

**President's Letter**

**Katherine Holbrow**

**Contents**

<b>President's Letter</b>	<b>1</b>
<b>Regional News</b>	<b>2</b>
<b>3D PRINTING IN CONSERVATION</b>	
<b>Introduction and Timeline</b> <i>by Carolyn Tallent</i>	<b>8</b>
<b>Layer by Layer: 3D Printed Art Objects in LACMA's Collections</b> <i>by Charlotte Eng</i>	<b>10</b>
<b>Tea. Earl Grey. Hot. About Materials in 3D Printing</b> <i>by Denise Madsack</i>	<b>14</b>
<b>In Progress: 3D Laser Scanning and Reproduction of Taliesin's Flower in the Crannied Wall</b> <i>by Nicole Grabow</i>	<b>19</b>
<b>3D Printer Technology and Violin Making Tradition: an Outlook on Potential Applications and Open Questions</b> <i>by T. Rovetta, C. Invernizzi, M. Licchelli, M. Zilioli, F. Cacciatori, and M. Malagodi</i>	<b>22</b>
<b>3D Printing at The British Geological Survey</b> <i>by Simon Harris</i>	<b>25</b>
<b>3D Printing a Cheetah: Integrating Photogrammetry, CT Scan Segmentation, 3D Modeling, and 3D Printing with Traditional Model Building</b> <i>by JP Brown</i>	<b>26</b>
<b>When Rapid Prototyping Meets Electrochemistry: The PLECO, An Electrolytic Pencil for the Localised Cleaning of Tarnished Silver &amp; Gilded Silver</b> <i>by Romain Jeanneret, Gaëtan Bussy, Christian Degrigny, Carole Baudin, and Hélène Carrel</i>	<b>37</b>
<b>Glossary of 3D Printing Terms</b>	<b>41</b>
<b>AYMHM</b>	<b>43</b>

Well, Members, my year as WAAC President has ended with the annual meeting, and Cat Coueignoux will be your voice on this page for the next year. Cat is already working hard on next year's meeting. In hindsight, now, I can see that pulling together the actual program is easy. Organizing this event taught me a lot of things, and one was that WAAC members have the remarkable ability to produce excellent presentations at the least warning. Maybe I am biased, but I thought all the talks were amazing: strong, scholarly, and entertaining. Not to mention concise (we all know that's the hardest part)!

There was also a fun San Francisco vibe at the meeting that made it really special. What better place for opening talks encompassing epistemology and decontextualization of mandalas (Jeff Durham), conservation strategies for social practice (Amanda Hunter Johnson), and psychedelic rock posters of the late 1960s (Victoria Binder)? That's a suitably mind-bending line-up for the City of Love, and I felt my inner flower child cheer when Jimi Hendrix blasted and colored lights flashed in the elegant former Reading Room of the old San Francisco Library (now the Asian Art Museum).

The meeting also showcased conservation's great range. What a breadth of experience and creativity I saw presented over the course of the week, in talks, workshops, and tours, and in just plain conversations too. It staggers me sometimes what diverse, interesting people go into conservation. Does the rest of the world realize how special we are? My WAAC fortune cookie said "curators value your opinion," so maybe.

But seriously, we know that one of the best things about the WAAC meeting is that you get to hear all the talks, regardless of specialty. This meeting had something for everyone. There was a great group of treatment talks, including those by Donna Williams and Nick Calderaro on objects, and Shiho Sasaki and Anne Zanikos on paintings. Some talks confronted larger issues in collections care, such as Donald Sale's struggles with the unique situation at the Royal Pavilion in Brighton, Ellen Carlee's and Kelly Bennett's collections move sagas, the Sherring-Moeller survey of 15,000 photographs, and Denise Migdail's explanation of evolving thangka care.

Others bravely tackled knotty scientific problems, such as Chris Stavroudis' battle against shrinking canvas, Vanessa Muros' unusual archaeological finds, and Donald Sale's plastics assessment. LACMA really came through this year, including presentations on new data on LED light sources (Charlotte Eng), the latest efforts to stabilize the Watts Towers (Christina Fisher), and protecting Michael Heiser's Levitated Mass (Mark Gilberg).

The tours, workshop, and the Angels project were resounding successes too. Chris Stavroudis' cleaning workshop was (literally) standing room only. A stellar team descended on the Chinese Historical Society of America and did their magic, while the tours showcased some unique conservation spaces and projects around San Francisco. The banquet was delicious, and some of us even got a ride on the 1906 LeRoy carousel. I thought everything went perfectly!

