indian peoples, including the Arapaho, Crow, Cheyenne, Kiowa, Comanche, Blackfeet, Sioux, Gros Ventre, Shoshone, and Pawnee.

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**Volume 27 Number 1**  
**WAAC Newsletter**

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**President's letter, continued**

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The **Whitney Gallery of Western Art** presents an outstanding collection of masterworks of the American West. Original paintings, sculptures, and prints trace the artistic interpretations of the West from the early 19th century to today.

The **Draper Museum of Natural History** integrates the humanities with natural sciences to interpret the Greater Yellowstone Ecosystem and adjacent intermountain basins.

The **Cody Firearms Museum** contains the world's most comprehensive assemblage of American arms, as well as European arms dating to the 16th century.

The **Buffalo Bill Museum** examines both the personal and public lives of W.F. "Buffalo Bill" Cody, and seeks to interpret his story in the context of the history and myth of the American West.

We are looking forward to the meeting in Wyoming. Please consider joining us and even presenting a talk

**New WAAC Board Members**

We would like to thank outgoing President Molly Lambert for all of her hard work throughout the year and for putting together a truly memorable annual meeting. And thank you to Nancy Odegaard and Donna Williams for serving as Members-at-Large. Pam Skiles did a wonderful job as Secretary. Tania Collas and Chris Stavroudis have done amazing work as Treasurer and Membership Secretary, respectively. The *WAAC Newsletter* is a gem among newsletters. Thank you, Carolyn Tallent for your tireless work as editor. Thank you also to the Regional Reporters and the many other contributors who make it such a fine publication.

Laura Downey Staneff was elected as this year's Vice-President. The new Member-at-Large officers are Scott Carrlee and Nicholas Dorman. Alexis Miller has agreed to serve as Secretary for the coming year. The election was incredibly close so remember to vote when your ballot arrives in next year's meeting packet! And please agree to run for office should you get a call from the nominating committee. The aim is to have board members from different parts of the West, from museums and private studios, and of differing specialties.

**Santa Fe Meeting**

Molly and Maureen Russell, local arrangements chair, made sure that the sessions at this year's annual meeting were interesting and the events fun. The Bandelier National Monument tour was led by Angelyn Bass Rivera, NPS Vanishing Treasures Conservator. The open house tour in Chimayo gave conservators the chance to visit the Cruz Lopez Studio, the Patricio Chavez Retablo Shop, Ortega's Weaving Shop, the Chimayo Museum, and Chimayo Trading and Mercantile.

We would like to thank the Museum of International Folk Art for providing space for the meeting and reception. We would also like to thank the Museum of Fine Arts for providing the St. Francis auditorium for one of the sessions.

Thank you also to all of the wonderful people who made the banquet so outstanding! The venue was beautiful Hyde Park Lodge among the yellow aspen trees. Rex Hobart and the Misery Boys made excellent music by the camp fire. Their classical country CD can be ordered online at [www.rexhobart.com](http://www.rexhobart.com). (Rex is married to the Museum of New Mexico's third year intern, Paula Hobart.) Emily and Kam O'Brien provided the s'mores and other goodies that were enjoyed by the campfire, which glowed thanks to wood provided by Robert Rivera.

If you missed the meeting in Santa Fe, you missed a wonderful time. Start planning now to join us in Wyoming.

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Albrecht Gumlich

**HEALTH & SAFETY**

Chris Stavroudis

**ARTICLES YOU MAY HAVE MISSED**

Susanne Friend

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To make academic course packets that include articles from WAAC Newsletter, contact the authors of the articles directly.

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**Deadline**

Contributions for the *May* Newsletter should be received by the Editor before **March 15, 2005**.

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## Western Association for Art Conservation

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

### **PRESIDENT**

Beverly Perkins

### **VICE PRESIDENT**

Laura D. Staneff

### **SECRETARY**

General Information  
New Memberships  
Publication Orders

Alexis Miller

### **TREASURER**

Change of Address  
Payments

Tania Collas

### **MEMBERS AT LARGE**

Scott Carrlee  
Nicholas Dorman  
Maureen Russell  
Chris Stavroudis

### **WEB EDITOR**

Walter Henry

### **PUBLICATIONS FULFILLMENTS**

Donna Williams

Individual Membership in WAAC costs \$30 per year (\$35 Canada, \$40 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 \$35 per year (\$40 Canada, \$45 overseas) and entitles the institution to receive the WAAC Newsletter and Membership Directory. For membership or subscription, contact the Secretary.

### **Internet**

Articles and most columns from past issues of WAAC Newsletter are available on-line at the WAAC Website, a part of CoOL (Conservation OnLine) hosted by Stanford University Libraries. WAAC's URL is: <http://palimpsest.stanford.edu/waac/>.

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## UCLA / Getty Master's Degree Program in Archaeological and Ethnographic Conservation

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The Cotsen Institute of Archaeology at UCLA and the J. Paul Getty Trust have formed a partnership to create a new program awarding a Master's degree in Archaeological and Ethnographic Conservation. The program will admit its first student intake in the Fall of 2005. The new faculty for this program will consist of three UCLA academic staff together with a conservator who will also function as a laboratory technician for the new laboratories which will open up at the Getty Villa in the Fall of 2005-Winter 2006.

The conservation of archaeological and ethnographic materials and sites is an important part of our efforts to preserve the cultural remains of the past. In this program, students will study for a 3 year Master's Degree in Conservation, dealing specifically with archaeological and ethnographic material. The program will emphasize the multiple values and meanings that archaeological and ethnographic artifacts may hold for society, and how these values impact decisions on conservation and use.

The role of the archaeological or ethnographic conservator is increasingly involved in wider cultural or museum-based decisions. Likewise, the conservator may work as part of an interdisciplinary team, with ethnographers, indigenous communities, cultural resource managers, or curators. Part of the appeal of conservation is this lack of closely defined boundaries; conservators may work in the field, laboratory, or in the private or public sector, under contract, or in more conventional employment. This is one reason why conservation is an exciting career choice and why graduates from a wide variety of backgrounds are attracted to conservation.

The aim of the UCLA/Getty Conservation Program will be to provide students with a solid educational base and practical training in both archaeological and ethnographic materials; as well as an appreciation of the often complex issues relating to significance, access, and use of these materials which can be very different from the criteria for conservation of fine art or historical materials. In the case of ethnographic materials especially, the program will facilitate an understanding of the multiple values that artifacts hold for indigenous populations, and will foster a sense of partnership with indigenous communities in relevant aspects of the conservation process.

The partnership between UCLA and the Getty in creating this program ensures that both a major research university and an institution with an important mandate for conservation of the artistic heritage of the world are working to create a rich and vibrant conservation training opportunity. The program will help the student develop working relationships with a wide array of colleagues in the Getty Conservation Institute, the J. Paul Getty Museum, and UCLA departments of Archaeology, Anthropology, Art History, Chemistry, Materials Science, and Geology to name only a few. The intake to the program will be every second year for this three-year MA degree. The next group of students will therefore be admitted in 2007, with the usual deadline for submissions to UCLA graduate school being in December 2006 for 2007 intake.

For information please consult the website at [ioa.ucla.edu/conservation](http://ioa.ucla.edu/conservation) or contact [gdbailey@ucla.edu](mailto:gdbailey@ucla.edu), telephone number (310) 794 4837.

### **Return of the Silent Auction**

The WAAC silent auction will be in full swing at the meeting this August in Wyoming. The auction will provide seed money to benefit the maintenance of outdoor sculpture at the Buffalo Bill Historical Center. Please help make this event fun by bringing something to put in the auction. Thank you!

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## Regional news

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### ATTENTION WAAC MEMBERS:

C'mon, admit it: when your WAAC NEWS arrives in the mail, isn't the first thing you turn to the Regional News?? It's how we keep in touch with each other, at least a little bit, when we don't have time or a good excuse to call and catch up with friends and colleagues out of the immediate area. So, do you see YOUR news in the following column? If not and you would like to be included in the next issue, take the initiative! Contact information for each region is listed at the end of each section. The Regional Reporters are volunteers who gather the information and send it to the WAAC News editor. Next time, be sure to send your reporter an email or give a call with your news. Even a sentence or two will be welcome reading for the rest of us!

### ARIZONA

**Brynn Bender** continues working on cleaning and stabilization of the surface of historic wooden river boats for the Grand Canyon National Park, as well as working with conservation assistants **Audrey Harrison** and **Maria Lee** on the conservation of the Campbell collection of prehistoric ceramics from Joshua Tree National Park.

**Nancy Odegaard** presented a paper at the Eastern Analytical Symposium in Somerset, NJ on methodologies for using handheld XRF technology for the study of pesticide residues on museum objects. **Teresa Moreno** and **Caitlin O'Grady** participated in the Materials Research Society Fall Meeting in Boston. Teresa presented on laser cleaning of wax and coatings and Caitlin presented on manganese oxide accretions. Melissa Huber represented the lab at the Association for Preservation Technology international annual conference in Galveston, TX.

Three very important pre-Columbian textiles at the Ica Museum in Ica, Peru have been reported stolen. **Grace Katterman** and **Nannette Skov** worked three years on conserving one of them, a Wari tunic.

Nannette Skov has published *Textile Care and Preservation*, a how to manual for

owners, collectors, and museums without a textile conservator.

**Julie Unruh** continues to oversee the condition survey and treatment of 20,000 vessels for the Save America's Treasures Pottery Project at ASM. **Maggie Kipling** has begun her Kress Fellowship at ASM and will also focus on the Pottery Project. Pre-program students **Tara Hornung** and **Stephanie Ratcliffe** are assisting in the project by gathering and compiling data on adhesive use.

**Gretchen Voeks** has completed her on-site condition survey for 20 cemeteries at Kalaupapa National Historic Park and is crunching data for the final report. Over 900 of the gravemarkers are damaged concrete and will provide interesting challenges for many years to come.

Members of the ASM lab, including students and volunteers, recently completed work on the current exhibit *Navajo Weaving* at Arizona State Museum.

*Regional Reporter:*  
Gretchen Voeks

### HAWAII

At Pace Art Conservation, **Rie** and **Larry Pace** were fortunate to have **Alice Tate-Harte** for a 6 week summer internship. Alice is a graduate student at the Courtauld Institute in London and has completed her first year of graduate study in Painting Conservation.

Larry flew out to the Big Island to look at a series of paintings by local artist Herb Kane in the collection of the National Park Service at the Pu'ukohola Heiau National Historic Site. The paintings depict the construction, dedication, and use of the Heiau by native Hawaiians. Rie, Larry, and Alice examined, faced, removed from its stretcher, and rolled a Qajar Period (19th C.) iranian ceiling

painting which hung from a bedroom ceiling at the Doris Duke Estate, Shangri-La, in Honolulu. Other work for the Paces includes the monitoring of a fresco mural in a bank lobby in downtown Honolulu as the lobby is extensively remodeled; and the completion and delivery of a large Vietnam War era painting depicting a fire fight belonging to the Tropic Lightning Museum at Schofield Barracks in central Oahu.

**Susan Sayre Batton** curated the conservation-based exhibition *Washi in the Floating World: Recently Conserved Prints by Utagawa Hiroshige*, at the Honolulu Academy of Arts, which opened 19 October, 2004. The exhibition illustrates the important role that washi (Japanese paper) plays in the creation, longevity, and conservation of ukiyo-e woodblock prints.

Didactic panels, photographs, and samples of traditional Japanese paper are on view, as well as Edo period Noh kinran robes, which contain gold-leafed washi. Washi's role in paper conservation is illustrated in conservation treatment documentation using ukiyo-e prints from Hiroshige's *Hoiedo Tokkaido* series. In addition, the importance of conservation in connoisseurship is explored through the side-by-side display of an important Edo period print, *Fujigawa in Snow*, and a later 20<sup>th</sup>-century reproduction. The exhibition is on view in the Michener Gallery until 31 January, 2005.

**Laura Gorman** monitored the removal and relocation of twenty huge concrete mural panels by artist Tom Van Sant at the Honolulu airport. Laura has accepted the position of Objects Conservator at the Saint Louis Art Museum and will be leaving the islands at the end of 2004.

WAAC thanks Laura for her service as Regional Reporter for Hawaii'i. This post is now open and interested members are encouraged to contact current Vice President and Regional News Editor Laura Downey Staneff (ldstaneff@ionsky.com) for details.

*Regional Reporter:*  
Laura Gorman

## **GREATER LOS ANGELES**

**Leslie Rainer, Chris Stavroudis, and Aneta Zebala** have begun the preliminary examination of a mural located at the original Chouinard School of Art building in Los Angeles. The mural was painted by David Alfaro Siqueiros, assisted by local artists, in 1932. It is entitled *Street Meeting*. The mural has been covered by numerous layers of paint, suffered exposure to the environment, and is partly covered by ceramic tiles. **Carolyn Tallent** is on the advisory team for the project. (See AYMHM p. 34).

**Elisabeth Mention** will be retiring from the Paintings Conservation Department at the J. Paul Getty Museum after having worked at the Getty for more than thirty years. Elisabeth has been a cherished colleague and mentor in the department and throughout the Getty Trust. Her work has included the study and restoration of many paintings from the Getty collection, as well as important partnerships with other institutions. Elisabeth will retire in January 2005, and we wish her the very best in her life after the Getty!

**Ana Burgos** has joined the Getty Paintings Conservation department as Senior Staff Assistant. Also in the lab is new graduate intern **Carmen Albendea**, who trained in paintings conservation in Spain and most recently completed a 2-year internship at the Hamilton Kerr Institute in the UK. Carmen will work in the department for the internship year September 2004-2005.

**Mark Leonard and David Bomford** (Senior Restorer at the National Gallery, London) have completed work on the second volume of the Getty Conservation Institute's Readings in Conservation series. *Issues in the Conservation of Paintings* will be published before the end of the year.

**Tiarna Doherty and Mark Leonard** continue to work on two very large animal paintings by Jean-Baptiste Oudry which come from the Staatliches Museum in Schwerin, Germany. The paintings will be included in an upcoming Oudry exhibition planned for the Spring of 2007

at the Getty Center. Tiarna has recently presented research on the collaboration of Rubens and Brueghel at a Rubens Symposium in Braunschweig, Germany.

As part of another ongoing conservation partnership, **Yvonne Szafran** is working on paintings by Lucas Cranach the Elder and Tintoretto from the Kröller-Müller Museum in the Netherlands. She will also be conserving the most recent Getty paintings acquisition, a Classical Landscape by Valenciennes.

**Gene Karraker** has restored a 17<sup>th</sup>-century Italian frame for the Tintoretto from the Kroller-Muller. He is also working on a publication on frames for the Getty "Looking at" series.

**Arlen Heginbotham** has been working on projects involving the identification of protein-based materials in artworks using antibodies. He has been collaborating with **Michael Quick** of the University of Southern California's Department of Biological Sciences to identify the media used in the polychromy on a 17<sup>th</sup>-century French cabinet from the Getty's collection.

Arlen has also been working on the fine points of discriminating between 18<sup>th</sup>-century and later reproduction gilded bronzes based on alloy composition. He is analyzing a large amount of data collected over the last year by X-ray fluorescence (with the invaluable help of **Julia Schultz**), and is hopeful that statistical methods will allow a clear differentiation between period artifacts and 20<sup>th</sup>-century reproductions.

After more than 30 years in the Conservation Center at the Los Angeles County Museum of Art, **Victoria Blyth Hill** has announced her retirement in June 2005. As the Director of Conservation for the last five years, formerly the Senior Paper Conservator, Victoria has instituted many positive changes within the department, and the staff is grateful for her important contributions. Her plans for the future include private practice, travel, research and writing, and most importantly, spending more time with her family. We wish her the best.

**Don Menveg** worked for several months preparing furniture and decorative art objects for LACMA's major winter exhibition, *The Arts and Crafts Movement in Europe and America* which opened last December.

**Natasha Cochran, Batyah Shtrum, Don Menveg, and John Hirx** are all working on LACMA's Madina collection of Islamic Art, which features works ranging from the 7<sup>th</sup> to the 19<sup>th</sup> centuries. A portion of the collection is being rotated for display in January in the Islamic galleries.

After completing a one year Mellon Fellowship, **Solitaire Sani** left LACMA in October for a position at the Museum of London as Textiles Conservator in the department of Conservation and Collections Management.

In September, **Yadin Larochette** began a second year at LACMA as a Mellon Fellow, and in October she attended two conferences in Chile. The first conference was held in Santiago at the SEK International Institution, which inaugurated a restoration and conservation program last year. The SEK restoration/conservation program is offered at the Chilean branch only, but SEK has branches through out Latin America, Spain, and one site in the U.S.

The second conference was held 2 hours west of the capital at the University of Valparaiso, and was sponsored by Chile's Comite Nacional de Conservacion Textil, a group of approximately 80 professionals involved with textiles, including textile designers, weavers, anthropologists, archaeologists, curators, and of course, conservators. Most members live in Chile, some live in other Latin American countries. Yadin was voted into the group this session and hopes to give an introductory presentation about her work at their next meeting scheduled for November 2005 in Mexico City.

The Comite alternates between talks one year and a workshop the next. This year a three-and-a-half day workshop was held, taught by **Patricia Raffellini**, on the history of western costume from the 16<sup>th</sup> century to 1970. Patricia is a researcher,

curator, and collections manager for the National Museum of the History of Costume in Buenos Aires, Argentina.

**Soko Furuahata** attended the Modern Machine-Made Papermaking workshop held in Williamstown in early November, which involved visits to several paper mills.

**Jennifer Koerner**, **Soko Furuahata**, **Chail Norton**, and **Chie Ito** have been very busy working on several big exhibition projects, including *The Arts and Crafts Movement in Europe and America*. Chail and Chie also treated a large diptych poster for an upcoming exhibition of posters from the collection of the Robert Gore Rifkind Center.

