

## Kylix Conserved by Undergraduate Apprentice

To an undergraduate studying classical archaeology at the University of Michigan, the Kelsey Museum is a valuable resource. It allows classroom instructors to display real artifacts, not just slides. We get to learn about Roman burial practices by reading the inscriptions from ancient grave markers. Scenes from Greek drinking parties are brought to life for us on the faces of the amphora actually used. In my case, the Museum also helped me determine a career path. In my junior year, after talking to Conservator Suzanne Davis, I became interested in the work done in the Museum's conservation lab. Suzanne found a beautiful red figure kylix (a type of cup) in the collection that was in need of repair and allowed me to do the work necessary.

The kylix was originally broken into about thirty pieces. In a previous reconstruction these fragments had been poorly joined, with adhesive, paint, and gap-filling material obscuring parts of the surface. Using an ultra-violet lamp, we discovered that the adhesive used was shellac, which does not age well and becomes insoluble over time. There was also a clear surface coating of cellulose nitrate, probably applied to make the surface seem glossier. This too can have poor long-term aging properties. I needed to remove the old coating, paint, fill material, and adhesive, disassemble the kylix, and then reassemble the pieces using a new adhesive with better aging properties.

The first step was to remove the coating of cellulose nitrate and any paint on the surface. This was done using cotton swabs dipped in solvent and gently rubbed over the entire surface until it was clean. Once the surface had been cleaned, the kylix was ready to be taken apart. For disassembly, the kylix was placed in a solvent chamber—a small, lidded plastic box in which I placed a large piece of cotton soaked in solvent. After the kylix sat in the chamber for a few days, the evaporating solvent had dissolved enough of the shellac that the pieces simply fell apart. But adhesive remaining on the edges of the pieces still had to be removed before the kylix could be reassembled.

The shellac was very difficult to remove. I first had to soften the rock-hard adhesive by placing poultices of cotton soaked in solvent over each edge of all thirty pieces of the kylix. Then I gently cleaned the edges using a cotton swab, paintbrush, sharpened bamboo stick, or even a scalpel depending on how stubborn the adhesive was. This time-consuming process had to be repeated often, but eventually all the old adhesive was removed and I could begin reassembling the kylix.

All of the edges to be glued back together were sealed with a clear, dilute, acrylic resin, named B-72, so that the new adhesive (concentrated B-72) would not be drawn into the body of the kylix, making it more difficult to reverse in

the future. Then, like a puzzle, I had to figure out which pieces went where. I also had to plan in which order to assemble them to ensure the tightest fit. I had to adjust the fit of a few pieces after they had been glued by softening the adhesive using a heat gun, then shifting the pieces into a better fit. When I was satisfied with the fit of all the pieces, I glued the final fragments together, and the kylix was finally back in one piece.

I am still performing some cosmetic work on the kylix, such as making and painting two plaster fills necessary for structural support, but my work is basically done. During my time in the lab I learned a great deal about the work of a conservator. Attention to detail and patience are two key qualities for a conservator. When working on objects as fragile and rare as some of the objects in the Kelsey's collection, one small mistake can cause irreversible damage. Also I learned how dependent the survival of the Museum's artifacts is on the conservator. Every decision made by a conservator, whether it is to loan an object, to put it on exhibit, or to allow its use in a classroom, must be determined by the object's ability to survive such action. It is remarkable that the beautiful objects in the collection of the Kelsey have survived for us to enjoy. The job of a conservator is to ensure their continued care and survival. I would like to thank the Kelsey Museum, and especially Suzanne Davis, for allowing me to experience this enjoyable and rewarding job.

*Sara Powers, LS&A graduate, 2005*

## Grant Funds New Kits

We are pleased to announce that the Archaeological Institute of America (AIA) has awarded its Ann Arbor Local Society a Local Society Incentive Grant. The award will be announced at the annual meeting (January 2006) of the AIA in Montreal, Canada. The grant funds will be used to create an educational kit that will help teachers explain archaeological field methods to middle and high school students. Classes using the kits will also be encouraged to design small exhibitions in their schools on archaeological excavation, survey, and field conservation. Participating schools will be invited to the Kelsey Museum at the end of 2006 for an event celebrating their exhibitions. The program was the brainchild of Todd Gerring, the Kelsey's Coordinator of Museum Visitor Programs.



Photo: S. Davis

*Sara Powers displays the kylix (KM 2601) during reassembly.*