

# Conservation Research Laboratory



Institutional CV

**ORGANIZATION**: Conservation Research Laboratory (CRL)

Center for Maritime Archaeology and Conservation (CMAC), Texas A&M University

ADDRESS: Conservation Research Laboratory, RELLIS Campus, Airfield Drive, Bryan, Texas, 77807

EMAIL: CRL@tamu.edu

FOUNDED: 1978

FOUNDER: Dr. Donny L. Hamilton

**CURRENT DIRECTOR**: Dr. Christopher M. Dostal

WEBSITE: <a href="https://liberalarts.tamu.edu/nautarch/crl/">https://liberalarts.tamu.edu/nautarch/crl/</a>

**OVERVIEW**: The Conservation Research Laboratory (CRL) is one of the oldest continuously operated conservation laboratories that deals primarily with archaeological material from shipwrecks and other underwater sites. Operating under the auspices of the Center for Maritime Archaeology and Conservation (CMAC), CRL plays an important role in the Nautical Archaeology Program at Texas A&M University (TAMU), and collaborates closely with all of the excavation projects of the TAMU-affiliated Institute of Nautical Archaeology to develop innovative conservation strategies. In fact, the Nautical Archaeology Program's graduate students are deeply involved in the work done at CRL, making it an integral part of each student's academic training in artifact conservation.

CRL manages large, complex archaeological projects year-round and consists of three specialized laboratories. A smaller teaching CRL is used primarily for undergraduate and graduate conservation coursework and is also equipped to conserve small inorganic and organic artifacts. The full-scale CRL is designed to handle all varieties of archaeological materials and often engages in multi-year projects that can include thousands of artifacts, ranging in size from the smallest trade beads and pins to entire ship hulls, artillery, anchors, etc. A third laboratory, the Archaeological Analytical Laboratory, provides detailed analytical data required by archaeologists and is our hub for 3D digitization and computer modeling.

**AREA OF EXPERTISE**: All kinds of artifacts are treated at CRL, from those made of iron, copper, brass, or pewter to those made of wood, leather, glass, or ceramic. While CRL is best known for large-scale conservation of shipwreck materials from projects such as *La Belle* (1686), USS *Westfield* (1864), or CSS *Georgia* (1864), we also conserve small artifact collections and single artifacts for archaeological organizations, museums, and private individuals from both waterlogged and terrestrial contexts.

**EQUIPMENT:** One 40x8-foot-long archaeological freeze dryer, one 22x47-inch-long freeze dryer, industrial digital X-ray radiography, electrolytic reduction tanks with power supplies, pneumatic cleaning tools (air scribes), X-Ray Fluorescence Spectroscopy, Fourier Transform Infrared Spectroscopy, three FARO CMM-arm laser scanners, 3D Printers, Microscopes, ventilated fume hoods, PEG impregnation vats, large storage vats including a 60-foot-long, 12-foot-deep pool with raisable metal platform.

#### **STAFF**:

## Director: Christopher M. Dostal, Ph.D.

Christopher Dostal earned his Ph.D. and M.A. in nautical archaeology from Texas A&M University, and his B.A. in Anthropology from University of Colorado at Boulder. He is the Director of the Center for Maritime Archaeology and Conservation and the Director of the Conservation Research Laboratory at Texas A&M University, in addition to being an assistant professor in the Nautical Archaeology Program. Dr. Dostal teaches graduate courses in archaeological artifact conservation and analytical methods in archaeology and oversees the Conservation Certificate.

## Associate Research Scientist: Peter Fix, Ph.D.

Peter Fix earned his Ph.D. in nautical archaeology from Texas A&M University. He is a specialist in conservation of waterlogged archaeological artifacts and aircraft. Peter was the director of conservation for the 19-year-long conservation of *La Belle* and is currently the head of the conservation and reconstruction of the World Trade Center ship, the 18<sup>th</sup> Century Alexandria, VA ship project, and the conservation head for the gunboat *Philadelphia*.

#### Senior Research Associate: John Hamilton

John Hamilton is the lab manager for the CRL and is the main supervisor for all student workers. He has over twenty years of experience in conservation, and is one of the most experienced metals conservator in the world, having worked on objects ranging in size from nails and pins to 9,000-lb cannon. His duties include maintenance and upkeep of the building.

#### Research Associate: Karen Martindale, M.A.

Karen Martindale received her B.A. in Anthropology from Rice University in 2011 and her M.A. in Anthropology from Texas A&M University in 2015. While attending Texas A&M, she worked at the CRL, where she conserved artifacts from a variety of maritime and terrestrial projects, including *La Belle*, USS *Westfield*, and CSS *Georgia*. After graduating, she worked as a conservator at the *Queen Anne's Revenge* Conservation Laboratory in North Carolina, conserving artifacts from Blackbeard's flagship. She returned to the CRL in 2018 to take on a supervisory role; she also oversees laboratory health and safety.