Three of the 24 Getty Grant Program's Graduate Interns, will join the Organic Materials Analysis Laboratory of the GCI for the 2004-2005 year: **Christel Claire Pesme**, currently pursuing her Master's Degree in Conservation at the University of Paris-Pantheon-Sorbonne, will work under the supervision of **Jim Druzik** pursuing her interests in researching the preservation of light-sensitive artifacts; **Roberta Maria Renz** who recently completed her Master's Degree and is currently continuing her studies in the Paintings Conservation doctoral program, University of Applied Arts, Vienna; and **Charlotte Anais Martin de Fonjaudran** is finishing her Master's Degree in conservation of wall paintings at the Courtauld Institute of Art.

Roberta will be working on contemporary painting materials research supervised by **Michael Schilling** and Charlotte will be studying organic materials in wall paintings with Michael Schilling and **Giacomo Chiari**.

These three Graduate Interns join graduate students **Jesús Jiménez** and **Casey Greet** from the Chemistry Department of California Polytechnic State University, Pomona. Jesús and Casey are examining the chemistry and aging properties of water-mixable artists' oil paints with faculty advisors **Charles Millner** and **Bud Jenkins**. These five will also work very closely with GCI staff scientists, **Joy Keeney**, **Herant Khanjian**, and **Cecily Grzywacz**.

Other GCI interns are **Amel Chabbi** (Field Projects), and **Sandeep Sikka** (Building Materials Science).

*Regional Reporter:*  
Virginia Rasmussen

## NEW MEXICO

We New Mexicans were happy to host WAAC's Annual Meeting 2004, and we think the members attending must have gotten all our news at that time.

**David Rasch** is pleased to announce that he has accepted two new positions. He has been promoted to head the Historic Preservation Section for the City of Santa Fe, a position which oversees construction and building alteration within five historic districts and ground disturbance and archaeology within three archaeological districts. He has also been elected by the membership of the New Mexico Association of Museums as President for a two-year term.

In addition, David is continuing with private practice as conservator and collections consultant. His recent contracts include treatment of taxidermy specimens for the Biltmore Estate in Asheville, North Carolina; treatment of Spanish Colonial tinwork for Rancho de las Golondrinas, a living history museum in Santa Fe; and assistance for the Philbrook Museum in drafting their long-range conservation plan with a public workshop component in Tulsa, Oklahoma.

**Laura Downey Staneff**, WAAC's new Vice President, has relocated to Gilpin County Colorado, where she will continue doing private conservation and consulting when she isn't shoveling snow. She will miss her friends in New Mexico and hopes to visit regularly.

**Teresa Myers** has set up a new business, Teresa Myers Conservation Services, in

Sebec, Maine. She can be reached at 207-564-3910 or through her website [www.myersconservation.com](http://www.myersconservation.com).

*Regional Reporter:*  
M. Susan Barger

## PACIFIC NORTHWEST

**J. Claire Dean** recently finished up the field work component of a project with the Confederated Tribes of the Umatilla Indian Reservation with the assistance of Deborah Uhl. Since then field work destinations have included Montana, Wisconsin, New Mexico, and a couple of days in Wyoming helping the Wyoming National Guard with their Native American consultation process with regard to rock image sites on properties that they manage.

At the end of November she will be heading to South Africa for her annual working vacation at the University of the Witwatersrand, Rock Art Research Institute.

**Vina Rust** participated in a group exhibition in the Los Angeles area in November and December. Information about the show is up on the gallery website: [www.sculpturetoewar.com](http://www.sculpturetoewar.com).

**Jack Thompson** conducted a CAP survey of the Woodbury Art Museum, in Orem, Utah (Utah Valley State College). Other projects have included treatment of a mold and bug infested collection of Native American baskets, a braintan-covered saddle, and a Chinese woven grass hat for the Columbia Gorge, Discovery Center. He has also removed 1960s wall-covering to reveal the original 1913 wallpaper at Pittock Mansion in Portland. The original wallpaper will be photographed in high resolution digital format to re-create, print, and replace the original, badly faded wallpaper, after removing a representative sample for archival purposes.

Jack has also harvested two deerskins which will be made into parchment.

Work continues on Mill of Dunnydeer. Most recently, an addition has been built onto one of Jack's cabins in Idaho to serve as a carpenter's shop for building the overshot waterwheel and other odds and ends useful to a papermill.

**Sarah Melching** and family have relocated from Seattle to Olympia, WA. Her new contact information is Pacific NW Paper Conservation Svcs., Inc., PO Box 7624, Olympia, WA 98507, 360.570.9909.

**Jessica Kottke** has begun work with **Peter Malarkey** in preparation for the conservation degree program admissions process. She graduated in Art History at the University of Puget Sound in Tacoma, WA in 2004 and also served as a workstudy assistant to Tacoma Art Museum Registrar **Janae Huber** in 2003-2004.

*Regional Reporter:*  
Peter Malarkey

## ROCKY MOUNTAIN REGION

**Victoria Montana Ryan** was presented with an award for Excellence for Historic Preservation and Restoration by the Historic Preservation Alliance of Colorado Springs, in recognition of her conservation of the City Auditorium WPA murals.

At the Denver Art Museum **Paulette Reading** and **Kristy Jeffcoat** have been hired as Assistant Conservators. **Jessica Fletcher** has been promoted to Associate Conservator. Paulette, Kristy, Jessica, and Chief Conservator, **Carl Patterson** are now focusing on preparing collections for installation in the new wing. The addition is designed by **Daniel Libeskind** and is slated to open in late 2006. Also helping with the efforts are interns **Paige Issacs**, **Dawn Jaros**, and **Josiah Wagener**.

As mentioned above, Laura Downey Staneff has recently moved to the Gilpin area, in the mountains outside Denver. Laura will continue her private conserva-

tion practice, Silverpoint Art Conservation LLC, and will make several trips to Tucson in the coming year to consult for the Center for Creative Photography.

WAAC thanks **Eileen Clancy** for her service as the Rocky Mountain Region Reporter. Eileen has passed this responsibility on to Paulette Reading, who is welcomed in her new role.

*Regional Reporter:*  
Paulette Reading

## SAN FRANCISCO BAY AREA

The conservators at the Fine Arts Museums of San Francisco are extremely busy preparing the collections for the move to the newly built deYoung Museum in Golden Gate Park. The collections move-in will take place over 5 months beginning in March 2005, with the museum scheduled to open to the public in October 2005.

In Objects Conservation **Elisabeth Cornu** is working with collections management teams on move-in scheduling, outfitting of storage, and building construction details to accommodate the varied collections. **Lesley Bone** is readying approximately 3,500 ethnographic works for installation. **Natasa Morovic** is conserving American frames under an NEA grant and a private grant.

**Rowan Geiger** has joined the laboratory staff part-time under an NEA grant to work on furniture projects for the New deYoung, and **Blanche Kim** is working part-time to help with preparation of decorative arts objects.

In Paintings Conservation **Carl Grimm**, **Tony Rockwell**, **Tricia O'Regan**, and **Charlotte Ameringer** are busy readying the American paintings collections as well as overseeing their packing. In September Tricia attended the IIC Congress in Bilbao. The conservators are looking forward to moving into our new studio spaces in January/February.

In September **Jim Bernstein** and **Debra Evans** taught a 4-day workshop "Mastering Inpainting" for Scandinavian conservators at the Moderna Museet in Stockholm.

Also in September, the paper lab at the Fine Arts Museums of San Francisco welcomed **Jeffrey Warda**, a 3rd year intern in the Buffalo conservation program, who will be working in the lab for a year.

**Margaret (Meg) Geiss-Mooney** recently completed the conservation of the set of 10 ballroom drapes located at Filoli Center, Woodside, California - each 20 feet tall - that's a lot of voided silk velvet!

*Regional Reporter:*  
Charlotte S. Ameringer

## TEXAS

**Stephanie Watkins** reports that a National Endowment for the Humanities grant for cataloging and preservation treatment of the B. J. Simmons Performing Arts Costume Drawing collection was completed in August 2004 in the paper conservation laboratory at the Harry Ransom Humanities Research Center of the University of Texas at Austin. Conservators on the project were: Stephanie, **Corinne Dune** (year one), and **Jane Boyd** (year two). They treated over 12,500 drawings in a two-year period with the assistance of numerous student volunteers. (Congratulations! Ed.)

Between September and December 2004, **Marco Biasiotti** and **Raffaella Tonio**, students from the Fondazione per la Conservazione e il Restauro dei Beni Librari, Spoleto, Italy, interned in paper and book conservation (respectively) at the Harry Ransom Humanities Research Center at the U. of Texas at Austin.

Stephanie was also the compiler and writer of the recently published American Institute for Conservation's Photographic Materials Group's (AIC-PMG) *Photographic Materials Conservation Catalog, Chapter #1, Exhibition Guidelines for Photographic Materials*. Head of photograph conservation, **Barbara Brown**, contributed to the project along with other colleagues.

Exhibition considerations specific to many photographic processes are addressed in the chapter, including lighting types and levels, temperature and humidity levels, pollutant levels, monitoring methods, glazing, matting, hinging, and framing methods, display techniques, documentation, and loan and travel guidelines. An extensive bibliography is included. (See p. 31.)

Barbara Brown reports that **Andrée Chaluleau**, 3rd-year graduate student from the INP, dr (Institut National du Patrimoine de France, département des restaurateurs [National Institute of Cultural Heritage of France, conservator program -- formerly known as IFROA], spent her three-month internship (May-July) in the photograph conservation lab in the HRC Conservation Department, working with Barbara .

**Jae Mentzer**, from the Winterthur/University of Delaware Art Conservation Program, completed her eleven-month internship with Barbara in the photograph conservation lab in July as well, returned to Delaware for graduation, and is working there on a couple of grant-funded projects, as well as working with undergraduate students in the pre-conservation program.

Barbara worked with **Shin Maekawa**, Senior Scientist at the Getty Conservation Institute, for almost a week at the end of August through the beginning of September to install the First Photograph into its new, oxygen-free museum case that was designed and made by GCI.

In October, Barbara attended the ICOM-CC Photographic Records Working Group interim meeting held in Amsterdam, the Netherlands, where she gave a presentation on "Four Metallic Photo-

graphic Prints from the Harry Ransom Center Collection," co-authored by **Dusan Stulik** and **Herant Khanjian**, Senior and Assistant Scientist, respectively, at GCI.

**Chela Metger** reports that the Preservation and Conservation Studies Program (PCS) is now named the Kilgrarlin Center for Preservation of the Cultural Record, part of the School of Information at UT Austin. **Karen Pavelka** will be teaching at Sun Yat Sen University in Guangzhou, China the week of Dec. 13, then Chela teaches at the same place the following week.

Eight conservation students and five Preservation Administration students began graduate studies at the Kilgrarlin Center this fall. Conservators: **Annie Wilker, Erin Hammeke, Katherine Kelly, Cara Johnson, Andrea Knowlton, Carie McGinnis, Alison Kilman, Tish Brewer**; Preservation Administrators: **Bryce Spencer, Lyndsey Watts, Lisa Boettrich, Aaron Russell, Holly Ovalle**.

Third-year students **Holly Robertson** and **Beth Heller** will begin their final internships this January 2005, Holly at Harvard Libraries and Beth at the Minnesota Historical Society.

**Anne Zanikos** has completed the conservation of four Santos belonging to San Fernando Cathedral in San Antonio. In total, seven statues were damaged in December 2003 when a deranged man entered the Cathedral and pulled them off of their pedestals. Anne had previously conserved the Santos in 2000 during a restoration of the building. San Fernando Cathedral is the oldest continuous use Catholic cathedral in North America.

**Mark Van Gelder** recently completed the treatment of the ca. 1840 painting: *Portrait of Colonel David Crockett* by John Gadsby Chapman. The work, which belongs to the Harry Ransom Humanities Research Center at the University of Texas at Austin, is now on long-term loan to the Texas State Governor's Mansion.

*Regional Reporter:*  
Ken Grant

## SAN DIEGO

The Balboa Art Conservation Center (BACC) is pleased to announce that **Julie Reid** joined its staff in September as Assistant Conservator of Paintings. Julie is a graduate of the Buffalo State Program and has come to BACC from a post-graduate internship at the Hamilton Kerr Institute.

Also at BACC, **Judy Dion** is in her second year as Mellow Fellow in Paintings Conservation while **Rachel Freeman** is Mellon Fellow in Paper Conservation for 2004/2005.

*Regional Reporter:*  
Frances Prichett

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*Since 1965 the Russian Academy of Sciences has published a journal called Problems of Information Transmission. It is, insofar as it is possible for a scientific publication (even a Russian one) to convey an emotional tone, a melancholy read. Threaded through recondite papers on Markov Chains and Hamming Spaces and binary Goppa codes and multivariate Poisson flow is a vocabulary of imperfection, of error correction and density estimation, of signals with unknown appearance and disappearance times, of indefinite knowledge and losses due to entropy. Sparse vectors are glimpsed through a haze of Gaussian white noise. Certainty backslides into probability. Information transmission, it emerges, is about doing the best you can.*

*from Transmission  
by Hari Kunzru*





## Technical Exchange

*Albrecht Gumlich, column editor*

### Applicators for PVA adhesive, cold fish glue, and similar adhesives

Characteristics of applicators in photo from left to right: The quantity of adhesive flow decreases with smaller spout while the desired precision of application is increased.

The two glue bottles shown on left allow fairly precise dosage. All three can suck up excess glue after pressure on bottle is released.

Left: Relatively small LDPE bottle (16 oz. container), recycled, with water bottle nozzle (easy to open and close). Availability: in this case, Whole Foods. Bottle formerly contained "BeeMaid" clover honey, Product of Canada.

Center: Dripless Glue Bottle. The glue dispenser is good for smaller-scale work. With a light squeeze of the bottle, glue is forced through a channel at the bottom of the airtight reservoir and up the spout. The 4 oz. bottle is supplied with two trimmable nozzles: flat for dispensing a strip of adhesive and conical for beads. Dripless Glue Bottle (4 oz.) available with spare nozzles and caps for \$5.80 at: Lee Valley [www.leevalley.com](http://www.leevalley.com) or 1-800-871-8158.

Right: The bellows applicator did not prove to be as good for glue as hoped. It's hard to produce an even, continuous

flow. The fixed tip cannot be removed for filling or cleaning. However, this device may be of use for injecting (even viscous) liquids into cavities, as the pressure achieved is pretty high.

Easier to fill and clean and most precise is a Glue Syringe (not shown in picture). The half-ounce capacity is sufficient for many applications in conservation. The pointed tip is made of plastic and can be cut down to adjust the opening or to increase flow. It comes in two varieties. One with a slightly bent tip, which allows accurate placement is available from Garrett Wade 1-800-2212942 or [www.garrettwade.com](http://www.garrettwade.com) (3 syringes for \$4.75 – stock number 63J01.01).

A similar type with straight tip is available from Cole-Parmer. It is made of polypropylene. The disposable transfer pipette has a 12-mL capacity, graduated in 1.0-mL increments. Cutting tip can provide easier aspiration and accommodates different viscosities. Product number EW-06215-00 comes in a box of 50 for \$31.50 at [www.coleparmer.com](http://www.coleparmer.com).

Note: An apparent advantage of using these applicators is to minimize the process of cleaning tools after application. Nonetheless, I do recommend spreading the adhesive evenly across the entire surface with a suitable brush. In the case of PVA the application of a thin coat ("brushing" it into the pores of all surfaces) will improve the bond.



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# Babies Born to Moms Who Work with Solvents Studied

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Reprinted from *ACTS FACTS*, Monona Rossol, Editor  
181 Thompson St., # 23, New York, NY, 10012-2586.  
ACTSNYC@cs.com Dec. 2004 Vol. 18, No. 12

A new study of children of women exposed to solvents on the job during pregnancy shows these children have poorer language, memory and attention skills, more hyper activity, and are more impulsive than children born to women who did not use solvents.

**HISTORY.** It has long been known that one solvent, alcohol, is associated with birth defects and developmental problems in children exposed to drinking mothers. Fetal damage can also occur when alcohol is inhaled either from alcohol-containing products that are abused (sniffing) or from using alcohol-containing products such as paints, shellacs, lacquer thinners, and inks. Many other solvents such as petroleum distillates, toluene, and acetone are also present in common products. It was assumed that adverse effects could be caused by much smaller amounts of these solvents because they are more toxic than alcohol. This assumption was borne out by animal studies which showed birth defects and delayed development in offspring of rodents exposed to solvents. The same effects were seen in infants delivered to mothers who abused solvents during pregnancy. However, not much was known about lower levels of solvent exposure on the job.

**THE 1999 STUDY.** The first study showing a connection between on-the-job solvent exposures and birth defects was published in the *Journal of the American Medical Association* (March, 1999, see *ACTS FACTS*, 5/99). The study followed the offspring of Canadian women employed as factory workers, laboratory technicians, artists or graphic designers, printing industry workers, chemists/painters, office workers, car cleaners, veterinary technicians, funeral home employees, carpenters, and social workers. The study found that "women exposed occupationally to organic solvents had a 13-fold risk of major malformations as well as increased risk for miscarriages in previous pregnancies."

**THE NEW STUDY.** A second Canadian study was published in the *Archives of Pediatrics and Adolescent Medicine* in October, 2004. This study, directed by Dr. Gideon Koren, founder of the Motherisk centre at the Hospital for Sick Children in Toronto, compared the children of women exposed to solvents on the job with children of women who did not work with solvents. The children of the solvent-exposed mothers were found to have poorer language, memory and attention skills, and were more hyperactive and impulsive.

**THE SUBJECTS.** Dr. Koren looked at 32 women exposed to organic solvents at work for at least eight weeks in their first trimester of pregnancy. The women's various occupations included graphic designers, a hair stylist, museum conservators, photo lab workers, and factory workers. These women were matched to a control group of women who

were not exposed to solvents and were of the same ages, IQs, incomes, and life styles. All of the women in both groups had mainstream jobs and were of the same socioeconomic status. None were exposed to lead, mercury, alcohol, legal or illegal drugs, or did heavy lifting.

