## **CONSERVATION**

## Laura D'Alessandro

We will remember this past year as the Year of the Coffin — the coffin of Ipi-ha-ishutef, to be exact (OIM E12072A-B). From the construction of the coffin itself to the meticulous detail of the painted hieroglyphs, the coffin is one of the highlights of the Museum's collection. Due to the generosity of the American Research Center in Egypt (ARCE), the Oriental Institute received funding to support the conservation and research of this wonderful example of a



Figure 17. The coffin of Ipi-ha-ishutef (OIM E12072B) on its custom-built platform in the Conservation Lab



Figure 18. Simona Cristanetti cleans the exterior of the coffin



Figure 19. Alison Whyte stabilizes pigment on the interior of the coffin lid

First Intermediate Period wood coffin. It has resided in the Conservation Laboratory for most of the past year where it rests on a custom designed and built platform, compliments of Preparator Erik Lindahl, and where it is literally the center of attention (fig. 17). Assistant Conservator Simona Cristanetti is the lead conservator for the project. Her position is supported by the ARCE grant and has allowed her to focus on the coffin and its complex treatment over the past year (fig. 18). Associate Conservator Alison Whyte, who undertook the conservation of the lid with its highly decorated surface and own particular set of challenges, joined Simona on the project (fig. 19). Updates on Simona's and Alison's work can be found on the Oriental Institute's website in the Conservation Laboratory section: http://oi.uchicago.edu/collections/coffin-project.

The scope of the project includes analysis of the various pigments used in the painted decoration. The analysis will be split in two ways. McCrone

Associates will carry out optical microscopy and organic and compositional analysis on the pigments and Conservation staff will carry out x-ray fluorescence (XRF) and scanning electron microscopy (SEM) to examine their elemental composition and structural detail. At the conclusion of the project, Simona and Alison will share details on the analysis and conservation of Ipi-ha-ishutef's coffin on the Oriental Institute's website.

Work proceeds in the lab at a fast pace. The Oriental Institute's handheld x-ray fluorescence spectrometer, affectionately called "The Tracer" (and officially named the Bruker Tracer III-SD), has become an integral part of the Conservation Lab's operation. It has revolutionized the way we work in the lab, allowing us to determine, in a totally non-destructive way, the elemental composition of the objects that come to us for research or treatment. This quick picture provides us with important information on the material that an artifact is made of and can be critical in choosing the best conservation treatment. We received two

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training sessions from Bruker scientists over the course of the year that were extremely useful for our work.

The Tracer also allows broader questions to be answered. We began to study one such research question last year, attempting to identify groups within cuneiform tablets based on their clay composition. Preliminary analysis of the results from the initial test group by Dr. Lee Drake, senior application scientist at Bruker Elemental, determined that two main types of clay were represented. Alison and Simona conducted additional testing of the clay body of one of the largest tablets in the collection. Testing the clay at small intervals across the body of the tablet, a process known as "mapping," allowed Lee to assess the homogeneity of the clay body. It was surprisingly similar across its face, showing only a small drift across the width of the body. The results from these two test groups will direct the next stage of the project over the course of the summer and fall.

The Tracer was also popular with visiting researchers. We hosted three groups of researchers over the course of the year: graduate student Katarina Streit, studying ceramics from the Amuq and Ein el Jarba (Israel); Orlene Mcilfatrick, studying Alishar ceramics; and Mark Altaweel and Chikako Watanabe, using the Tracer to analyze clay sealings and tablets from several sites including Bismaya and Nippur. We all enjoyed working with the researchers and took the opportunity to discuss their research and possible future collaborations.

The ongoing development of the Institute's integrated database continued to be an ongoing responsibility of Alison's over the course of the year. Alison liaised with conservator and computer specialist J. P. Brown, who created the reports that will be used for our basic recording activities, conservation treatments, and loan forms. She also oversaw the ongoing updates to the database as they affected the conservation modules, a time-consuming job.

