



## Art Conservation *and sunken treasure*

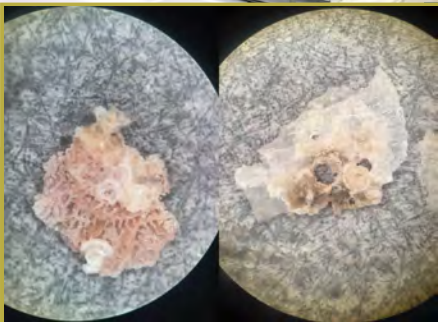
*The blue and white porcelain dish seemed a straightforward treatment project when Winterthur/University of Delaware Program in Art Conservation (WUDPAC) Fellow Ersang Ma received it last fall.*

Its distinctive style and artistic motif told her that it was made in Zhangzhou, China for export between the mid-16th and early 17th centuries, at the end of the Ming Dynasty (1368-1644). Her treatment goal was to prepare it for possible display in the Winterthur Museum. Even so, Ersang found the dish puzzling. She wondered, for example, why the glaze appeared so dull, and why the body seemed more porous than other Chinese porcelains. She also found an unusual damage pattern, including a zig zag crack along one side of the dish, which indicated the ceramic was very brittle.

Unexpectedly, a family member of the now-deceased individual who had donated the dish to Winterthur offered a possible explanation. Ersang learned the dish had been part of a trove of Chinese Zhangzhou porcelain discovered in a shipwreck about 40 miles off the coast of Vietnam's Binh Thuan province in 2001. The Chinese junk is believed to have sunk in 1608, which meant the dish had been immersed in salt water for almost 400 years. While Ersang could not conclusively link the dish to what is known as

the Binh Thuan shipwreck, she learned that accretions from the dish's surface had been identified as aragonite, a form of calcium carbonate formed biologically through marine organisms. Also, shell imprints on the surface were visible under magnification. These indicated the dish had been underwater and could explain its dull appearance and porosity. This information changed Ersang's treatment plans. Because the dish was now more likely to be used for research as an archaeological artifact rather than as a decorative object destined for display, Ersang took a more conservative approach. Instead of inpainting all the cracks and fills on dish's exterior, for example, she planned to leave cracks exposed and repairs uncovered to convey a sense of the passage of time.

The Chinese Zhangzhou dish has been a great treatment project for Ersang, who grew up in China and has grown more interested in her heritage since beginning her conservation studies. An object's major, Ersang also added a minor in paper studies to better prepare her to work with Asian art. After Ersang completes her treatment, the dish will be returned to the museum collection, where it will become part of a new exhibition that will allow more people to learn about its amazing journey to Winterthur.



### ARTC Spotlight—July 2017

*The University of Delaware's Art Conservation Department educates and trains professional conservators who are well versed in the treatment, analysis, documentation, and preventive conservation of individual artifacts and entire collections. For more news about our students and other department activities visit our web site at [www.artcons.udel.edu](http://www.artcons.udel.edu).*

*Top: Winterthur/University of Delaware Program in Art Conservation Fellow Ersang Ma performing selective inpainting on the dish decoration. Above: Shell imprints on the dish surface, visible under magnification, indicating that the dish had been underwater. Right: The damaged dish before treatment, with a dull surface and an unusual crack pattern.*

*(Photos: Amaris Sturm, Ersang Ma.)*