**EXPOSURE.** The women's jobs did not involve excessive exposures. They were exposed to a total of 24 different common solvents or combinations of these solvents for periods of time ranging between 1 hour and 40 hours per week. All the women worked with solvents throughout their first trimester and some as long as 40 weeks. The average exposure of the women was for 28 weeks. Some of the women reported wearing respiratory protection and other protective gear.

**THE EFFECTS.** The children did not differ in birth weight or the age at which they reached developmental milestones. However, the children of women exposed to solvents, who ranged in age from 3 to 9 years old, had lower scores on a variety of language, memory, and dexterity tests than did the children in the control group. The exposed children also had lower behavioral and motor functioning scores and more attention and hyperactivity problems.

Although the children's IQs were not significantly lower, Koren points out that "A kid can be very smart, but if hyperactive he will not do very well." All the children were perceived by their mothers as doing well, but "still, when we compare them meticulously to a control group, there were changes that were quite clear and that could not be ignored..." Koren said. "These tendencies are at times more challenging to a child, and clearly, we think women should try to minimize their exposures."

**COMMENT.** It is possible that the increases in hyperactivity and attention problems seen in children today may be related to solvent-exposure. I have answered inquiries from pregnant women for more than 20 years and am convinced that many of them are exposed to significant amounts of solvents in beauty and hygiene products, paints and home improvement products, cleaners, and hobby and professional art materials. Researchers would be wise to fully investigate solvent exposure from common products used both at work and at home rather than assuming more esoteric environmental exposures are at fault.

Readers should note that some of the jobs held by the women in this study were related to art and theater work such as graphic design, photography, conservation, and hair styling. Although this is a small study and very preliminary, it should be followed up. In the meantime, ACTS councils avoidance of all solvents including alcohol during pregnancy whenever possible.

Sources: "Child Neurodevelopmental Outcome and Maternal Occupational Exposure to Solvents," *Archives of Pediatric & Adolescent Medicine*/ Vol. 158, Oct 2004, pp. 956-961; *The Toronto Star*, 10/5/04, p. A2 & *The Canadian Press*, 10/5/04, <http://www.cp.org/>.

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## Health and Safety

All the News That's Fit to Print

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The biggest Health and Safety news for conservators is the study "Child Neurodevelopmental Outcome and Maternal Occupational Exposure to Solvents." The journal *Archives of Pediatric and Adolescent Medicine* isn't something I've heard of, much less await breathlessly every month. However, Monona Rossol, of Arts, Crafts and Theater Safety, keeps a keen eye out for such research, and I do eagerly await the arrival of *ACTS FACTS* each month.

Monona's lead article from the Dec. 2004 issue of *ACTS FACTS*, "Babies Born to Moms Who Work With Solvents Studied," is reprinted, with the kind permission of Monona, preceding this column. If you haven't read it already, please do so now.

We clearly need further research on this topic. But as I'm writing this in the holiday season, let's look for the good news in this research. While findings of "lower scores in a variety of ... tests" is certainly disturbing, the good news is that "the children did not differ in birth weight or the age at which they reached developmental milestones." Of particular interest, the study included conservators. [We are somebody!]

Clearly, women who are pregnant or attempting to have children should exercise the utmost caution. This would include all of the familiar lifestyle changes – no alcohol and no smoking – as these activities increase the total body burden and add to any occupational exposure to solvents. In addition, you must be extra vigilant in minimizing exposure. Reduce your exposure by means of changing your work patterns, utilizing engineering controls, or using personal protective equipment (PPE). The most obvious PPE is the lowly respirator. Don't forget that changes in your face as a result of pregnancy can affect respirator fit. Getting re-fit-tested may be wise.

Minimizing exposure doesn't stop with wearing a respirator 'till it hurts. There are other routes of exposure. Solvent exposure can occur through the skin, so wear gloves. Thin nitrile gloves are best for general use, but choose the appropriate heavier duty gloves by using a glove chart. Avoid latex or vinyl gloves when working with solvents. Remember that if a glove softens or swells with exposure to solvent, that solvent is diffusing through the glove. This can change a 5 second short-term exposure to a much longer exposure that doesn't stop until you remove the now poultice-like glove.

Also, be sure to wear a lab coat or smock. Remember that solvent vapors can adsorb onto your outer surface and then slowly be re-released after the exposure has ended. So wear an outer surface that you can shed when you leave the smelly work area. And, please, remember to doff your stinky lab coat when you go home.

In a column in the September 2000 *WAAC Newsletter* (22/3), I mentioned the ad-hoc experiment a clever conservator and doctor used to examine respirator use while pregnant. The conservator donned her respirator, and the doc measured her blood oxygen levels while performing typical work tasks. The good news was that no change in oxygen levels were detected. So, at least in my mind, a pregnant conservator needn't worry about not getting enough oxygen for herself and her fetus while working with a respirator. This is certainly an experiment that deserves to be repeated. Should you and your MD choose to do so, please drop me a line with the results.

The AIC Health and Safety committee is also very interested in the article in *Archives of Pediatric and Adolescent Medicine*. Look for additional insights and recommendations in upcoming issues of *AIC News*.

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Now in print: it can now be told! The article by Cathy Hawks and Kathy Makos (and coworkers) on the procedure for testing for low levels of mercury vapor is out. I mentioned this test in the January 2003 *WAAC Newsletter* in "Mercury,

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**Chris Stavroudis, column editor**

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the other heavy metal.” For those of you who don’t regularly read *TAXON* (the *Journal of the International Association for Plant Taxonomy*) or perhaps you just missed the August 2004 (53/3, pp. 783-790) number, allow me to fill you in.

Two years ago I said of the C/Kathys’ research: “The most exciting aspect of their research is that they’ve taken a commercially available product and developed a test-strip indicator that is exquisitely sensitive to mercury vapor.... For the details, you will have to wait for them to publish.”

So, the wait is over! Here’s what you do: Make a suspension of 10 ml of J.T. Baker Mercury Indicator Powder (Product Code 4509) with 25 ml distilled water by stirring with a clean, glass stirring rod. Using glass microscope slides cleaned with distilled water and then with undenatured ethanol, brush the suspension onto the slides with a clean nylon-bristle artist’s brush. When dry, the slides can be placed into areas suspected of mercury contamination.

Check the slides in 7 days and compare them with control slides kept in an area known to be free of mercury contamination. The indicator changes color in response to mercury vapor. The article cautions that “While color change is a reliable indicator of the presence of mercury, the association is not strong enough to accurately calculate  $\mu\text{g}/\text{M}^3$  mercury concentration levels from  $\Delta\text{E}$  readings. However, the data do strongly suggest that a yellow indicator slide would represent no detected, or extremely low, mercury vapor concentrations. The presence of any gray color indicates that mercury levels of concern are likely to exist (i.e., with potential to exceed the ACGIH occupational TLV-TWA of  $25 \mu\text{g}/\text{M}^3$ , (ACGIH, 2003).”

If *TAXON* is not one of your regular reads, email Kathy Makos makosk@si.edu or Cathy Hawks cahawks@aol.com to get a copy of the article. The article which has color illustrations and a good number of references, discusses the testing procedure in greater depth, the limitations of the test, and discusses safe work practices, ventilation guidelines, and safety protocols for working with contaminated collections.

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The Metropolitan Museum of Art and Yale University Press have released *Art, Biology, and Conservation: Biodeterioration of Works of Art*, edited by Robert J. Koestler, Victoria H. Koestler, A. Elena Charola, and Fernando E. Nieto-Fernandez. The nicely designed, 565 page, hardback contains the papers from the eponymous conference held at the MET in June of 2002.

There is quite a lot of interesting material in the volume. I had requested a review copy so that I could comment on the health and safety component of the volume. While there is no specific article on health aspects of molds or working with contaminated cultural materials, a few articles do mention the potential health effects to the conservators and users of contaminated cultural materials.

Many of the studies begin with culturing the molds present on the artifact and identifying the species present. Of particular interest were the articles on the Louis Comfort Tiffany drawings in the collection of the MET. Prior to their acquisition in 1967, the collection suffered significant mold damage. The molds were sampled and identified both by classical culturing and by using DNA amplification followed by sequencing.

Once the species of mold present were determined, potential health hazards to the conservators and public were evaluated. Also interesting, the treatment of the stains was informed by the knowledge gleaned from the analysis. Melanin produced by the fungi were treated with lignin-degrading enzymes, which, while promising, were “not completely satisfactory from the conservator’s point of view.”

Mary-Lou Florian's contribution makes the case that fungal analysis is, shall we say, problematic. "The problem is that interpretation of all these analytical results is almost impossible." There are problems with sampling, and a lack of background or baseline references. And, if one is considering health implications, the wide variability of individual's responses to exposure complicate matters even more. Her important conclusion is that "when dealing with any fungal problem, no matter what the size of the infestation, all precautions must be taken regarding personal protection, and stringent aseptic techniques should be used to prevent an increase of airborne fungal structures and cross-contamination of objects."

The papers don't just cover molds, there is an article on bacteria that produce proteases that degrade silk. Submissions are international in source and scope. The book is subdivided into sections on Special Topics, Paper, Textiles, Stone and Mural Paintings, Wood and Archaeological Materials, and Treatment and Prevention. There is a fascinating paper on using copper and zinc strips on outdoor surfaces to function as a source of metallic oxides which inhibit biodeterioration.

My favorite paper is the last, by A.R. Cavaliere, "In defense of the fungi," which reminds us that fungi can be our friends. Mushrooms, antibiotics... there is a long list of fungi that are not actively degrading our cultural and artistic patrimony.

*Art, Biology, and Conservation: Biodeterioration of Works of Art* is available from Yale University Press' website (<http://yalepress.yale.edu/yupbooks/>) for \$65.00. To locate the book on the website, search for "biodeterioration."

In all fairness, if one is to discuss books on mold, one must also mention Mary-Lou Florian's 2002 book *Fungal Facts: Solving Fungal Problems in Heritage Collections*, published by Archetype Publications. The 146 page paperback *Fungal Facts* is available from Archetype ([www.archetype.co.uk](http://www.archetype.co.uk)) for \$40.00. This excellent resource should be on every conservator's book shelf if they ever deal with or consult on mold.

Quoting from the introduction: "This book is organized to allow you to build logically (by reading the chapters sequentially) a knowledge base that will enable you to solve fungal problems related to heritage objects, regardless of the environment or material or how small or large the infestation. Health hazards caused by fungal infestations are a major concern and this issue is addressed where relevant throughout the text..."

And, this just in via MacWorld.com: the journal *Human Reproduction* published an article "Increase in scrotal temperature in laptop computer users" by Y. Sheynkin et al, of SUNY Stony Brook. Summarized best on the Macworld website: "A combination of the heat generated by a laptop and the position of the thighs that is needed to balance the computer leads to higher temperatures around a man's genitals and over time can result in decreased sperm production..." The upshot of this research is that males should use laptops on the desk rather than on their laps.

Lastly - This is my first column of 2005. 2005 is volume 27 in WAAC years. Carolyn Tallent has now been the editor of the *WAAC Newsletter* for over 10 years (since Volume 16 number 3). [Carolyn - Sorry I missed your 10<sup>th</sup> anniversary.] She has been *WAAC Newsletter* editor longer than anyone else.

We tend to recognize the efforts of someone like Carolyn only when they resign their position. Were she to resign today (and for pity's sake, please don't) the next *Newsletter* editor wouldn't exceed her record number of *WAAC Newsletters* until some time in 2016.

*Chris Stavroudis is a conservator in private practice.*

## 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, postpaid:**

\$8.85 (\$6.60 per copy for orders larger than 10 copies)

**Make your check payable to WAAC. Mail your order to:**

Nancy Odegaard

### Loss Compensation Symposium Postprints

A compilation of the talks comprising the Loss Compensation panel from the 1993 meeting at the Marconi Conference Center, enhanced by a detailed introduction into the history of loss compensation theory written by Patricia Leavengood.

**Price, postpaid:**  
\$12.50

**Make your check payable to WAAC. Mail your order to:**

Chris Stavroudis

### Back Issues of WAAC Newsletter

Back numbers of the *Newsletter* are available. Issues **before 1993 cost \$5 per copy**, issues **from 1993 on cost \$10 per copy**. A discount will be given to libraries seeking to obtain back issues to complete a "run".

**Make your check payable to WAAC. Mail your order to:**

Chris Stavroudis

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# Vulpex spirit soap as a cleaning agent for painted surfaces

by Suzanne Ross and Alan Phenix

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## Introduction

Possibly one of the greatest areas of technological progress in paintings conservation during the last 20 years is in the area of cleaning; that is, the removal of unwanted coatings or deposits, whether these are varnishes, overpaints or deposits of dirt/grime, etc. This period has seen, for example, the emergence of viable approaches to non-contact cleaning, such as lasers of different types (uv, vis, ir) and atomic oxygen plasma. But some of the most significant advances, both in terms of materials and of general approach, have come in liquid, chemical methods of cleaning, largely initiated by the pioneering work of Richard Wolbers.

The result has been that the modern paintings conservator has a diverse range of possibilities for formulating cleaning preparations to deal with different kinds of coating or deposit. These might include any of the following: water, organic solvents, surfactants, thickeners, acidity/alkalinity regulators, enzymes, chelating agents, inorganic salts, plus others. New materials inevitably bring new concerns, and much recent research in the cleaning of works of art has been directed towards evaluating the possible effects of these new cleaning agents and formulations on paint materials. Such studies should be seen as contributing to our collective understanding of the risks (and potential benefits) of their use in practice, so that the conservator can make informed decisions about treatment options and is better able to solve difficult cleaning problems.

Undoubtedly approaches to cleaning have become considerably more sophisticated over the last twenty years, but the broad range of possibilities and materials now available can be bewildering to many practitioners who, quite understandably, appreciate the value of familiar, effective, and readily available commercial products for cleaning.

One such product is Vulpex Liquid Soap which was first introduced in around 1970. One of the perceived advantages of this product was that it offered the possibility of a detergent-type cleaning effect in an essentially non-aqueous environment. Despite all the technological advances alluded to above, a good number of conservators in Europe and North America still use Vulpex to deal with a range of cleaning problems, from surface cleaning through to removal of tough varnishes and overpaint. Although still seemingly quite widely used, Vulpex has perhaps missed out on some of the critical evaluation that is appropriate for materials to be used on valuable items of cultural heritage.

Accordingly, in 2003 we undertook a small research project to examine this product in more detail, particularly its possible effects on paints. (Note 1).

## What is Vulpex?

Vulpex is a liquid soap that is described by the manufacturer as “a safe cleaner for practically everything from paper to stone.” It is supplied as a dense concentrate which must be diluted before use either with water or with a hydrocarbon solvent, such as white spirit. It is, therefore, often described

as a “spirit soap” or, more specifically, as potassium methylcyclohexyl oleate. Picreator Enterprises Ltd. of London are the sole manufacturers of Vulpex, which is their registered trade mark. (Note 2).

In concentrated form as supplied, Vulpex is a viscous amber liquid, quite translucent, with a “camphoraceous odour.” It is described as being “*non-acid ... (it) does not damage even vulnerable or delicate surfaces, assuming the soap is used in diluted form, either with water or white spirit.*” According to the material safety data sheet, concentrated Vulpex, as supplied, has a pH of  $13 \pm 1$ , so it is quite strongly alkaline.

## How, and on what, is it used?

### Applications

On the basis of reports in the conservation literature, from the manufacturer and its distributors and from personal communication, it is clear that Vulpex has found use in the cleaning of a wide variety of objects/surfaces including: feathers, costumes, carpet, paper, leather, saddle cloth, bronze statuary, armour, shell, marble, furniture, gilding, and, of course, paintings; though it is perhaps in stone cleaning that Vulpex is used most extensively. (Anon. 1988). Picreator comments that Vulpex has often been used with historic buildings, by UK national conservation bodies such as English Heritage.

It is reported as being particularly effective for cleaning fire damaged items or ones with coatings of soot. (Spafford-Ricci and Graham 2000). It was, for example, apparently, used in the House of Lords, London for cleaning the Peers' staircase murals due to centuries of pollution and obscuring tobacco smoke soot.

Although it is reported rather infrequently in the conservation literature in connection with cleaning paintings or painted surfaces (Jaeschke & Jaeschke 1990), it is clearly a product with which many paintings conservators are familiar, and – at least in the UK – it is common to find a bottle of Vulpex in the chemicals cupboard of many studios. Picreator comments, “*The picture restorers (oil paintings) are the largest class of fine-art users amongst our clientele.*” Not only is it used as a detergent preparation for removing surface dirt, but paintings conservators also use it to remove other, tougher coatings that may not be removable, for example, with organic solvents alone. As Burnstock and Learner note, for this purpose there are “*various alkaline soaps, for example Vulpex, a modified potassium oleate. In water they act as anionic surfactants and are used primarily to aid with surface cleaning but they are also very effective varnish (and paint) removers.*” (Burnstock and Learner 1992).

This observation that Vulpex is capable of a cleaning action that goes beyond simple detergency (for removing surface dirt) is consistent with anecdotal evidence of the applications for which the product is actually used by practising conservators, which are often varnish or overpaint removal. The enhanced activity of the product is not at all surprising from knowledge of its chemical composition. There is little

doubt that Vulpex is a highly effective solublizing agent for hydrophobic substances: as the manufacturers note, “*Vulpex attacks and emulsifies dirt, fats, fatty oils, mineral oils, waxes, and hydrocarbons with great speed and efficiency.*”

### Recommended dilution and clearance

As noted previously, Vulpex is meant to be used in diluted form, mixed either with water or mineral spirits. In general, Picreator recommends the following concentrations, which are largely echoed by distributors:

- for aqueous cleaning, from 1:6 parts by volume (~14%) or 1:7 (12.5%) to 1:10 (9%) dilution with water, and
- for non-aqueous cleaning, 1:10 (~9%) to 1:20 (~5%) in solvent (mineral spirits).

These concentrations, it should be stressed, are the manufacturer’s guidelines only. As far as clearance (removal of any residues) is concerned, manufacturer and suppliers effectively advise using the same solvent as is used as diluent: that is application of white spirit for clearance of non-aqueous solutions and water for clearance of aqueous solutions of Vulpex.