Alison continued as the lead conservator for our special exhibits. She worked on the conservation and analysis of objects for A Cosmopolitan City and conducted the condition assessment for the objects borrowed from the Walters Art Museum with their courier. She was also kept busy over the course of the year with courier trips to New York to install and deinstall our large loan of objects to the exhibit From Ancient to Modern: Archaeology and Aesthetics at the Institute for the Study of the Ancient World (ISAW). Alison was involved in several additional loans: for the University of Chicago Booth School of Business's Doing Busi-

ness in the Ancient World, for the Metropolitan Museum of Art's exhibit From Assyria to Iberia, and the Art Institute of Chicago's When the Greeks Ruled, as well as their new galleries for Islamic art.

Despite Simona's primary responsibility for Ipi-ha-ishutef's coffin, she was able to continue her conservation treatment of the Persepolis tablets. Her time on this critical project was limited but she managed to treat several dozen tablets this past year. Simona also acted as a courier for the loans to the Metropolitan Museum of Art and ISAW in New York City. Simona was also able to maintain her role as the conservation liaison to the Achemenet project, advising on



Figure 20. Conservators Alison Whyte and Simona Cristanetti inspect coffin work platform in the Prep Shop

handling issues for both the project consultant and photographers. In June, Simona hosted Joe and Jane Barabe and friends for an afternoon with Ipi-ha-ishutef's coffin as a result of Joe's winning bid at this year's gala auction. Emily Teeter joined Simona and Alison in sharing their research and work on the coffin with Joe and Jane's friends.

An unexpected activity that came up suddenly saw the entire lab involved in preparing to return some the Chogha Mish materials to Iran. These clay tablets required careful packing to prepare them to be hand-carried by Oriental Institute Director Gil Stein. We were very pleased to hear that they had made the return trip safely.

It was a busy year for presentations. Alison co-authored and presented "Evolving Attitudes: Past and Present Treatment of Egyptian Collections at the Oriental Institute" at Understanding Egyptian Collections: Innovative Display and Research Projects in Museums in September at the Ashmolean Museum, Oxford, UK.

Alison also co-authored (with Tasha Vorderstrasse) an article called "Opera Diva and Doll Maker: The Dolls and Tableaux of Baronne Sandra Belling" for *News & Notes* 226. In addition, the results of Alison's x-ray fluorescence analysis of objects included in our A Cosmopolitan City special exhibit were published in the catalog for the exhibit.

In November, at the annual conference of the American Schools of Oriental Research (ASOR), in San Diego, Head of Conservation Laura D'Alessandro presented a poster entitled "Recent Research on Blue Pigment from Sargon II's Palace, Khorsabad, Iraq," co-authored with Dr. Steve Heald of the Argonne National Laboratory, Alison, Simona, and Elisabeth Fontan, chief curator (retired) at the Louvre. Laura also co-chaired "Pigments, Paints and Polychromies in the Ancient Near Eastern Context," a workshop on ancient pigments, with Dr. Alexander Nagel, Smithsonian, at the ASOR conference.

Laura and Gil were invited to take part in the colloquium on Building Capacity for Global Protection of Cultural Property, organized by the Cultural Heritage by Archaeology and Military Panel (CHAMP) at the annual conference of the Archaeological Institute of America (AIA), in New Orleans. Gil was unable to attend the conference so Laura presented the talk "The National Museum of Afghanistan and the Oriental Institute: Lessons Learned for Building a Sustainable Partnership" on behalf of the project.

In March, Laura and Simona attended a round-table discussion at the British Museum on the conservation of clay tablets. The attendees were an international mix of curators, conservators, and conservation scientists responsible for the study and preservation of this fragile cultural material. At the conclusion of the two days, the group resolved to work more closely together over the next two to five years to address many of the issues that were raised.

Laura traveled to Kabul twice during the year to meet with project conservators working on the joint National Museum of Afghanistan-Oriental Institute (NMA-OI) cultural heritage project and assess the conservation component of the project. Both trips were spent connecting with our Afghan colleagues and learning about their current concerns.

Laura is currently serving on the Neubauer Collegium Material Matters Advisory Board and the planning committee for the Synchrotron Radiation in Art and Archaeology (SR2A) conference scheduled to take place Chicago in 2016.

I thank Alison and Simona for their contributions to this section and the busy workflow of the lab. The year has once again flown by very quickly. We look forward to seeing what the new year will bring.