---

---

## President's letter, continued

---

Interestingly in that regard, both our first and last speaker felt called upon to quote poet Burns, "the best-laid plans of mice and men, gang aft a-gley." Maybe we need to roll out a new fortune cookie: "embrace the a-gley." Or maybe my idea of perfect is another's a-gley? But however you interpret that quotation, please don't conclude there's no point in planning. Plan to come back to California again next year for another great meeting (in a beautiful oceanside setting next time). And thanks for a great, supportive, WAAC-filled year.

Katie

---

## Regional News

*Catherine Coueignoux*  
column editor

---

### Alaska

Recently, the Anchorage Museum conservation department hosted **Tommy Joseph**, who conserved and taught about totem pole conservation, while treating a pole carved by him and donated to the museum. He also helped assess and prepare to conserve another pole for display in the museum. **Sarah Owens** is attending Poles, Posts, and Canoes: The Preservation, Conservation, and Continuation of Native American Monumental Wood Carving, at the Hibulb Cultural Center and Natural History Preserve in Washington. **Monica Shah** has been working with artists and researching objects in the collections to increase access to them and to increase our knowledge about the objects themselves.

**Helen Alten** is settling into her position as the Director of the Sheldon Museum and Cultural Center. Her conservation treatments have revolved around repairing exhibited collections and materials broken by children in the discovery area. A pending NEH grant would pay for an environmental engineer to improve the museum's climate control capabilities. In the meantime, an architect is drawing up plans to improve the facility with the idea of bringing in more outside shows and borrowing collections from large Eastern institutions. Materials analysis will be included in the winter exhibits upgrades.

And, finally, the Sheldon Museum and Cultural Center was accepted into the New Pathways Alaska program – one of ten Alaska arts organizations, only two of which are museums – which is designed to foster innovative community collaborations and preserve the culture of this region. It has, historically, been the rich source of Northwest Coast materials that are now housed in the largest museums of the world.

One project is a new cultural center at Klukwan whose shell is already constructed. The contents will include the famous, and rarely seen, Whale House poles and screen. The Sheldon Museum and Cultural Center currently holds material in trust for the Chilkat tribes. Upon completion of the Klukwan facility, it will no longer be caring for some of this material, and the Sheldon Museum will work to coordinate its collections to complement with the Chilkat ones. This is an exciting period for Northwest Coast tribal materials.

**Ellen Carrlee** and **Scott Carrlee** finished moving the Alaska State Museum collection into a new storage vault, utilizing dozens of museum professionals statewide in a real-life training workshop funded by IMLS and organized using the Incident Command System. Scott continues statewide field services while the museum is dark, and Ellen turns to the preparation of objects for the new exhibits. Pre-program intern **Lisa Imamura** begins her studies at Queen's University this fall.

*Regional Reporter:*  
Ellen Carrlee

---

---

## Volume 36 Number 2 WAAC Newsletter

---

**WAAC Newsletter (ISSN 1052-0066)** is a publication of the nonprofit Western Association for Art Conservation (WAAC). It is published three times per year, in January, May, and September. WAAC Newsletter is printed on alkaline paper. Copyright 2014 Western Association for Art Conservation.

### EDITOR

Carolyn Tallent

### REGIONAL NEWS

Catherine Coueignoux  
vp@waac-us.org

### HEALTH & SAFETY

Chris Stavroudis

### ARTICLES YOU MAY HAVE MISSED

Susanne Friend

**COPY EDITOR** Wendy Partridge

### Photocopying

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

### Note to Authors

Authors of articles and other contributions accepted for publication in WAAC Newsletter assign to WAAC Newsletter the right to publish their work in both print and electronic form and to archive it and make it permanently retrievable electronically. Authors retain copyright, however, and may republish their work in any way they wish.

### Disclaimer

The Western Association for Art Conservation does not recommend particular individuals, businesses, treatments, products, or services. WAAC Newsletter is simply a vehicle for the presentation of information from various sources. Publication of articles or reports in the Newsletter should not be construed as an endorsement of their content by WAAC. Opinions expressed in articles published in the Newsletter are those of the authors.

### Internet

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

### Deadline

Contributions for the January *Newsletter* should be received by the Editor before **August 15, 2014**.