### Some uncertainties about Vulpex

If one considers, in the abstract, the questions that one would want to address in the evaluation of any cleaning agent or preparation for painted works of art, one may raise the following issues:

- does the user have sufficient knowledge of the composition and activity of the ingredients?
- (for non-volatile substances) would there be a risk of active material being left behind on the surface being cleaned? (i.e. how effective are the measures recommended for clearance of non-volatiles?)
- what are the likely effects of the cleaning agent on the original paint material? Specifically, what are the risks of the agent causing:
  - swelling and softening of the paint binder, with consequent risk of pigment loss,
  - leaching of extractable organic paint binder components,
  - permanent chemical alteration of the paint binder or pigment.

In the short time available for our research project we perhaps have only been able to scratch the surface of these issues in relation to Vulpex, but we hope that our findings will provide some initial enlightenment about this quite widely used conservation material. The following account reports a selection of some of the most pertinent observations on the product.

#### (i) The composition and activity of Vulpex

Vulpex is described as a potassium methylcyclohexyl oleate soap. From the chemical point of view, however, this description does not give an entirely clear or self-evident picture of the actual ingredients. Superficially, from the

name alone, one would presume this to be the potassium salt of a fatty acid, but the nature of the acid is slightly obscure. Is it oleic acid or methylcyclohexyl oleic acid? If the latter, not only is the name irregular, but it would imply an oleic acid moiety side-substituted with a methylcyclohexyl group, which would certainly be unusual.

Some clarification does, however, come from the Material Safety Data Sheet supplied by Picreator. In this document the composition of Vulpex is declared as:

Methyl cyclohexanol ~ 30% (CAS no.583-59-5)  
Potassium hydroxide ~ 10% (CAS no. 1310-58-3)  
Water and other components up to 100%.

The identification of the presence of independent methylcyclohexanol should lead us to infer that the oleic acid (‘oleate’ of the name) is not directly associated with the methylcyclohexyl part, in the sense of being part of the same molecule, and that they are in fact independent species, perhaps in the form of oleic acid (as potassium salt) and methylcyclohexanol, which would behave as effectively as a solvent. If present, methylcyclohexanol then would be expected to contribute some solublizing effect on fatty, greasy materials. (Note 3).

However, there is further possible complication to the role of the methylcyclohexanol, as alcohols may react with strong alkalis to give alkoxide ions. This comes about when an alcohol is in the presence of a strong alkali, such as KOH. The alcohol may act as a conjugate acid and donate a proton, through the equilibrium reaction:



Interestingly, in their literature, Picreator state that “*the product contains no free alcohol, which is completely reacted with the alkali.*” Since a substantial amount of potassium hydroxide is present Vulpex, this might imply, then, that an active ingredient may in fact be the methylcyclohexyl alkoxide base  $CH_3C_6H_9O^-$ . (Note 4). The presence of 10% KOH will, in any event, mean that the product is quite strongly alkaline (hence the reported pH value of around 13) which will serve to neutralise and solublise the oleic acid soap, to enhance detergency and emulsification of fatty substances, and perhaps also to saponify fats.

On the basis of the information available, therefore, we might hypothesise that the active ingredients of Vulpex may include any of:

free methylcyclohexanol  
methylcyclohexyl alkoxide base  $CH_3C_6H_9O^-$   
potassium hydroxide  
oleic acid (as potassium salt)  
water  
possibly other, unknown components.

In order to test this hypothesis, at least in part, organic chemical analysis was performed on samples of Vulpex from stock, and some findings are reported here.



Vulpex™ spirit soap as a cleaning agent for painted surfaces, continued

Pure Vulpex	Oleate / stearate	Oleate / palmitate	Palmitoleate / palmitate	Palmitoleate / stearate
	28.23	9.33	1.09	3.29

Table 1. Ratios of fatty acids present in pure Vulpex as determined by GC-MS

**Gas Chromatography - Mass Spectrometry (GC-MS) of Vulpex**

(GC-MS) analysis confirmed the presence of many free fatty acids in the Vulpex. (See Table 1). Oleic acid (C18:1) was the major component and was present in large abundance, but significant proportions of other fatty acids were also detected: palmitoleic acid (C16:1), palmitic acid (C16:0), linoleic acid (C18:2), and stearic acid (C18:0).

There are a number of important observations from these results. Firstly, no species were found that comprised both oleic acid and methylcyclohexyl residues, so supporting the view that these are present in Vulpex as independent agents. Free methylcyclohexanol was not detectable under the conditions and derivatization method used in these GC-MS analyses. The presence in Vulpex of several different fatty acids that are also likely to be present in paint films has implications for residue and leaching studies carried out on this material. It may not be an easy task to distinguish, either in extracts or in residues, fatty acids that derive from the Vulpex from those that originate from the paint.

The various fatty acids and their proportions may also give some clues to the process of manufacture of Vulpex. Comparison of the fatty acid abundances in Vulpex with those in various natural fats and oils showed the closest match to any raw oil was olive oil (Table 2). However, the relatively

	Fatty acid distribution (%)	
	Vulpex	Olive oil
Oleic	76	56-82
Palmitic	8	8-18
Palmitoleic	8	-
Linoleic	6	4-19
Stearic	2	2-5

Table 2. Fatty acid constitution of Vulpex and of Olive oil

high abundance of palmitoleic acid in Vulpex may count against olive oil being used as the primary raw ingredient. It has been noted that “the commercial grades of oleic acid prepared from tallow fatty acids by solvent separation, generally contain 6-9% of palmitoleic acid” (Swern 1979-1982) which may point towards Vulpex being manufactured from commercial grade oleic acid, mixed with KOH, water, and methylcyclohexanol.

**Fourier Transform Infra-red (FTIR) of Vulpex**

FTIR spectroscopy was performed directly on samples of stock Vulpex using a diamond cell attachment to the infra-red spectrometer. The spectrum obtained for Vulpex was compared to published IR spectra for the various isomers of methylcyclohexanol and with the spectrum of a sample of potassium oleate that was prepared in the laboratory. (Note 5). A strong correspondence was found between the spectrum for Vulpex and peaks in the respective spectra of potassium oleate and methylcyclohexanol, with indications of closest similarity with the 3-methylcyclohexanol and, especially, 2-methylcyclohexanol isomers. As with the GC-MS analysis, the results of infrared spectroscopy therefore tended to support the view that Vulpex contained methylcyclohexanol and potassium oleate. From the IR spectra it was not, however, possible to draw any conclusions on the possible dissociation of the methylcyclohexanol to form the alkoxide.

**(ii) Evaluation of effects of Vulpex on oil paints**

A series of test were performed to evaluate the possible effects of Vulpex on oil paints. Since the product is intended to be used in diluted form, either in water or in mineral spirits, these tests were carried out using a standard range of dilutions that correlated with conservators’ usage and manufacturer’s recommendations. The various solutions tested are shown in Table 3, which includes the pH values measured for the aqueous solutions and alkalinity values for the non-aqueous ones. The very low concentration option, 1:100, was included in these tests, since this had been em-

Table 3. Concentrations of test solutions of Vulpex with measured values for alkalinity

Dilution in water (Vulpex : water, parts by volume)	pH of aqueous solutions	Dilution in mineral spirits (Vulpex : min. spirits, parts by volume)	Approx conc. of KOH (Note 6)	
			moles / litre	g / litre
1:7	12.7	1:7	165 x 10 <sup>-3</sup>	9.2
1:10	12.3	1:10	92 x 10 <sup>-3</sup>	5.1
-	-	1:20	44 x 10 <sup>-3</sup>	2.5
1:100	11.3	1:100	11 x 10 <sup>-3</sup>	0.61

ployed in one of the few previous evaluations of the cleaning effect of Vulpex, that of Burnstock and White (1990).

Experiments to evaluate swelling, leaching, and the potential for residues were conducted on various reference oil paint films made from Winsor & Newton Artists' Oil Colour. The group of test paints included: thermally aged burnt umber (BU), thermally aged raw sienna (RS), thermally aged lead white (PbW), and light-aged flake white mixed with yellow ochre (#17). These films, especially the light-aged flake white + yellow ochre (#17), have been used previously in studies of the solvent-induced swelling of paints. (Phenix 2002b, Phenix 2003).

### Swelling of oil paints in Vulpex solutions

The swelling effect of Vulpex solutions on sample oil paint films was measured by the photomicrographic technique we have used and reported previously. (Phenix 2002a, Phenix 2003). A group of fragments from the test films were immersed in the various concentrations of aqueous and non-aqueous solutions of Vulpex noted in Table 3 and observed under a low power stereomicroscope. Digital images of the fragments were captured through the microscope at intervals, from the moment of initial immersion in the liquid up to 120 minutes or longer. The magnitude of swelling of the fragments was determined from changes in their area over time, which was measured by quantitative image analysis.

The mean proportional change in area plotted against time for the group of fragments in an experiment represents a swelling curve that reflects the particular response of the paint to the immersion liquid, as shown in Figures 1 and 2. Figure 1 shows a selection of swelling curves generated for the test paints in aqueous Vulpex solutions, and Figure 2 shows selected swelling curves for Vulpex solutions in mineral spirits (Stoddard Solvent). Some swelling curves obtained in previous studies for the test paints immersed in selected organic solvents are also included for comparison.

A great deal could be said about the swelling effects observed in these experiments, but it is sufficient here just to mention some key points:

- All paint types tested swelled significantly in the various Vulpex solutions. The burnt umber film showed the strongest swelling response of the films tested.
- Prolonged exposure to the Vulpex solutions led to disintegration and solubilisation of the paints.
- Aqueous solutions of Vulpex generally produced a markedly greater magnitude and rate of swelling than comparable mineral spirit solutions.
- Prolonged exposure to the 1:10 aqueous solutions of Vulpex ultimately caused massive (>100%) swelling of the burnt umber paint (the highest values we have recorded for any liquid – compare with the strong-swelling solvent N-methylpyrrolidone, which is also shown).

- Immersion of paint in a more dilute aqueous solution showed a much-reduced rate and general effect of swelling.
- Significantly, if allowed to continue for long periods, the swelling of the paints in all Vulpex solutions did not level off at an equilibrium or maximum value (as usually occurs with solvents), but continued indefinitely, leading to eventual disintegration of the samples.

These experiments indicate that the more concentrated aqueous solutions of Vulpex (approaching 1:10) are capable of inducing quite rapid and substantial swelling of oil films and, therefore, might be expected to involve a high element of risk when used for cleaning oil paintings. Aqueous Vulpex at a dilution of 1:10 was an extremely active agent on these paints. The risk of swelling can be greatly reduced through the use of lower concentration aqueous solutions (for example, 1:100) and, especially, through the use of Vulpex in mineral spirits. At least in the early period of immersion, such solutions generally produce only low-moderate or moderate swelling of the paints. For example, up to 20 minutes immersion, all of the solutions 1:100 aqueous, 1:10 mineral spirits, and 1:100 mineral spirits produce appreciably lower levels of swelling on burnt umber than, say, the solvent xylene, but greater than the effect of pure mineral spirits.

The disintegration of the paint samples that was observed on very prolonged immersion is almost certainly a consequence of the strongly alkaline nature of Vulpex. While it would be improbable that, in the actual cleaning of a painted surface, oil paints would be exposed for such long periods, this observation does emphasise the importance of effective clearance of the cleaning agent in order to avoid long-term chemical alteration of the paint.

### Scanning electron microscopy of paint samples treated with Vulpex

The results of SEM examination of selected paint samples immersed in aqueous and non-aqueous solutions of Vulpex tended to confirm the general picture obtained from the swelling tests regarding the comparative activity of the various solutions. Again, the substantially greater activity of the aqueous solutions was indicated.

### Leaching

In addition to helping characterise the nature of the Vulpex as has been described above, organic chemical analysis by gas chromatography-mass spectrometry was used to examine the potential for Vulpex solutions to extract organic components from the oil paint binder. GC-MS analysis of raw Vulpex had indicated the presence of a large abundance of oleic acid, plus quantities of palmitic, palmitoleic, linoleic, and stearic acid, which – with the exception of palmitoleic acid – may all be present in (young) oil films. In order, then, to assess any potential for leaching it was necessary to measure changes in ratios of the fatty acids present, as those present in pure Vulpex were similar to those present in

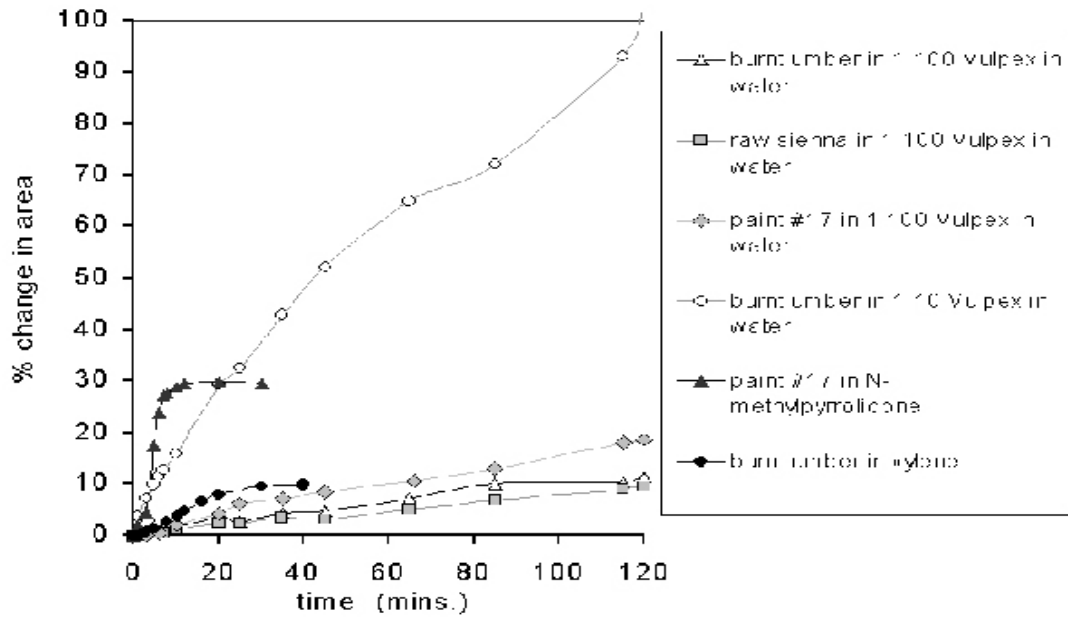


Figure 1. Swelling curves of various paint films in aqueous solutions of Vulpex compared to swelling in two solvents

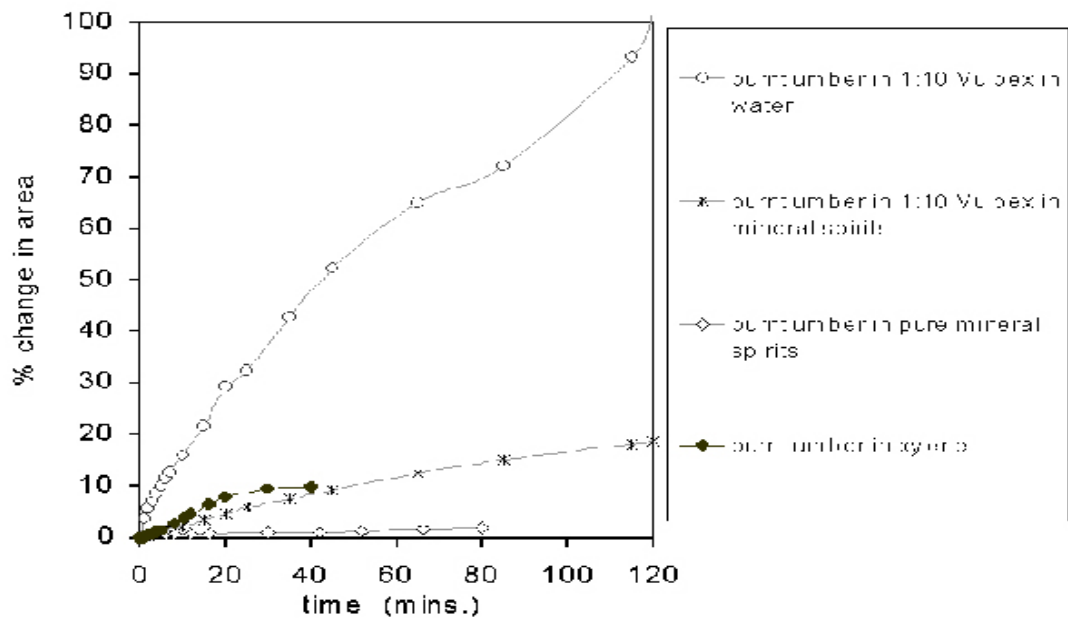


Figure 2. Swelling of burnt umber paint films in Vulpex solutions and comparison with two hydrocarbon solvents

	Oleate/ Stearate	Oleate/ Palmitate	Palmitoleate/ Palmitate	Palmitoleate/ Stearate
Vulpex	28.23	9.33	1.09	3.29
Burnt umber (#BU)	0.08	0.06	–	–
Raw sienna (#RS)	0.01	0.10	–	–

Table 4. Ratios of fatty acids present in pure Vulpex and the various test paint samples

oil paint. Some key fatty acid ratios for Vulpex and the test paint films are shown in Table 4. The presence in Vulpex of palmitoleic acid was useful. Since there was effectively no palmitoleic in the paint, the ratios of other fatty acids to palmitoleic in the liquid should stay relatively constant unless components are extracted or deposited. Indeed, unlike conventional leaching tests with organic solvents, with Vulpex there is the additional potential for fatty acids to be deposited from the cleaning liquid, as well as extracted from the paint, and this possibility is an additional factor that must be taken into consideration

In order to assess whether fatty acids could be extracted from the paint films by Vulpex solutions, or indeed deposited from them, small samples of the test paints were immersed in various solutions and the extracts run through GC-MS to detect changes in ratios. After the specified period of immersion, the supernatant liquid was acidified, extracted, derivatised, and run through GC-MS as described previously. Any change in fatty acid ratios, compared to pure Vulpex, would suggest exchange of fatty acid components between the paint and the surrounding solution. Some selected results for aqueous 1:10 and 1:100 Vulpex solutions are shown in Table 5.