#### RESEARCH AND TEACHING

Since 1978, CRL has been an integral component of the academic program within the Department of Anthropology and is one of the main research laboratories of the Center for Maritime Archaeology and Conservation. The laboratory focuses on the preservation of archaeological material culture from marine environments, although it possesses the expertise to preserve material from terrestrial sites as well.

One of CRL's principal objectives has been to develop better conservation techniques, and many of the standard procedures used worldwide were developed or improved at CRL. Four US Patents were granted to TAMU and Dow Corning Corporation as a result of research conducted on silicone oil at CRL by Drs. C. Wayne Smith and Donny L. Hamilton, (the patents may be examined on the Internet at http://nautarch.tamu.edu/APRL/patents.htm). Over the past five years, \$2.5 million in conservation projects have been undertaken at CRL for organizations such as the Texas Historical Commission,

National Park Service, U.S. Navy, US Army Corps of Engineers, the Smithsonian Institution and various state, federal and foreign country entities.

## **Conservation Training Certificate**

Through CMAC's faculty and laboratories, interested graduate students have the option to pursue a Conservation Training Certificate. The Conservation Training Certificate affords advanced training in innovative and adaptive technologies for the preservation of waterlogged organic and metallic artifacts. As a prerequisite, trainees must have an in-depth knowledge of mainstream conservation methodologies and practical laboratory experience. The certificate is awarded to anyone who completes 12 credit-hours of courses in archaeological training, chosen from the following (3-credit) courses:

- ANTH 605: Conservation of Archaeological Resources I
- ANTH 606: Conservation of Archaeological Resources II
- ANTH 617: Conservation of Archaeological Resources III Organic Materials
- ANTH 663: Analytical Methods for Archaeology and Conservation
- ANTH 685: Directed Studies\*

## **Student Experience and Impact**

CRL is one of the top employers for students of the Nautical Archaeology Program's Master of Science in Maritime Archaeology and Conservation degree. Graduate student workers are a fixed component of the conservation contracts fulfilled by this lab, which provides them with invaluable hands-on training in the field of conservation. Since its inception in 1978, the CRL has employed hundreds of students and has additionally benefited from dozens of student and community volunteers.

### **CURRENT AND RECENT PROJECTS**

#### 2024-Present Tom Cook Blacksmith Shop and Sartin Hotel

A historical archaeology project by Stantec for the Texas Department of Transportation (TxDOT) involving the conservation of small finds from a historic blacksmith shop operated by freedman Tom Cook in the late 1800s.

 $\frac{https://www.txdot.gov/about/campaigns-outreach/archeology-history/txdot-archeology/bolivar.html}{}$ 

 $\frac{https://www.facebook.com/ConservationLabTAMU/posts/pfbid0K24a5xRUxKQEnyYCoRmUF9gVYNdqHVhMzARhZtgCVVk4SgM8L3VHnqLYDTfzCaK5l}{}$ 

## 2023-Present Savannah River Cannon Project

In continuation of the Army Corps of Engineers Savannah Harbor Expansion Project, 17 cannon from a 200-year-old, unidentified shipwreck site in the Savannah River were sent to the CRL for conservation. Most of the guns were double loaded, requiring conservators to unload the two cannon balls, junk wads, tompions, and paper gunpowder bags.

(https://www.npr.org/2022/04/29/1095643209/savannah-river-british-cannons-1779-discovery)

<sup>\*</sup>Pursuing a conservation-related topic.

### **2018-Present** Ponville Canoe (Louisiana)

The oldest Native American dugout canoe ever found in Louisiana was found nearly 30 feet underground near Bayou Lafourche in Assumption Parish. Discovered by Jamie Ponville, the canoe was identified as a dugout by state archaeologist Chip McGimsey. Radiocarbon dating revealed the tree from which the canoe was dug was cut down sometime between 450 and 620 AD. The canoe was found on lands once occupied by the Chitimacha Tribe ancestors.

(https://www.fox8live.com/2018/09/18/heart-louisiana-ancient-native-american-dugout-canoe/)

## 2017-Present Alamo Cannon Project

On October 2, 2017, the Commissioner of the Texas General Land Office announced that Texas A&M University's Conservation Research Laboratory (CRL) would conserve nine cannon from the Alamo's collection. Of these nine cannon, seven are believed to have been present at the 1836 battle. Some of the cannon in the collection were discovered around the Alamo complex between 1852 and 1908. Some were found buried in the ground, while others were observed to be scattered on the surface. Two of the nine cannon in the Alamo collection, which were not from the Alamo event (but from the same period), will also be conserved.

