



## Art Conservation *and the fragments of history*

*When a box filled with more than 100 pieces of colored glass more than 1,000 years old arrived at the Objects Lab at Winterthur, it marked the beginning of a challenging treatment project for four Winterthur-University of Delaware Program in Art Conservation (WUDPAC) Fellows studying there. The project held special interest for one of those Fellows, Sara Levin, who interned last summer at the Athenian Agora excavations lab in Athens and will spend this summer working in ceramics and glass conservation while interning at the Antiquities Authority in Jerusalem.*

The blown glass dates from the 3rd to 10th century A.D. and was excavated at Nippur, an ancient city in what is now Iraq. Since then, it has been in storage at the University of Pennsylvania's Museum of Archaeology and Anthropology in Philadelphia. The treatment goal was to clean and reassemble the shards so that they could be accessed and studied by researchers at the Museum.



The first step was to separate the pieces based on characteristics such as color, weight and weathering patterns. Through this process, the

students determined they had at least four different vessels. Sara took away more than 30 pieces of very thin, light blue glass that appeared to belong to one small bottle with a rimless neck. Her analysis showed a modern adhesive made of cellulose nitrate on a few of the pieces, indicating that someone had tried to put the pieces together since they were excavated. Using x-ray fluorescence spectroscopy, Sara also learned that the weathered glass contained cobalt and copper, which gave the glass its blue color.

Working under the direction of objects conservator Bruno Pouliot, Sara then began to match the fragile pieces together like a delicate, three-dimensional jigsaw puzzle. Using small tools, careful pushes with her fingers and blue painter's tape, she reconstructed the bottle by carefully taping the pieces together from the inside. This was done so as not to disturb the fragile weathering on the outside of the bottle. The final result was a bottle seven inches tall that was missing only a few pieces. Once the bottle was together, Sara just as carefully removed the tape and took it apart. Finally, she reattached the pieces using a long lasting, synthetic adhesive that doesn't yellow over time and is easily reversible. Before returning the bottle to the Museum, Sara placed it in a storage box she had constructed for its housing.



### ARTC Spotlight—July 2012

*The University of Delaware's Art Conservation Department educates and trains professional conservators in the treatment, analysis, documentation, and preventive conservation of individual artifacts and entire collections. Our students are powerful public spokespersons for cultural heritage and its preservation. For more news about our students and other department activities, visit our web site at <http://www.artcons.udel.edu>*

*Top: Fragments of the Nippur vessel prior to assembly. Above: WUDPAC Fellow Sara Levin examining residues from vessel fragments; the vessel's iridescent weathering viewed at 6x magnification. Right: Sara with fellow objects conservation majors Crista Pack and Bartek Dajnowski, each reconstructing a fragmented vessel; a view of the Nippur vessel after Sara's conservation treatment. (Images: Sara Levin and Elena Torok.)*