Admittedly, these are quite long periods of exposure to the Vulpex solutions, especially the 21 hour immersion; much

longer than would occur in the actual situation of cleaning a painted surface. However, comparison of the oleate/ stearate and palmitoleate/ stearate ratios of the immersion liquids after treatment indicates that there is potential for exchange of fatty acids between paint and solution. Most notable changes were found in the case of the burnt umber paint film in 1:10 aqueous Vulpex for 1 hour and raw sienna in aqueous Vulpex for 21 hours, the results for both of which suggest an increase in the presence of stearic acid in the liquid (i.e. extraction from the paint) or else depletion of oleic acid (deposition from the solution).

#### Residues

At least some of the components of Vulpex are non-volatile: oleic acid and potassium hydroxide being the most significant. In the practical usage of Vulpex as a cleaning agent for paint, it is important that these components are fully removed from the surface. Some initial tests were conducted to try to evaluate the effectiveness of the recommended clearance processes. This was done using GC-MS to try to identify any accumulation of oleic acid during exposure to Vulpex solutions and subsequent clearance and using XRF to try to indicate any deposition of potassium. Evidence for slight increases in the abundance of oleic acid was found for the burnt umber exposed 1 hour to 1:10 and 1:20 solutions of Vulpex in mineral spirits and to a 1:10 solution in water.

Table 5. Ratios of fatty acids in supernatant liquid after immersion of paint samples

Liquid	ratio Oleate / Stearate	ratio Palmitoleate /Stearate
Pure Vulpex	28.23	3.29
Burnt umber 1:10 Vulpex in water, 1 hour immersion	11	1.05
Raw sienna 1:10 Vulpex in water, 1 hour immersion	19.85	2.19
Lead white 1:10 Vulpex in water, 1 hour immersion	20.83	2.37
Burnt umber 1:100 Vulpex in water, 21 hours immersion	23.33	2.76
Raw sienna 1:100 Vulpex in water, 21 hours immersion	17.82	1.82
Lead white 1:100 Vulpex in water, 21 hours immersion	21.31	2.2

	<u>Potassium ions detected, as percent</u>
pure Vulpex	>5.87%
untreated burnt umber paint film	0.54%
after immersion in 1:100 Vulpex in H <sub>2</sub> O	0.97%
after immersion in 1:10 Vulpex in H <sub>2</sub> O	3.39%
after immersion in 1:20 Vulpex in mineral spirits	4.45%
after immersion in 1:10 Vulpex in mineral spirits	6.19%

Table 6. Results of XRF showing proportional abundance of potassium ions in burnt umber sample paint films before and after immersion in aqueous and non-aqueous formulations

The results for potassium were more telling. XRF was used to analyse the proportion potassium ions on the surface of burnt umber paint samples after immersion for 1 hour in various Vulpex solutions, with subsequent clearance. As recommended, for aqueous solutions water was used to clear the surface by swabbing, and for non-aqueous mineral spirit was used. The proportional abundance of potassium ions detected are shown in Table 6. The proportion of potassium in pure, neat Vulpex was determined by XRF to be >5.87% by mass.

These results indicate that, in all cases – even with clearance – the potassium content of the paint was increased as a consequence of exposure to the cleaning solutions. Whether this would be accompanied also by accumulation of OH-ions remains uncertain at this point. As might be expected, the lower concentration solutions leave smaller amounts of potassium behind. Interestingly, however, it is the solutions in mineral spirits that leave the greatest residues of potassium, perhaps because of the lower solubility of ionic species in a hydrocarbon solvent such as was used for clearance.

The question remains, also, whether these quantities of residual material would have any potential long-term effect on the paint. Any residual alkali, especially, might be expected to have some influence on the pattern of ageing/deterioration of the paint and, possibly on the future sensitivity of paints to cleaning agents such as organic solvents. Some preliminary tests we conducted were inconclusive, but there were sufficient indications to suggest that this would be a useful line for further investigation.

### Summary and Conclusion

It is hoped that the above observations have helped to clarify some issues to do with the use of Vulpex for cleaning painted surfaces. In the first instance, there is some greater certainty about the likely ingredients of the product and their functions. It has been demonstrated also that Vulpex can be quite an active agent on oil paint films, especially if used in water at concentrations approaching 1:10 or greater. Such solutions might potentially have quite a strong swelling and solubilizing effect on oil paint, especially if used for

a somewhat prolonged application, and the conservator is advised to use them with some degree of caution.

The activity of aqueous Vulpex solutions (and the consequent risks for oil paint) can be substantially reduced by lowering the concentration as far as is practicably possible. A solution at 1:100 dilution was considerably less active on oil paint than one at 1:10 dilution. However, it might be expected that the cleaning activity of the more dilute solutions is similarly reduced, and the practical conservator will be trying to find an optimum balance between activity-on-coating and activity-on-paint. Adjusting concentration between these levels may be one way of achieving this balance.

Certainly, the solutions of Vulpex in mineral spirits were considerably less active on oil paints than the corresponding aqueous solutions, in terms of induced swelling. The mineral spirits option, also involving control of concentration/dilution, may provide a more effective way of reducing the activity of the cleaning agent on oil paints. However, clearance of residual Vulpex with mineral spirits does not appear to be as directly effective as it is with water, especially regarding potassium. When using the potassium methylcyclohexyl oleate soap in mineral spirits, therefore, we would recommend that the practitioner rinses the surface as thoroughly as possible to be confident of effective clearance. Given that clearance appears more effective with water, one might raise the question of whether a double clearance process might be most effective when using Vulpex in mineral spirits - first rinse with pure mineral spirits, allow to dry fully, followed by rinse with water (provided the surface can tolerate water) - an approach which has been suggested for other types of surfactant cleaning preparation.

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#### Notes:

1. This article is based on the findings of a research project carried out in 2003 by Suzanne Ross, "An investigation into Vulpex, a potassium methylcyclohexyl oleate soap" as part of her studies towards an MA Conservation of Fine Art (Easel Paintings) at Northumbria University, Newcastle upon Tyne, UK. The authors would like to thank Picreator Enterprises for their co-operation with this work.

2. Picreator Enterprises Ltd., 44 Park View Gardens, Hendon, London NW4 2PN, UK. Tel: + 44 (0)208 202 8792, fax + 44 (0) 208 202 3435. [www.picreator.co.uk](http://www.picreator.co.uk).

3. Methylcyclohexanol is a solvent of intermediate polarity, which might also be expected to have weak surfactant properties on grounds that it has some amphiphilic character, i.e. it contains a hydrophobic, lipophilic element (the hydrocarbon skeleton) and a hydrophilic element (the -OH

group). Teas fractional solubility parameters for methylcyclohexanol are not published, but one would expect them to be similar to those of cyclohexanol which are: fd 50, fp 12, fh 38.

4. A similar situation probably occurs in a chemical reagent occasionally used by conservators for removing stubborn (oil) overpaint, namely "alcoholic caustic." This reagent comprises a solution of sodium or potassium hydroxide mixed with ethanol in which at least some of the ethanol will be present as ethoxide ion,  $\text{CH}_3\text{CH}_2\text{O}^-$ .

5. To create solid potassium oleate, oleic acid and potassium hydroxide (40% potassium hydroxide [Analar] solution) were mixed and the water left was evaporated off.

6. In a non-aqueous system such as this, realistically, pH cannot be measured, so an alternative approach to determining alkalinity was used. The 10 ml aliquots of the various solutions of Vulpex in mineral spirits were titrated with 0.01M HCl, with the end-point of the neutralization being visualized with Methyl Orange indicator. The amounts of KOH in the solutions are here expressed in moles/litre and g/litre of the made-up, diluted Vulpex solutions.

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*As Beatrice followed the instruction, she asked. "How in the world did someone discover that this was safe to eat?"*

*"There is a method to tell compatibility when you encounter something different. It begins with your sense of smell. It is very important that you learn to smell everything, not just plants. Smell the air, the water, animals, even other people. Smells are distinct, and you must not forget how something smells. When you have enough comparisons, you will note that poisonous substances often have very strong, individualized smells. If a plant does not smell of a poison you recognize, then next you should break off a portion and rub it upon your body. Use a tender area such as your eyelid, around the nostrils, or under your arm. Wait to see if any sting or discomfort develops, or if itching, or any raised marks, or blisters appear on your skin. If not, then you may try one taste, but put the taste upon the side of your mouth or under your upper lip and again wait for the body's reaction. If there is none, you may increase the taste to slightly larger sample. Gargle some juice at the back of your throat before spitting it out, again waiting to see how it feels before you swallow any. Once you ingest a sample and swallow, you must wait to see if this causes any stomach pain or if your body rejects the food by forcing it back out of your mouth or running out the bottom. Wait long enough to see if it affects your thinking or walking."*

*from Message from Forever by Marlo Morgan  
a story of Aboriginal life in Australia*

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# Structural Fills: Preservation and Conservation in a Museum of Living Anthropology

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by Tony R. Chavarria

In eras past, the study and interpretation of Native Americans was conducted on an uneven playing field. Genuine interest and respect concerning indigenous cultures notwithstanding, the relationship between these groups was primarily one of authority/subject. Native groups in the American Southwest served as producers of material culture, practitioners of exotic ceremony, labor for excavations, and custodians of museums. I wish to share some thoughts and observations on museum practices and the always-evolving relation to the indigenous tribes of the Southwest. As a non-conservator, I hope to create discussion and dialogue among conservators and between sometimes-disparate groups. Through this, differences of worldview and training can occasionally merge into common goals.

For nearly a century, the Museum of Indian Arts and Culture/ Laboratory of Anthropology (MIAC/LAB) in Santa Fe, New Mexico has been a catalyst in the study and interpretation of Southwestern Peoples. Its mission is to be a place of relevant education, research, and exhibition by utilizing neighboring tribal communities as resources of culture and knowledge to be applied in all areas of museum practice.

Given past relationships there continues to be an initial barrier of mistrust when it comes to museum consultation. Based in the heart of the nineteen pueblos and the Navajo and Apache nations, and an institution whose past is steeped in Southwestern archaeology and anthropology, MIAC/LAB is in an ideal position which it has yet to take full advantage of. To an idealist, a museum can be a prism where the diverse spectrum of knowledge, lifeways, and practice exist from a shared light.

## The Participant/Observer.

I am a curator of ethnology and a member of a Southwestern Pueblo tribe. These identities merge, compliment, and clash. As a museum person it is my role and responsibility to preserve, curate, and educate using the holdings and resources of the institution. As a Kha'pong or person from Santa Clara, I also have responsibilities and obligations most severe. Conflicting worldviews create a dissonance within.

Joyce Begay-Foss, Director of Education at MIAC/LAB has said on varying occasions, "I am an Indian first and a state employee second." This statement expresses the tightrope walked by the native museum/preservation professional. The line passes through minefields of suspicion, internal schisms, family conflict, and religious restriction. Once an anthropologist told me that I could be "the next Alfonso Ortiz." Though Dr. Ortiz is respected and held in some esteem in the anthropological community, the comment was somewhat terrifying to me. What I knew was that Dr. Ortiz became to a degree ostracized and was often criticized within the Pueblos. Acceptance in a profession at the expense of losing a connection to my home seemed too great of a price. Yet, Dr. Ortiz also heralded the evolution of indigenous peoples having roles in academic interpretation and the broader realm of identity, which continues to this day.

As Charles Cambridge, Ph.D. and Dine' stated, "Since European contact, American Indians have socially flowed through multi-tribal and ethnic cultural settings within the reservation, rural, and urban areas. Indians are faced with modernity and the race to meet the standards of material well being. Progress, political reality, materialism, and development set limits upon and individual social identification within a tribal setting. In this light, the exporting of alien cultural values is challenging the traditional concept of tribal cultural boundaries. This tends to redefine the Indian self in new forms of identities that are not within the traditional fixed characteristics of a traditional culture."(Cambridge, *American Indian Identity: The Never Ending Story*).

What I believed I could do, and continue to believe, is that by using my advantageous position as a resource from the museum to the native communities and from the communities to museums, I can try to educate both sides to the other's perspective. And this is a long, difficult, and frustrating process. Being Pueblo and curator is not the best match. In performance reviews I have been taking to task for not displaying enough "leadership," that is assuming projects, giving orders, and taking on a dominant role over subordinates. Exhibiting traditional leadership roles of self-sacrifice, group management, and quiet discussion does not meet American expectations.

## Evolving Ideas

If a museum is to act in consultation with indigenous groups, there must be a shift in how these interactions develop and how success is mapped. As Nancy Mithlo has advocated the use of Indigenous Knowledge Systems in academic thought, these systems can also be applied in a museum. By recognizing the validity of traditional use and care, and the cultural constructs behind these practices, a deeper knowledge and potential for education and collaboration can be achieved. This will become increasingly important in the future as the MIAC/LAB regains the physical custody of human remains and re-associated funerary objects.

Past consultations have largely been in the realm of ceremonial objects. It will take a sensitive and delicate touch to work with affiliated groups. An attitude of, "hey, we have all these bones of yours, come and get 'em" will not create the relationships desired. Repatriation in this case cannot be the goal, meaningful consultation must be. Results must be measured in how comfortable a tribe is in working with the museum. Elements of conservation, preservation, and interpretation are shared. We only need to find a shared level to communicate.

In the past four years I have slowly initiated consultations with several conservative Pueblo groups and have let them proceed at their own pace. I have made the decision to follow a community timeline and not push the issue. In these informal discussions, I have not necessarily acted in a curatorial role but have allowed my self to be naïve. By seeking dialogue rather than repatriation, our interactions turn from being between a museum and tribal authority, to a quiet talk

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## Structural Fills: Preservation and Conservation in a Museum of Living Anthropology, continued

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of common interests. I try to find the appropriate persons to speak to depending on the area of consultation. These people can be artists, government officials, or keepers of religious knowledge, and in some instances, all of these roles can be found in one person.

Federal law (NAGPRA) dictates that consultation and any repatriation can only occur via official tribal representatives. In the Southwest, many Pueblos have strong systems of external governance and internal religious organization, not always in confluence with each other. Yet in many instances, it is only in these internal ceremonial structures that the knowledge is to be found to identify accurately objects and make recommendations for disposition. It requires a determined effort and finesse on the part of the museum staff as they seek genuine keepers of knowledge while working through governments. They must know when to be active and when to sit back and let things proceed of their own accord.

Progress should not be measured in results such as repatriations, but in the ongoing dialogue with tribes. The consultation process can be a method to establish a level of trust and understanding; the prospect is to create ongoing relationships with governments and people. The experience is symbiotic. Over time, tribal representatives will have a deeper insight into the museum, its mission, staff, and collections; and the museum will gain a deeper understanding of the cultures it represents. By open and quiet dialogue, respect and a fragile trust can be built and must always be nurtured. Repatriation is not always a conclusion. Consultation and beneficial relationship is the ongoing hope. The tensions of the past combined with the Pueblo adaptation of secrecy can be a formidable barrier. But it can be overcome by opening up buildings and minds.

### Excavating a New Century

In a museum that exhibits culture, a visitor can learn from what is not exhibited as much as by what is. By an open examination of conservation, issues of cultural property, cultural perspectives of rights-of-knowledge, and preservation, restrictions become opportunities. This establishes a base for consultation to occur beyond the realm of NAGPRA. By reaching out to tribal government officials and traditional religious leaders (whom I consider curators and preservationists) and establishing open dialogue regarding all elements of the museum, we can create symbiotic investments in each other.

Working together on programs, exhibitions, and storage, it is possible to learn about the roles of anthropology, archaeology, arts, and conservation. As many tribes seek revitalization, we can create a value in western models of information gathering, conservation, and preservation. In turn, a museum can explore different modes of interpretation. As the human animals we are, we can adapt to the new environment we have created for ourselves. By seeking an honest appreciation of the cultures which birthed the objects we care for, we fulfill the goals of our visions.

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## Annual Meeting

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*The 2004 WAAC Annual Meeting was held  
October 2 - 4 in Sante Fe, NM  
The papers from the meeting are listed below  
along with summaries prepared by the speakers.*

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### Conservation and the Work of the Light and Space Artists

Mitchell Hearn Bishop

The work of the artists associated with the Light & Space movement, such as Jim Turrell, Bob Irwin, Maria Nordman, and others will be discussed in terms of how these works can be conserved and/or documented and the different approaches that can be taken. Reconciling these with professional ethics and standards will also be considered. An approach embracing the context and values associated with these works will be advocated. In some instances, these values deliberately circumvent materiality in favor of an experiential approach. Reconciling this with preservation and conservation concerns will be the primary subject of this paper.

### Repairs on Ethnographic Objects Using Abalone Veneer

Scott Carrlee

Many objects from the Northwest Coast and the Pacific Islands have abalone inlay or buttons as decorative elements. Often portions are lost or missing, compromising the aesthetics of the design. Replacing the missing elements with abalone veneer is easy, fairly inexpensive, and will never be mistaken for original material (except to the casual viewer). The best way to handle this material for conservation purposes will be discussed and treatment examples will be shown.

### Structural Fills: Preservation and Conservation in a Museum of Living Anthropology

Tony Chavarria

This presentation will examine varying perspectives of museum conservation methods used in the treatment American Indian art and artifacts. Touching on issues of patrimony, preservation, and roles of authority garnered from specific events, this presentation hopes to create discussion and dialogue among conservators and between sometimes-disparate groups. Differences of worldview and training will be shown to merge in common goals.