(https://liberalarts.tamu.edu/nautarch/crl/alamo-cannon-project/)

### 2017-Present Louisiana Caddoan Canoe

In 2017, a Caddo dugout canoe showed up along the bank of the Red River, just north of Shreveport, Louisiana. The canoe, crafted from a single bald cypress tree sometime between 1298 - 1413 CE, measures over 34 feet in length and nearly 3 feet in width. It claims the title of the largest pre-contact watercraft ever found in the southeastern United States, narrowly surpassing a similar canoe excavated nearby in 1983.

The canoe provides tangible evidence of a means for the Caddo people to travel. They traveled within and between villages to visit relatives, exchange food and tools, and engage in other social activities. This canoe also deepens our understanding of the Caddo's profound mastery of watercraft construction and their facilitation of trade networks that spanned time and space.

Following conservation, the canoe will go on display at the Red River National Wildlife Refuge in Bossier City. Learn more about the Caddo Canoe and its journey below, thanks to a collaboration with Regan Crider at the Red River National Wildlife Refuge.

(https://www.crt.state.la.us/cultural-development/archaeology/discover-archaeology/exhibits/caddo-canoe/index)

## 2016-Present Alexandria, Virginia Ship Project

In January of 2016, a mid-18<sup>th</sup>-century ship was discovered during the construction of a new hotel on the waterfront of Alexandria, VA. The ship was documented and disassembled as part of the recovery excavation, and the waterlogged timbers were stored in fresh water vats at a nearby municipal facility until June 2017, when they were carefully packaged and shipped to the Conservation Research Laboratory at Texas A&M University for stabilization. Additional documentation of the timbers will include high-definition laser scanning, modeling, X-ray analysis, and wood degradation analysis before they are conserved using a process involving polyethylene glycol and vacuum freeze drying.

(https://liberalarts.tamu.edu/nautarch/crl/alexandria/)

## 2015-Present World Trade Center Shipwreck

On July 13th, 2010, mechanical excavators working adjacent to the south side of the 1967 World Trade Center foundations uncovered the remains of a watercraft buried 20- to 30-feet below street grade. Archaeologists from the Cultural Management Division of the Consulting firm AKRF, Inc. observed the uncovered timbers and halted the excavators to further assess the discovery. Following that initial assessment, the New York State Historic Preservation Officer determined that the find was "significant" and directed archaeologists to form the appropriated team and excavate the site in a rapid, but controlled, manner. The excavation yielded the remains of an almost completely iron fastened watercraft, approximately 30-foot-long by 15-foot-wide, and thousands of small artifacts, some directly associated with the use of the watercraft, and the rest stemming from post-Colonial to late Federalist periods of New York City.

In April 2011, the timbers from the 2010 excavation were transferred to the Texas A&M University (TAMU), Conservation Research Laboratory (CRL) for long-term wet storage, during which time they were digitally recorded using 3D laser scanning and the ship was reconstructed for study during the length conservation treatment.

The vessel has undergone significant mechanical cleaning, chemical chelation, and has been bulked with polyethylene glycol, and will be completed via freeze drying in the summer of 2024.

(https://liberalarts.tamu.edu/nautarch/crl/wtc/)

#### Ongoing Texas Historical Commission Annual Projects

The CRL has a long-standing, annually renewed contract with the Texas Historical Commission to conserve a set number of high priority items that crop up in a given year. Current projects include the San Jacinto Battleground, the Magoffin Home site, the Varner Hogg site, and Washington-on-the-Brazos.

#### PAST PROJECTS

#### 2018-2022 Castillo de San Marcos NPS Cannon Project

Castillo de San Marcos is a 17th-century Spanish masonry fort located in St. Augustine, Florida. It was built while Florida was still under Spanish rule as a means to protect the town of St. Augustine from the attacks of other colonial powers. Over the centuries, the fort has been occupied by Spanish, English, and the US. The fort was retired in 1900, and in 1924 it was designated a National Monument.

During the first week of June 2018, the CRL began a multi-year project with the National Parks Service to conserve 25 iron cannon from Castillo de San Marcos National Monument and Fort Matanzas National Monument in St. Augustine, Florida. The castiron cannon at the fort range in size from 500 to nearly 8,000 pounds, and date from the 17th to the 19th centuries. Over the centuries, the salty coastal air caused the cannon to corrode.

At the CRL, the conservation of iron artifacts is done with a process called electrolytic reduction (ER). Because of the specialized and potentially dangerous nature of the work, it was agreed that the best practice to conserve these cannon at the CRL in Texas instead of trying to establish an on-site facility at the fort. Over two years, the cannon were shipped to and from the CRL to successfully undergo ER.