### Microenvironments for Pyrites and Other Unstable Minerals

Tania Collas

Pyrites ( $\text{FeS}_2$ ), like all sulfides, oxidize when exposed to air. The oxidation reaction produces sulfur dioxide and sulfuric acid, which further the degradation of the specimens, pres-



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## Presentation Summaries

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ent a threat to other specimens, and pose a health risk to collection staff. While various inherent factors determine the degree to which individual specimens are susceptible to deterioration, recent published research has shown that the oxidation of pyrites can be virtually halted if they are kept in an oxygen-free environment at a low relative humidity. Once housed in sealed microenvironments, the specimens can be safely stored with the rest of the mineralogical collection. This presentation describes the step-by-step procedure for creating a simple desiccated, anoxic microenvironment. The basic microenvironment can be modified to house other specimens or artifacts that have specific humidity requirements. A list of supplies and sources will be provided, along with a short bibliography.

### **Archaeological Site and Historic Ruins Protection – Reburial Techniques and Shelters**

Rachel Burch

### **Earthquake Strapping for Collections**

Tania Collas and Vicki Gambill

Southern California may have beautiful scenery and mild weather, but it also has its share of natural disasters. Los Angeles and its environs experience as many as thirty earthquakes in a typical day, although most are very small and go unnoticed (<http://www.trinet.org/trinetdesc.html#hist>). An earthquake of significant magnitude could strike downtown Los Angeles at any time without warning. To mitigate potential earthquake damage to collections, staff from the Natural History Museum has started an earthquake-strapping project in targeted collection areas.

Immobilizing 33 million artifacts and specimens is a tall order, so we are addressing the most vulnerable collections first. Our method of earthquake strapping is not new, but it is low cost, easy to install and use, and adaptable to many different types of collection storage units. This presentation will show the steps involved in making the earthquake straps

and will provide examples of their use in museum collection storage areas.

### **Once Upon a Mattress: Conservation Challenges Presented by the Treatment of a Painting Executed on a Vinyl Mattress.**

Paula De Cristofaro

A painting by Argentinean artist Guillermo Kuitca, entitled *San Juan de la Cruz* (1992), is executed on an unusual support – a king-sized vinyl mattress. The work was damaged at the time it was unpacked. My talk will discuss how the treatment of this uniquely constructed work presented cross-disciplinary conservation challenges. My presentation will follow-up with information gathered directly from the artist regarding his choice of materials and his views on the ageing of his materials

### **An Investigation into the Tradition of Applied Decoration to Spanish Colonial Paintings**

Kristy Jeffcoat and Camilla Van Voren

Traditionally, Spanish Colonial paintings were heavily influenced stylistically and technically by Italian, Flemish, and Spanish paintings, brought to the New World by Spanish colonists. The use of religious art as a teaching tool for the masses began in Europe and traveled to the colonies via this route.

Customs resulting from the veneration of saints often included the incorporation of expensive materials such as gold leaf, inset glass and jewels, and even lace in an effort to portray them as “other-worldly.” These materials most often survive intact in polychrome sculpture of the period, but there is evidence of their use in the embellishment of canvas and panel paintings, though there are fewer extant examples of this.

The Denver Art Museum (DAM) in collaboration with the Western Center for the Conservation of Fine Arts (WCCFA) undertook the conservation treatment of a large eighteenth-century oil on canvas

painting from Ecuador. During the treatment, a pattern of uniform paint losses was discovered around the inner edge of the virgin’s mantle.

Consultation between the curator, the WCCFA conservation team, and the DAM conservation team ended with the conclusion that lace once adorned the painting, much like jewels or fabric that are sometimes seen embellishing polychrome sculptures of the same time and place. This paper will deal with the thought processes and precedents that led to the treatment and restoration.

### **Preliminary Results from a Survey for Residual Arsenic on the North American Ethnographic Collections at the Field Museum** (poster)

Marianne Klaus, J. Plitnikas, R. Norton, T. Almazan, and S. Coleman

As was standard practice in the past, the Field Museum’s Anthropology Department and some of its ethnographic holdings’ original collectors treated artifacts with pesticides to protect them from insects. Some pesticides can leave hazardous residues on artifacts, however, and an examination of Museum records and archives identify early departmental use of arsenic, one of the most toxic of these pesticides.

The presence of residual arsenic is a safety concern for staff and visitors, outgoing loans, and repatriation activities. Because of this and past incomplete record keeping of its use, the Save America’s Treasures (SAT) Project at the Museum is carrying out a preliminary survey for arsenic on the approximately 40,000 artifacts in the North American ethnographic collections. (Archaeological collections are not included in this survey. Additionally, human remains and archival material [i.e. photographs] have also been excluded.)

The goal of this survey is to begin to clarify the extent of contamination within the collections, provide more details on the time period for arsenic usage, and

reveal any patterns for its application by specific collectors, on types of artifacts, and on kinds of materials.

In May 2003, SAT conservators began a survey, sampling 10% of the artifacts by accession. Although both organic and inorganic artifacts were tested, within an accession those with organic components were selected for sampling over wholly inorganic ones if possible. The Merckoquant Arsenic Test was used to determine if arsenic was present. The result of each test was reported in the Anthropology database, in the permanent file of each object, and in an Excel file, which correlated all of the results with accession data (date, source, collector). To date, approximately 60% of the testing has been completed.

Analysis of the data being compiled from the survey reveals that 35.7% of the sampled artifacts have tested positive for arsenic. The highest percentage of positive artifacts comes from accessions dating from the decade 1890 to 1899. A significant drop in the percentage of positive artifacts in the late 1930s-early 1940s suggests a departure from arsenic usage during that time.

At this stage in the survey, it is premature to be able to identify strong links between the application of arsenic and collectors, artifact types, and kinds of materials. The high percentage of positive artifacts found in accessions collected directly by the Museum (i.e. expeditions), however, suggests that staff were consistently applying arsenic to the collections.

Certain accessions collected or donated by the same individual also show high percentages of positive artifacts (>50.0%), which may indicate that some poisoning was carried out before artifacts entered the Museum's collection.

In addition, the highest percentage of positive artifacts identified so far are those made from animal skin and fur. Once this survey is completed, it is the intention of the department to test all of the North American ethnographic artifacts in accessions with results of  $\geq 25\%$  positive for arsenic. Similar preliminary surveys may also be proposed for other ethnographic collections such as African and Pacific.

### **New Mexican Spanish Colonial Painted Hides: Ecclesiastical and Decorative Arts in 16<sup>th</sup> –18<sup>th</sup> Century New Mexico.**

Dale Kronkright

With perhaps 60 surviving examples, the ecclesiastical and decorative painted hides of 18<sup>th</sup> and 19<sup>th</sup>-century Spanish colonial New Mexico provide a unique opportunity to examine one component of the complex and fragile relationship between Spanish colonists and the Native Americans whose lands were invaded.

Dale Kronkright will provide a presentation that offers insights into the materials, techniques, and complex cultural contexts that brought the brain-tanned hides and painting traditions of Pueblo, Comanche, Apache, and Ute people directly into the center of economic, social, and military survival in colonial northern New Spain. The findings are a result of a five-year formal systematic study of New Mexican Spanish colonial hide paintings at the Museum of New Mexico.

Northern New Mexico became the frontier of the Spanish colonial empire in 1598. While New Mexico did not immediately offer the Spanish colonists access to mineral wealth and political status associated with other Spanish colonies, it did offer a resource that promised to establish a foothold economy in northern New Spain.

Native Americans throughout the southwest practiced a system of semi-tanning animal hides using emulsions of brains and organs that produced soft, white durable leathers unlike anything the Spanish had seen. Further, the abundance of large hides that Native Americans obtained from both buffalo and elk provided the Spanish colonists with access to a resource that was in great demand in Zacatecas, Puebla, and Mexico City: hides, leather, and decorative painted leather door, wall, and floor coverings.

These were produced in New Mexico by the hundreds beginning as early as 1627, and the practice continued for nearly 200 years. Today, 40 New Mexican Spanish colonial hide paintings remain in the col-

lections of the Museum of New Mexico, the Spanish Colonial Arts Society, and the Archdiocese of New Mexico.

In 1986, Museum of New Mexico (MNM) conservators Claire Munzenrider and Bettina Raphael, along with former McCrone microscopist Robert L. "Mac" McLaughlin, began a systematic study of two large, pieced painted hide wall murals from northern Spanish colonial New Spain, what is now northern New Mexico. These two paintings are commonly referred to as the *Seggesser Hides*. One depicts a battle between Spanish colonial military forces with their Pueblo Indian workers, the other a French colonial military expedition (ca. 1720 – 1758).

The team also expanded its study to the ecclesiastical Spanish Colonial painted hides in the collection of the Museum of International Folk Art and the Spanish Colonial Arts Society first studied by E. Boyd in 1946.

The study of New Mexican Spanish colonial paintings on hide was given further attention in 1994 when MNM Senior Conservator Dale Kronkright became interested in continuing the effort to document the technical consistencies, variations, materials, techniques, and conservation problems presented by the more than 40 extant examples. Between 1994 and 2000, Mr. Kronkright was assisted by nine conservation interns and advanced fellows, who have all contributed to a more complete understanding of the materials, techniques, and preservation problems of these unique expressions of complex cultural relationships.

### **Maximum Strength Relief: a Case Study for Reattaching Large Heavy Cover Boards in Rare Book Conservation.**

Chela Metzger

This case study illustrates variations and combinations of published board reattachment methods used while treating a 1755 edition of Johnson's *Dictionaries* with detached cover boards.

The two volume Johnson's *Dictionary* is very large with heavy boards. Such books can present unique problems when the boards become detached. If the book is actually read, there is a very real danger that the board attachment will be stressed or broken during use unless the boards are firmly anchored to the textblock. But the strongest board reattachment can involve the most intervention and loss of fragile or degraded binding materials.

For conservators today, there are many published techniques to consider when re-attaching boards to books. Japanese paper hinge repair, joint tacketing, inside cloth hinges, split linen-flanges, and board slotting are some just some of the approaches found in the literature. (See AIC "Board Reattachment Discussion" in *The Book and Paper Group Annual* 20, 2001 p. 63-86.) When working with large heavy books, it may be especially useful to combine various board reattachment techniques and elements of traditional rebinding in order to address the structural and aesthetic problems of the treatment.

The 1755 edition of the Johnson's *Dictionary* was in a tightback, tightjoint 18<sup>th</sup>-century binding covered with thin sheepskin. The spine leather was heavily gold tooled and shattered, with previous losses and repairs in the head and tail areas of the spine. The laced-on cover board attachment had failed, been repaired, and failed again. The objective was to keep the binding intact and make these books available for in-house use by patrons at a small public library with no special collections staff or facilities.

The steps of the treatment involved a variety of both adhesive and mechanical techniques designed to allow for adequate anchoring of the heavy boards to the spine of the textblock with minimal damage to the already weakened leather covering material on the spine. The leather on the spine was faced and lifted mechanically at the head and tail area only.

After cleaning the back of the exposed textblock, linen linings with flanges were attached both adhesively and mechani-

cally to head and tail spine area. Patch linings of western paper and alum-tawed skin were adhered over the linen and sanded to reduce bumps on the spine.

New toned leather with flanges was adhered directly on the lined spine and under the lifted leather covering on the outside of the boards to provide loss compensation, spine lining, and board reattachment. The linen flanges at the head and tail areas were adhered to the inside of the reattached boards. Finally, toned Japanese paper was adhered over the outer joint and inner hinge areas to improve the visual integration of the treated *Dictionaries*, and the lifted original leather from the head and tail areas was re-adhered to the spine.

The books were boxed, with textblock supports incorporated into the box to take pressure off the cover boards when shelved vertically.

#### **Preliminary Report: The Conservation of Helen Lundeberg's Mural *History of Transportation***

Andrea Morse, Rosa Lowinger, and Tracy Lucero

In 1939, under contract from the WPA, Los Angeles based painter Helen Lundeberg was commissioned to create a large-scale wall mural. The piece was sited for a stretch of Florence Avenue in Inglewood, CA that was a heavily trafficked thoroughfare. It was to depict the history of transportation. Lundeberg created a mural composed of a material called petrachrome—a terrazzo-like substance that consists of small bits of stone aggregate in a cementitious matrix. The ensuing 240 foot long mural (there are 60 panels measuring 8 feet high by 4 feet wide) is one of the great WPA works in Southern California.

Since the installation of the mural, Florence Avenue ceased to be a well-trafficked thoroughfare. The mural was hidden by trees, poorly lit at night, and essentially exposed to many types of deterioration, including vandalism. The most apparent damage was graffiti. All of the panels had been tagged repeatedly in the ensu-

ing years—some to the point where the images depicted in petrachrome were no longer visible under layers of paint. On several occasions, the mural was damaged by automobiles. Full panels were lost or partially damaged.

In 2001, Sculpture Conservation Studio was hired by the City of Inglewood, under a grant from the Getty Conservation Institute, to assess the damage to the mural and determine if the piece could be conserved and also removed from its present site and relocated to a more trafficked portion of the City of Inglewood.

A sample panel was removed and test cleaning and repairs were carried out. The findings resulted in funding for the mural conservation project, including relocation to a new site in a park opposite Inglewood High School.

The mural is presently at the mid-point of a 24-month conservation project. This paper will present the preliminary findings of SCS with regard to the mural's condition and discuss the issues that have been dealt with in its removal and conservation. We will also address some of the issues that have arisen in determining the best method for reinstalling the mural on the new site.

#### **The Route 66 Preservation Program**

John Murphey

#### **The Conservation of Four Colonial Altar Screens Located in the Church of Nuestra Senor de Esquipulis, Chimayo NM**

Claire Munzenrider

The presentation will include an overview of a 5-year project that began with a condition survey of 5 large wood constructions (altar screens/ reredos) in 1998 and a subsequent treatment project in 2003-2004. The treatment was a collaborative effort that included members from the church community and the staff of the conservation laboratory of the Museums of New Mexico working side by side to complete successfully this large project.

**Healing the Whole Object: New Age Conservation in Santa Fe**

New Age Conservation Group

It is with great anticipation that the Spirit Guides have pronounced October 2004 as The Time to reveal the secrets of the ages as practiced by a select group of conservators inside the sacred space of the Conservation Pyramid. Yes, it has come the time to reveal the dawning of a new paradigm for conservation, an enlightened New Age for conservators.

Let us now move beyond the physical, even cultural realms of conservation, into the spiritual and emotional qualities of our objects as we gently guide them toward wholeness. Drawing on the wisdom of the Ancients, we find support in the healing modalities of crystals, aura healing, pyramids, the labyrinth, aromatherapy, astrology, and Native American ceremony. It is our deepest intention that we reclaim our inner shamans, leading ALL conservators to soon join us in the Healing Circle of New Age conservation. (It was brilliant, but you had to be there. Ed.)

**A Tale of Two Murals**

Victoria Montana Ryan

This is the cautionary tale of the conservation project of two historically significant murals permanently located in the entry lobby of the Colorado Springs Historic City Auditorium. Construction of the auditorium was completed in 1923. To further enhance the beauty of the much-used public building, and as a local effort in the Works Project Administration (WPA), two local artists were chosen to paint individual murals for the entry.

Archie Musick and Tabor Utley, students of Boardman Robinson and followers of Thomas Hart Benton, were chosen after submitting designs for competition. Their designs were to both compliment the architecture of the building and relate to the citizenry of the town. These two men had unique visions, individual iconography, and style. Equally important

for the conservation of the two works, each man had a distinct approach to materials and methods. While the murals have stood proudly for decades, deterioration was exacerbated by problems that plague many structures, including water ingress and by some problems unique to the locale and use of this Auditorium.

The conservation treatment, which involved the use of Aquazol as complimentary adhesive and inpainting medium, included stabilizing the surface and cleaning the murals.

**Cultural Considerations in Caring for American Indian Objects**

Sherelyn Ogden

American Indian cultural objects, like most objects, deteriorate over time. Standard museum practice suggests several procedures to slow deterioration. As a conservator and consultant, I have occasionally been asked to provide assistance in the care of American Indian items. The methods and techniques I suggested were always based on standard museum practice. But often, it seemed, my suggestions did not meet the cultural needs of the items and were impractical given the situation in which the items existed. I was glad that tribal methods of care were still practiced. I hope American Indians succeeded in caring for items when my suggested methods did not suffice.

Standard museum practice often fails to take into account cultural considerations. Museum professionals tend to apply the same standard procedures to all items regardless of the lifeways of the culture from which they come. They are seen as artifacts, separate from their culture, rather than, in the case of American Indian items, as cultural links between the past, present, and future. This can lead to strained relations between Indian people and non-Indian museum staff and, worse still, to inappropriate treatment and display.

Museum professionals need to be aware from the outset of the differences in approach to cultural items between Indian and non-Indian people. They also need

to remember that their understanding of these differences is influenced by their own cultural background. A general understanding of various cultural practices and points of view and a respect for these on the part of everyone involved is key to the appropriate care of these items.

Cultural differences can be glaringly obvious or so subtle as to be seemingly invisible. The interpretation of the differences sometimes can be as challenging as recognizing them in the first place. This became especially apparent to me when collaborating with Indian people to produce the book *Caring for American Indian Objects*. While consulting with the many Indian people who provided assistance with this book, I came to understand that cultural considerations cannot be separated from preservation. Actually, they are as much a part of preservation as are environmental or treatment considerations.

Of the twenty-one contributors to the book, fourteen are American Indians. This presentation will explore such topics as why items should be preserved and how they should be handled and displayed. It will touch upon issues related to use, gender, vocabulary, respect, sacredness, and continuity. Because I shall be discussing cultures different from mine, I shall use the words of Indian people as much as possible, quoting extensively from Indian contributions to the book.

**A Mounting System for Double-sided Paintings**

Steven Prins

**A Team Approach: Two African Masks from a Conservation and Education Perspective**

Paulette Reading and Heather Nielsen

The Denver Art Museum is opening a new addition in the fall of 2006. Included will be a designated 2300 square foot gallery space for the African collection, its first permanent display in 10 years. The core team working on the installation has developed several unique interpretive strategies and visitor experience goals

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## Presentation Summaries, continued

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that demand challenging and innovative display techniques. As a result this project presents a unique opportunity for conservation and education to work together, ensuring both memorable experiences for visitors and safe preservation of objects. This talk will focus on the conservation, interpretation, and presentation of two African masks.

The new installation offers visitors an opportunity to explore the nature of the creative process, in and out of Africa. Some interpretive components will highlight song, dance, and movement for certain works of art. To simulate movement, an Egungun mask, complete with costume, will be displayed slowly rotating on a turntable. Conservation treatment involved stabilizing fragile components, and creating a mount that both supported the object and also helped to suggest movement.

Designed with the needs of younger audiences in mind, a Yaka mask will be presented in a crawlspace, behind glass and next to a video that will be motion activated. Lifting paint on the mask will be consolidated so that it can withstand any possible vibration resulting from tapping on the platform or casework under which the mask will be displayed. Collaborative planning of this unique gallery has shown that the unconventional presentation of the objects poses both challenges and solutions to the preservation and interpretation of the artifacts.

### **Carved in the Cliffs: Conserving the Cavates and Removing Graffiti at Bandelier National Monument**

Angelyn Bass Rivera and Larry Hu-metewa

Deep in the canyons of the Jemez Mountains in Northern New Mexico are the remains of numerous prehistoric villages carved in the cliffs. These villages, composed of thousands of cavates (cave dwellings) and stone masonry structures, were occupied for about 400 years from the thirteenth to the sixteenth centuries.

Preserved within them are numerous built-in features to produce and store

food and weave fabric, as well as earthen plasters that are not often preserved in standing architecture of the same time period. The cavates are the ancestral homes of modern Pueblo people who live in the Rio Grande Valley. Modern Pueblo people visit the cavates and acknowledge them as an integral part of an ancient landscape to which they are strongly and deeply connected.

The cavates are slowly deteriorating from both environmental and human impact. A multi-phase project is underway at Bandelier National Monument to conserve and maintain the cavates as both constructed and natural heritage, and to develop a formal Conservation Plan to preserve their many values. This paper will present research and fieldwork recently conducted as part of the cavate project, including a discussion of treatments to mitigate modern graffiti that was carved into some of the cavate interior walls and ceilings.

### **The Volvo & Xavier Martinez: A Conservation Tale**

Pam Skiles

This paper presents an unusual treatment of a painting undertaken at the Oakland Museum of California. The painting had been damaged in a hot car when it was left for several hours with its face leaning against the leather seats. Subsequently, a small portion of the paint layer remained stuck to the leather seats. When the client brought the painting for treatment, she also brought the small fragments of paint that had been stuck to the seat, which had been pulled off the seat with clear adhesive tape.

It was decided to first exhaust attempts to return these fragments to the painting, before filling the losses to the paint layer. The crux of the treatment became removing the tape from the reverse of the fragments to allow them to be placed in the lacunae in the correct orientation. Factors that needed consideration included: the solubility of the paint, tape, consolidant, and facing adhesive; the thinness of the fragments; and their orientation on the pieces of tape.

### **Questions in Mimbres Ceramics Analysis: Integrating Conservation with Archaeological Inquiry**

Landis Smith

The Classic Mimbres culture of southwestern New Mexico flourished during the short period 1000-1150 with the prolific production of a unique and aesthetically striking pottery type. Subsistence farmers, the Mimbres lived in villages of the Mimbres and Gila River valleys where they made mostly hemispheric bowls whose rough exteriors contrast dramatically with meticulously prepared interiors.

The interior of these bowls has been described as a kind of white-slipped “canvas” against which were painted stylized animals, humans, anthropomorphic and fantastic figures, as well as geometric designs. Mimbres motifs and figures have been widely incorporated in today’s generic “southwest style” and are seen on everything from real estate signs to dinnerware and contemporary Acoma pottery. While the stylistic aspects of the pottery have been well studied, surprisingly few studies have been done in other areas of ceramics analysis.

As excavated collections are re-documented and re-analyzed, it has become clear that information routinely recorded by conservators could be better integrated with the language and concerns of archaeological ceramics analysis. By integrating conservation condition assessments with the language of ceramics analysis and the larger questions of archaeological inquiry, conservators can potentially offer important documentation for identifying certain trends and making correlations.

Condition assessments along with materials identification and characterization of pastes, slips, and paints; use/wear pattern descriptions; and notation of firing conditions are some of the areas that can all be of great use. A case study will describe the archaeological implications of a conservator’s investigation of paint instability in Mimbres ceramics involving re-firing experiments, use/wear analysis, and paint condition.

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## Presentation Summaries, continued

While much of the organic material at Mimbres archaeological village sites has disintegrated, ceramics offer the most reliable and extensive record of site occupations, social organization, lifeways, trade, and religion. The study of ceramics can also help trace aspects of the development, and even the little understood, and fairly abrupt, collapse of Classic Mimbres culture and ceramic production.

While the high artistry of Mimbres pottery has generated much interest, the demand for these pots has also led to extensive looting of sites and destruction of a great deal of contextual information. Nonetheless, the inter-disciplinary analysis of documented ceramics along with information from scientifically excavated Mimbres sites can offer a wealth of information to which conservators could contribute much.

### **Preservation of the San Esteban del Rey Mission in Acoma Pueblo**

Francisco Uviña

### **Using the Modular Cleaning Program**

Chris Stavroudis

This session will explore working with the Modular Cleaning Program. The Program's aqueous cleaning system will be reviewed and demonstrated, and the Program's new solvent and solvent gel cleaning systems will be presented. The theory behind the MCP will be presented in more detail than in previous presentations and the mechanics of using the FileMaker Pro based database will be elaborated upon.

### **Mexican Mayólica: Investigations into the Puebla Blue-on-White Style**

Mina Thompson

While treating the objects for *Cerámica Y Cultura: The Story of Spanish and Mexican Mayólica*, the Conservation Department had the opportunity to examine closely a variety of ceramic styles. The curator, Robin Farwell Gavin, stated the difficulty in refining dates for Puebla

Blue-on-White ceramics to a time span of less than one hundred and fifty years between 1650 and 1800.

This presentation discusses the origins of Mexican Mayólica and the international influences from trade that distinguish Puebla Blue-on-white ceramic styles, as well as the discovery, during our examination and treatment processes, of underdrawings on two objects.

These underdrawings were first noticed using a stereomicroscope and were then further elucidated through infrared reflectography using the MuSIS 2007 system.

The underdrawings from the Puebla Blue-on-White ceramics differ greatly from traditional ceramic design preparation techniques described in most literature, and the use of infrared reflectography has proven a useful tool in these ceramic examinations.

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## Publication of Interest

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### **Exhibition Guidelines for Photographic Materials** **The Photographic Materials Conservation Catalog.** **Chapter 1**

71 pages including extensive references.  
Available from AIC, \$11.25 per chapter for AIC members,  
\$17.50 non-members.

This thorough exploration of major issues involved in the exhibition of photographic materials will prove to be an essential resource for conservators, curators, collection managers—in short, for anyone involved in exhibiting these materials. Any conservator, involved in institutional exhibition policies, specializing in photographs or not, will find this document a useful summary of information and good practice for dealing with these sensitive objects. Institutions that exhibit photographs but do not have a conservator on staff would also benefit from having this resource available for reference and guidance.

A note on the publication background and format is in order. The *Photographic Materials Conservation Catalog* is published by the Photographic Materials Specialty Group (PMG) of the American Institute for Conservation (AIC). The *Catalog* is modeled on one published by the Book and Paper Speciality Group (BPG), the *Paper Conservation Catalog (PCC)*, which is described on the BPG website: “Published in fascicles, the PCC presents a systematic overview, in outline form, of the body of knowledge with which a paper conservator is expected to be familiar.”

Like most AIC publications, both *Catalogs* are written in a format derived from scientific publications, with numbered sections and a dry, descriptive writing style. As such, it makes an excellent reference as it is easy to find the appropriate section and to identify the information relevant to one’s specific question. Edited and compiled by Stephanie Watkins, paper conservator at the Humanities Research Center at UT Austin, the contributors to “Exhibition Guidelines” are numerous and extremely knowledgeable. This publication truly represents the current state of the field.

#### Major Topics Covered

*Exhibition Guidelines* takes a holistic view of exhibition issues, beginning the publication with “Purpose of Exhibition Guidelines for Photographic Materials” followed by the useful but easily overlooked “Factors to Consider Before Exhibition.” Also useful and otherwise difficult to find in publication is the section “Effects of Exhibition on Photographic Materials,” which is followed by “Standards, Guidelines, and Recommendations” which includes specific and concise information about light levels and duration of exhibits (which are linked, of course), as well as temperature and relative humidity. This information is culled from policies set by major institutions as well as recent scientific research.

Methods of monitoring the exhibit environment are covered in “Equipment and Materials: Considerations” which also includes information about glazing materials, matting and framing, as well as cases, crates, and packing materials. Again, this is an excellent and concise explanation of topics which curators and collections managers often find overwhelmingly complicated. “Exhibition Techniques for Photographic Materials” includes suggestions for methods to reduce light exposure and improve security which are useful for any type of object susceptible to damage from light or security risks, not just photographs.

“Traveling Exhibitions and Loans” continues the interest in issues sometimes overlooked in conservation literature but of daily importance to conservators and others working with collections. The final sections are a list of standards organizations with contact information; a useful glossary of common polymer names used in photograph conservation; and a comprehensive list of reference publications.

*Exhibition Guidelines for Photographic Materials* could be improved with the addition of a few illustrations, for instance diagramming different methods of attaching photographs within mats. Such information, although in some cases available elsewhere, would help to complete what is otherwise an excellent compendium of available information on the topic. It is hoped that this document reaches the eyes and the shelves of every professional involved in the exhibition of photographs, including librarians, archivists, curators, and collection managers as well as conservators.

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## Announcement

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### **World Heritage Forum goes online**

Because of the rapidly growing number of UNESCO World Heritage Sites on five continents, public interest in these strongly protected cultural and natural resources is rising. More and more essays and reports are published, and scientific interest in World Heritage Sites is rapidly growing.

The new website <http://worldheritage-forum.net> is providing the platform to get in contact about this issue. A new weblog on World Heritage Sites (focusing on cities) and a download area with publications is catering to visitors, officials, site managers, scientists, and journalists.

Information and contact:  
Dipl. Geogr. (Univ.) Matthias Ripp,  
Gabelsberger Str. 4, 96050  
Bamberg, Germany,  
[mripp@worldheritage-forum.net](mailto:mripp@worldheritage-forum.net)

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## Articles You May have Missed

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### **“Those Ancient Romans Traveled In Style,”** *Discovery*, Dec. 2, 2004.

Underneath a German bus terminal, archaeologists have found the remains of a 2,000-year-old Roman roadside rest stop that included a chariot service station, gourmet restaurant, and hotel with central heating. The building complex indicates that citizens of the Roman Empire traveled in relative comfort.

### **“Carvings Damaged By Taliban Go Back On Display,”** *WebIndia (ANI)*, Dec. 9, 2004.

A collection of pre-Islamic wooden idols chopped up by the Taliban in 2001 in their drive for a pure Muslim state is back on display in Afghanistan after being restored in a project financed by the Austrian government.

The near life-sized idols, some bearing at least a passing resemblance to the mysterious stone statues of Easter Island, went on display this week at the Kabul Museum, which was badly ravaged in Afghanistan’s civil war and Taliban rule until 2001.

### **“Bringing Twin Artworks Together Again,”** *Minneapolis Star Tribune*, Dec. 9, 2004.

A pair of rare multimillion-dollar paintings by the Russian-born artist Wassily Kandinsky were reunited Wednesday at the Minneapolis Institute of Arts after being separated in a crude artistic surgery more than 70 years ago in Munich, Germany.

The Minneapolis museum has owned one of the colorful abstractions since 1967, but the other, which was originally painted on the back of the Minneapolis image, fell through the cracks of Europe’s war-torn history and was all but forgotten for nearly a century. Preserved by the family of a Kandinsky friend, the second painting recently resurfaced in Munich and is now on loan to the Minneapolis museum.

### **“Expert: Parthenon Marbles Would Have Been Fine in Greece,”** *Discovery*, Dec. 4, 2004.

One of the biggest British arguments for keeping the Parthenon Marbles in London has been that keeping them there has protected them better than if

they had been left in Greece. But a distinguished Cambridge scholar says the sculptures would have been just fine if Lord Elgin had left them in Athens.

Following a sophisticated 11-year conservation program in Athens, the 14 slabs that Lord Elgin did not manage to remove are now showing surprisingly bright original details.

### **“LA City Audit Reveals Missing Art,”** *Los Angeles Daily News*, Dec. 4, 2004.

An audit of artwork owned by city agencies in Los Angeles suggests that hundreds of pieces of art are missing. The city has maintained its own art collection since at least the 1920s. There was a person who was supposed to be the curator of this collection, and he allowed city entities to borrow pieces to decorate city buildings. The problem was that over the years, the artwork that had been checked out was not really followed up on.

### **“Canadian Attacks Koons Sculpture In Berlin,”** *The Globe & Mail (Canada)*, Dec. 2, 2004.

Istvan Kantor, best known as the man who was banned from the National Gallery of Canada in the 1990s for tossing a vial of his own blood on the walls, has turned up in Berlin where he sprayed more of his bodily fluids at a statue of Michael Jackson yesterday.

Also known as Monty Cantsin, Kantor was banned from the Art Gallery of Ontario for vomiting on a painting in 1996. Six months later he repeated the performance at New York’s Museum of Modern Art. At the time he said he was protesting the “oppressively trite and painfully banal” nature of the works in question.

### **“Man vs. Machine, no Faking,”** *Los Angeles Times*, Dec. 4, 2004.

A computer program has been written to help authenticate art work. Its conclusions about who painted *Madonna and Child With Saints* by Perugino are already in dispute.

The technique involves wavelet statistics which offers a mathematical means of detecting patterns within images. The combination of broad patterns as well as almost invisible ones can add up to a particular artist’s unique style.

The technique has been applied to determining whether digital images have been tampered with.

When the program was used to determine who painted the Perugino, the results offered a different perspective from generally accepted art historical views. Art historians are intrigued but remain skeptical.

### **“Italy Returning Obelisk To Ethiopia,”** *Discovery*, Nov. 22, 2004.

Italy is finally sending a stolen obelisk back to Ethiopia. The monument is one of a group of six obelisks erected at Axum when Ethiopia adopted Christianity in the 4th century A.D.

It was stolen by the Italian dictator Benito Mussolini in 1937 and turned into a symbol of fascist power during his short-lived efforts to revive the grandeur of imperial Rome.

Despite signing various agreements that promised to return the 1,700-year-old monument, the Italian government showed no signs of doing so until the obelisk was badly damaged by lightning in a thunderstorm in 2003.

### **“Colorizing The Classics (Like They Were Meant),”** *The Guardian (UK)*, Nov. 22, 2004.

It has long been known that classical statues were painted. Indeed, their creators sometimes chose different kinds of stone for different parts of their statues according to the way they reacted to paint and wax, using types that could be highly polished for the fleshy parts and coarser varieties that would absorb paint for the drapery.

Some art history books have included colored photographs to give an idea of how the statues of the Greeks and Romans would have looked to contemporaries. But *I Colori del Bianco* (The Colours of White) is the first show to confront us with three-dimensional copies created with the help of meticulous scientific investigation.

### **“Afghan Treasures Surface,”** *MSNBC (Reuters)*, Nov. 21, 2004.

Much of the Afghan art missing after the American invasion has been surfacing. The bulk of the newly inventoried items were found in April 2003 when a presidential palace vault in Kabul was



cracked open to reveal a trove of famed, intact Bactrian gold pieces.

But many more artifacts, including giant Buddhist sculptures and ancient ivory statues, have been found in recent months in unmarked boxes and safes stashed for safekeeping during the Soviet-led coup and then during the years of hard-line Taliban rule.

**“Let’s Save Taliesin (We Need It),”** *Boston Globe*, Nov. 21, 2004.

What’s America’s best building? Robert Campbell suggests that Frank Lloyd Wright’s Taliesin ought to be considered. But it’s in bad repair. “Wright is arguably the greatest American artist in any field of the visual arts, and Taliesin is perhaps his masterpiece. If we don’t save it, we have no claim to call ourselves a culture.” The cost of restoration has been estimated at \$60 million.

**“Atlantis Discovered?”** *CNN.com*, Nov. 15, 2004.

An American archaeologist says he’s found the long lost city of Atlantis. Robert Sarmast said sonar scanning of the seabed between east Cyprus and Syria revealed man-made walls, one as long as 3 kilometers (2 miles), and trenches at a depth of 1,500 meters (1,640 yards). “It is a miracle we found these walls as their location, and lengths match exactly the description of the acropolis of Atlantis provided by Plato in his writings.”

**“Biotech In The Service Of Art Preservation,”** *Wired*, Nov. 3, 2004.

Biochemists at the United Nations University in Caracas, Venezuela, are using DNA sampling to identify materials from which artifacts are made and the pests that are feeding on them. They then use biotechnology techniques to create weapons that target the pests specifically, without damaging the artwork.

**“Needed: A Plan To Save Egyptian Tombs From Tourists,”** *The Guardian (UK)*, Nov. 1, 2004.

Tourist traffic is destroying Egypt’s Valley of the Kings. Egypt’s Supreme Council of Antiquities has asked the archaeologists, architects, and engineers of the Theban Mapping Project -

launched 25 years ago simply to make a detailed map of the 62 tombs and temples of the pharaohs and nobles buried more than 3,000 years ago - to complete a plan for the conservation of the valley by the end of 2005.

**“Iraq Explosions Causing Damage To Ancient Site,”** *The Art Newspaper*, Oct. 25, 2004.

Contractors exploding ordinance at an ammo dump in Iraq are causing damage to an important ancient site that is on Unesco’s World Heritage list. Since May, controlled explosions of recovered munitions and mines are conducted at a nearby US military base. These are believed to take place twice daily. This constant seismic activity is damaging the stone arches of the main temple and the outer wall of the ancient city, which could lead to collapses.

**“Degas’s 40-Year Painting,”** *The Guardian (UK)*, Oct. 25, 2004.

X-rays show that Degas worked and reworked a painting over the course of 40 years as his ideas changed. The x-ray shows flurries of reworking, as figures become more and less distinct, the teenagers turn towards one another and then look away, the detailed background landscape is softened into a blur. At one point, Degas scrubbed out their classically handsome faces and replaced them with Parisian urchins.

**“The Earthquake That Rebuilt San Francisco’s Museums,”** *San Francisco Chronicle*, Oct. 21, 2004.

The 1989 Bay Area earthquake was the best thing to happen to the area’s museums in a long time. Many museums were damaged in the quake and had to address plans to rebuild. In the mid-1980s, nothing had happened to any of the museums in 50 years. The scene felt very retarded. Now, all these museums have reinvented themselves with new buildings and new initiatives that make people feel differently.

**“Getty Museum Director Resigns,”** *Los Angeles Times*, Oct. 19, 2004.

Deborah Gribbon has resigned as director of the Getty Museum, citing differences with Getty president Barry

Munitz. “Barry and I have differences on a range of things. They are real differences. I think this is a very important moment for the Getty. Perhaps to a fault, I believe in the good of the institution. I think it’s better to resign than let differences become a distraction.”

**“Overpainted Raphael Discovered In Italy,”** *The Guardian (UK)*, Oct. 15, 2004.

A previously unknown painting by Raphael has been discovered in a church in Umbria, where it had been hidden behind another work. The work’s authenticity has been verified beyond doubt, and London’s National Gallery is considering making a request to display it alongside a similar work it currently has on view.

The painting was only re-examined in the course of a survey of diocesan art works ordered by the present bishop of Gubbio, Pietro Bottaccioli. Restorers discovered the banner had been painted over and decided to remove the later work, millimeter by millimeter, with scalpels.

**“Is A Harvard Rembrandt A Fake?”** *Boston Globe*, Oct. 14, 2004.

In a forthcoming biography of the colorful Hollywood artist, bon vivant, and art forger John Decker, Stephen Jordan includes an account of how Decker and his friend Will Fowler forged a Rembrandt *Bust of Christ* for actor (*Stagecoach*, *Gone With the Wind*, *Lost Horizon*) Thomas Mitchell, an amateur art collector.

“Not long after Mitchell passed away,” Jordan writes, “the painting fetched \$35,000 as an early Rembrandt. Today, the painting hangs at Harvard University’s prestigious Fogg Art Museum -- hailed as a true Rembrandt.”

**“It’s Kind Of Like Watching Paint Dry,”** *The Christian Science Monitor*, Oct. 13, 2004.

The world of art restoration is a mysterious one to even the most frequent of museumgoers, but a new program launched by the Minneapolis Institute of the Arts is giving non-experts a glimpse of the processes involved in caring for great and aging artwork.

On two occasions now, the Institute has performed its magic in a public gallery, so that visitors could witness the techniques in progress and in person - and for those who may have been prevented by time or geography from following the exhibit first-hand... the entire process is archived for public viewing on the web.

**“Are de Boers Famous Fakes Actually Legit?”** *Philadelphia Inquirer (AP)*, Oct. 3, 2004.

In 1992, a group of investors paid a modest sum for the Jelle de Boer art collection, which consisted of works the Dutch collector had judged to be lost creations of van Gogh, Matisse, and Renoir. The sale didn't exactly set the art world ablaze, since de Boer's stack of paintings had long since been judged to be fakes. But now, the current owners are asking experts to reexamine the collection, saying that they believe there may be a few authentic diamonds amidst the mass of imitations.

**“The Real Story Of The Iraq Museum Looting,”** *The Atlantic Monthly*, Nov. 4, 2004.

Everyone knows about the looting of Iraq's museums during last year's war. What almost no one knows is that most of the museums' holdings had been stolen and sold years before — and not by mobs of Iraqis off the street.

The earlier looting was carried out so systematically, and on such a large scale, that it dwarfs the thefts that occurred after the fall of Baghdad. Moreover, the April looting may have occurred in part because it would provide cover for the prior thefts.

**“Nazi Art Exhibit Attacked By Amateur Gymnast,”** *International Herald-Tribune (AP)*, Sept. 24, 2004.

The controversial Flick family art exhibit in Berlin has suffered its first casualty at the hands of an unusually limber protester. Yelling loudly, the 35-year-old woman attacked *Office Baroque*, a cutout section of wall by American artist Gordon Matta-Clark, doing a series of head-over-heels flips before landing on the work in a handstand, punching both her arms through the drywall.

She then ran across the large room, pushing over a section of a spray-

painted truck called *Graffiti Truck*, also by Matta-Clark. There is some question as to whether the woman was actually motivated by anti-Nazi fervor: she is apparently well-known to the Berlin police.

**“Please Look After These Paintings,”** *The New York Times*, Aug. 24, 2004.

A day after the brazen daylight robbery of *The Scream* and a second Expressionist masterpiece by the Norwegian painter Edvard Munch, museum officials begged the robbers on Monday to show greater care for the treasures than they did while wrenching them free from the wall and smashing their frames.

**“Fighting To Keep Stone Henge From The Cars,”** *CNN*, Aug. 18, 2004.

Preservationists are opposing a plan to put a car tunnel under Stone Henge. For them, the proposals prove the government cares more about motorists than preserving the integrity of a centuries old landmark. “Stonehenge has been there 5,000 years and the car was only invented 100 years ago. To cater to something that's been there for such a short time is patently absurd.”

**“Art That Goes on the Blink,”** *Los Angeles Times*, Oct. 4, 2004.

At the Los Angeles County Museum of Art the 6-foot-high grid of 84 white Quasar monitors of *Video Flag Z* that together formed an American flag are dark, victims of the very modernity to which they paid tribute.

Museums all over the world face similar problems. The film world has faced a similar conundrum as reels of celluloid crumble in their canisters. Many museums are investigating options for capturing the artwork in a way that would allow it to be displayed on future technology. Jeff Rothenberg, a senior computer scientist at Rand Corp. in Santa Monica proposed another technique: emulation. The idea is to write a single program that coaxes a current computer to mimic the original computer.

For John Hirx, senior objects conservator at LACMA, the key to resurrecting *Video Flag Z* lies in a manila folder filed in his office. In the folder is a letter signed by Paik giving LACMA the authority to re-create the work using currently manufactured television sets and a new armature with wheels and doors.

“Our goal is to create a new armature and acquire monitors that are aesthetically equivalent to the originals,” Hirx said. “When I get the requisite funding, I will replicate it as closely as I can. That's my goal.”

**“A Move for Art's Sake Stirs Debate on Bequests,”** *Los Angeles Times*, Dec. 14, 2004.

In a case watched for its possible effect on philanthropy, a Pennsylvania judge Monday ruled that art intended to stay put — the treasured, highly idiosyncratic but deficit-ridden Barnes Foundation collection — can be uprooted despite the terms of the donor's bequest.

The decision opens the way for the cloistered collection amassed by pharmaceutical tycoon Albert C. Barnes to be moved from suburban Merion, Pa., and housed in a more conventional, \$100-million showplace in downtown Philadelphia. There, attendance and revenue are expected to soar.

“It's very sad,” said Bruce J. Altshuler, director of New York University's museum studies program. “Museums, as a whole, are becoming less and less ‘different.’”

**“They've Barely Scratched the Surface,”** by Suzanne Muchnic, *Los Angeles Times*, Jan 9 2005.

Under layers of paint and structural work, a 1932 mural by David Alfaro Siqueiros is found. Will it ever see the light of day?

*Street Meeting*, 24-by-19-feet, was painted in 1932 by Mexican artist David Alfaro Siqueiros at a now-defunct art school. It's one of Los Angeles' most important public artworks, and it vanished soon after it was created.

Some artists who assisted Siqueiros have told historians that faulty materials were to blame. Others have said that the painting was obliterated because of objections to the subject matter. As time passed and memories dimmed, the school, established as Chouinard School of Art, evolved into CalArts in Valencia. The old building became the home of one Korean church, followed by another, and the mural was all but forgotten.

Until now. A small group of Siqueiros and Chouinard enthusiasts, bolstered by a team of professional paintings conservators, has discovered that the

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## Jobs

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two-story work is at least partly intact. Its condition is unknown, and large areas may have been lost or damaged.

But preliminary tests indicate that *Street Meeting* did not flake off or wash away, as often reported. It is buried under several layers of paint, on a wall that has been divided by a roof, partly tiled and roughly patched. Indented lines in the upper wall conform to contours of images in the mural. Nail holes and small excavations reveal vivid color.

"This is mind-blowing," said Dave Tourjé, an artist and executive director of Chouinard School of Art, a 2-year-old re-creation of the original institution. He discovered the location of the mural last summer but didn't go public with the news until he had discussed the situation with current owners of the building and engaged conservators who could verify the existence of the painting and assess its condition.

Siqueiros painted three murals in Los Angeles during a six-month sojourn. His only outdoor wall paintings in the United States, they mark a turning point in his development, said Los Angeles-based art historian Shifra M. Goldman, a Latin America specialist who has written extensively about his work.

The Chouinard mural is a seminal piece, Goldman said, representing his search for an expressive style attuned to revolutionary ideals and illuminating his experiments with airbrush painting on cement.

Conservator Leslie Rainer, a veteran of the Olvera Street mural project working with conservators Chris Stavroudis and Aneta Zebala, called it "a great find" for the city and the art community. "If we are able to recover it. We are cautiously optimistic," said Rainer, whose team will prepare a report of their findings and make recommendations.

"We do feel that something is there. We can see traces of the design through paint and plaster layers. We can see incisions that match the historic images. And we do see color, but some of it may have been scraped before the wall was repainted.

"We also see big patches of plaster on that upper exterior wall, and we have heard that large pieces of plaster fell off in an earthquake in the 1990s. But we can't know how much has sheeted off or what condition the mural is in until the whole thing is uncovered."

### **The Los Angeles County Museum of Art**

#### **Director of Conservation**

The Conservation Center of the Los Angeles County Museum of Art is seeking candidates for the position of Director of Conservation. The Center at LACMA was established in 1967 and has grown to encompass five areas of conservation expertise: paintings, textiles, paper, objects, and conservation research, which include our laser research facility. The Center is distinguished by a staff of over 25 professional conservators, scientists, technicians, interns, and fellows. We work with eleven curatorial departments and an encyclopedic collection spanning the history of art.

LACMA is beginning a new building campaign which will rely heavily on the expertise of the Conservation Center staff. The administrative responsibilities of the Director of Conservation include: developing and presenting the annual budget performance evaluations, fund raising, recruiting new staff, Mellon Fellows, and summer interns, advising the Executive Committee making strategic decisions regarding the programming of the museum and working with all departments to direct activities of LACMA.

**Minimum Qualifications:** Master's degree M.A. or M.S. in Conservation or related field; and seven to ten years related experience and training; or an equivalent combination of education and experience. Experience in a supervisory, administrative, and leadership role essential.

**Applications:** This non-civil service position will be available immediately. Salary will be commensurate with experience. A competitive benefits package is provided.

**To apply:** Submit letter of intent, résumé, and the names and telephone numbers of three professional references.

All applications to Los Angeles County Museum should be sent to: Mr. Adam Kaplan (with copies to Victoria Blyth-Hill), Los Angeles County Museum of Art, 5905 Wilshire Boulevard, Los Angeles, CA 90036. Los Angeles County Museum of Art is an Equal Opportunity Employer.

### **Andrew W. Mellon Conservation Fellowship 2005-2006**

The Conservation Center at the Los Angeles County Museum of Art will award a total of three Andrew W. Mellon Fellowships in the Conservation Center. The conservation sections of Paintings, Textiles, Paper, Objects, and Conservation Research each invite applicants. The most qualified applicants to three of the five departments will be selected. The fellowships, which are full time positions for one year, include a stipend of \$25,000 (\$2,083 per month) plus benefits. A \$2,000 travel allowance for study/research will be allocated at the discretion of the section head and the Director of Conservation.

The fellowship will focus on the study, examination, and treatment of works of art in the collections of the Los Angeles County Museum of Art. Successful candidates will gain considerable experience working on works of art in well equipped, production-oriented conservation laboratories. Conservation involvement in rotating permanent collections, special exhibitions, and movement of collections due to construction activities will enhance training opportunities. Research projects are encouraged. Participation in informal lectures, symposia, workshops, and the like, will contribute to the fellowship program as well as the opportunity to visit and collaborate with nearby cultural institutions. The deadline for applications is March 1, 2005 and successful candidates will be notified by April 1, 2005. Fellowship positions will be available beginning Nov. 1, 2005.

**Eligibility:** Candidates will be considered who have graduated from a recognized conservation training program, with the appropriate specializations, or who have similar training or experience. For the Conservation Research section, a Master's degree in chemistry or materials science or equivalent training and experience is required.

Interested candidates must submit the following material: a curriculum vitae; letters of recommendation from three professional references; a short statement of the candidate's interest and intent in applying for the fellowship. The above material should be sent to: *see previous ad.*

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## Jobs, continued

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### Associate Objects Conservator

The Conservation Center of LACMA is seeking a qualified full-time objects conservator. This section of the Conservation Center is responsible for the care, preservation, examination, and treatment of all three-dimensional objects (indoors and outdoors) in the Museum's permanent collection. In addition, duties include active involvement in acquisitions, loans, research, special exhibitions, traveling exhibitions, environmental standards, storage and transit conditions as well as participating in the supervision and training of objects conservation fellows and/or interns.

The incumbent, with the title of Associate Objects Conservator, will report to the head of Objects Conservation and will provide assistance on budgets and other administrative matters.

Minimum requirements: Graduation from a recognized conservation training program or equivalent education and professional experience. Conservation experience should include at least five years in an independent conservation position or preferably in an art museum conservation laboratory. Must possess good written and verbal communication skills, have interest in research, and a demonstrated familiarity with workplace chemical hygiene practices.

Applications: This non-civil service position will be available immediately. Salary will be commensurate with experience. A competitive benefits package is provided. To apply: Submit letter of intent, résumé, and the names and telephone numbers of three professional references to: *see previous ad*.

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### The National Center for Preservation Technology and Training Materials Research Program Associate

The NCPTT and Northwestern State University seek an architecture or objects conservator to develop new technologies that advance historic preservation. Experience in scientific analysis and/or cemetery preservation preferred.

The incumbent will develop or continue research projects under the direction of the NCPTT Materials Research Program Manager. The work will focus on developing new technologies for the preservation of houses of worship and cemeteries. Hands-on work will include developing

and applying treatments to headstones within cemeteries and laboratory testing, evaluation, and monitoring of preservation treatments.

A Master's degree in conservation or preservation is required. Applicants must be U.S. employment eligible. NCPTT ([www.ncptt.nps.gov](http://www.ncptt.nps.gov)) is a research center of the National Park Service located on the campus of Northwestern State University in historic Natchitoches, LA. Natchitoches offers a number of cultural and recreational activities. Starting salary is \$40,454.

Interested applicants should submit cover letter, curriculum vitae, and references to: Mary F. Striegel, NCPTT, 645 College Avenue, Natchitoches, LA 71457. For more information e-mail: [mary\\_striegel@nps.gov](mailto:mary_striegel@nps.gov) or visit our website at <http://www.ncptt.nps.gov>. AA/EOE

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### The Frick Collection Conservator of Objects, Decorative Arts, or Sculpture

The Conservator is responsible for the care, maintenance and preservation of the Frick Collection, the Frick household collections in the original mansion and two additions. The Conservator reports to the Chief Curator and is a member of the Curatorial Department. The Conservator undertakes treatments on objects that fall within his/her area of specialization. The Conservator provides oversight, and is an advocate for, the structure and fabric of the buildings in matters concerning preservation, alterations, or construction projects and helps to ensure the safety of the contents of the buildings during such work. The Conservator is responsible for all preservation, conservation, and technical examination procedures that involve collections or household collections by other members of staff, contract conservators, interns, or volunteers. The Conservator will undertake treatments on works in the collection after consultation with curatorial staff; supervise conservation department staff, interns, and volunteers; and be responsible for matters relating to the preservation and care of works of art on loan as may be appropriate. NOTE: Paintings are conserved at the Metropolitan Museum of Art on outside contract.

The position is to be held by an experienced conservator, ideally with a minimum of ten years museum experience, in the treatment

of objects, decorative arts, or sculpture. Excellent benefits. Expected hire date June 2005. Please send resume and cover letter to: Head of Human Resources, The Frick Collection, 1 East 70<sup>th</sup> Street, NY, NY 10021, Fax 212-861-7347, Email: [jobs@frick.org](mailto:jobs@frick.org). The

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### UCLA/Getty Villa Conservation Laboratory

#### Lab Assistant

The Laboratory will be a central component of the Master's Degree training in the Conservation of Archaeological and Ethnographic Materials.

Description: Provide technical, research, and organizational support for the faculty of the UCLA/Getty Conservation Program. 80% of the work hours will be at the Getty Villa in Malibu. Major duties include research support, laboratory preparation, ordering lab supplies and equipment, initiating service contracts and maintenance of all lab equipment. Supervise students, ensure general lab organization, and provide administrative, editorial, and computer systems support as necessary for laboratory operation.

Qualifications: Ability to perform conservation techniques and research activities: FT-IR analysis, digital microscopy, X-ray fluorescence analysis, microscopic staining techniques, and air abrasive. Knowledge of hazardous waste disposal and radiation safety. Ability to disseminate information when changes in safety procedures occur. Working knowledge of laboratory operation. Ability to work efficiently with superiors, postdocs, graduate students, and other staff. Demonstrated computer experience with both Windows-compatible and Macintosh computers, experience with numerous software applications including Adobe Photoshop, Microsoft Word, Excel, and PowerPoint. Ability to work independently, solve problems, and follow through on assignments with a minimum of supervision.

The applicant should possess at least 3 years of laboratory experience; or 2 years laboratory experience plus 2 years of college-level education, including coursework in the natural or physical sciences. Some experience or qualification in conservation is preferred. For further information contact the Chair of the UCLA/Getty Conservation Program: David A. Scott, A210 Fowler Bldg., Box 951510, Los Angeles, CA 90095-1510.