(https://liberalarts.tamu.edu/nautarch/crl/castillo/#:~:text=It%20was%20built%20while% 20Florida,was%20designated%20a%20National%20Monument)

## 2015-2022 CSS Georgia Project

The Savannah Harbor Expansion Project by the Corps of Engineers resulted in the discovery of the CSS *Georgia*, a confederate ironclad scuttled by its crew in December 1864. Remains from the ship were salvaged by the Corps and shipped to the CRL for a multi-year conservation program as part of the \$15 million archaeological project. Conserved items ranged from small and rare finds, like sword hilts, leather boots, and glass bottles, to massive items like cannon, including one 2,000-lb Dahlgren cannon.

https://apnews.com/general-news-f58215d7fd9c472089bab4a38f27dd1f

## 2009-2019 USS Westfield Project

In 2009, Westfield's wreck site was relocated in advance of a major dredging operation planned by the U.S. Army Corps of Engineers (USACE). The remains of the vessel consisted of a disarticulated debris field. To prevent the destruction of these remnants, the USACE orchestrated the largest archaeological salvage project that has ever been conducted in Texas waters. Over 8,000 artifacts were successfully recovered, including a 9-inch smoothbore Dahlgren cannon. These artifacts were ultimately sent to Texas A&M University for analysis and conservation. In 2017, the CRL completed work on the *Westfield* exhibit at the Texas City Museum.

https://www.fortworthcwrt.com/the-story-of-the-uss-westfield-conservation-project/

### 2007-2015 Mardi Gras Shipwreck Project

In 2007, a team of archaeologists and researchers mapped, recovered, and analyzed more than 1,000 artifacts from an underwater archaeological site in the Gulf of Mexico. While the artifacts and research indicate the ship sank in the early 1800s, the name of the ship and its crewmembers remain unknown. It's referred to as the Mardi Gras Shipwreck for the pipeline where it was found in 2002 by Okeanos Gas Gathering Company while surveying the floor of the gulf about 35 miles off the coast in 4,000 feet of water.

(https://www.crt.state.la.us/news?NewsID=436)

## 2001-2017 Crates from the *Brother Jonathan* Shipwreck

Two crates from the *Brother Jonathan* shipwreck, owned by the state of California, were shipped to the CRL on October 17, 2000. The crates contained a variety of tools and hardware most likely destined for a general store as each of the artifacts discovered was found in high quantities. The conservation work of each crate resulted in separate master's theses outlining the historical significance of the contents as well as the conservation process of the objects.

(https://liberalarts.tamu.edu/nautarch/reportlist/crl-reports-chest-from-the-brother-jonathan-shipwreck/)

## 2001-2002 Jewett Mine Cars Project

Between 1998 and 2001, strip-mining operations conducted by Northwestern Resources Company at the old Jewett Mine unearthed the remains of several pit cars dating to the early twentieth century. These remains were brought to the CRL to reconstruct the pit cars for display. Because none of the cars was complete and the various components were damaged, the goal was to incorporate the different elements into the reconstruction of three complete cars. The conservation work was undertaken by Mark Feulner and Troy Nowak under the supervision of Donny L. Hamilton.

(https://liberalarts.tamu.edu/nautarch/reportlist/jewett-mine-cars-project/)

## 2000-2015 Red River "Heroine" Steamboat Project

In 1990, a flood exposed the remains of a steamboat in the Oklahoma-Texas bordering Red River. The steamboat, discovered to be the 1832-built *Heroine*, sank on May 6, 1838 on the Texas side of the river after hitting a snag on the way to deliver provisions to a US Army outpost on the Upper Red River. The site was surveyed and excavated by the Oklahoma Historical Society (OHS) and the Institute of Nautical Archaeology (INA) from 2000-2009.

The engine and boilers were salvaged shortly after the ship sank, but the hull and remaining machinery were abandoned where they lay; five years later, a flood buried the

remains. The remaining machinery was recovered as part of the OHS-INA project and sent to the CRL for conservation.

Conserving these large artifacts involved multiple steps. The size (too big for our treatment tanks), complexity (lots of parts connected by nuts and bolts), and presence of the wood arms (wood and iron have very different treatment needs) meant that the flywheels and paddle wheels had to be disassembled to be sure that every piece was conserved properly. Thankfully, since these artifacts were from a freshwater site, the iron was in relatively good condition and was not covered in thick layers of concretion. Once disassembled, treatment progressed smoothly - electrolytic reduction for the iron, and silicone oil for the wood. For many projects, all that would be left is packing and shipping, but for *Heroine*, CRL also worked on a reconstruction of the propulsion system for display at the Oklahoma History Center. Primarily, this involved replacing the remains of the wood arms with new wood, and fitting the wheels into place in the exhibit. Additionally, model maker Glenn Grieco built two scale models of the ship, one showing the parts as they were found, and one showing them reconstructed.

## 1998-2005 Old Hickory Lake Dugout Canoe

In 1998, R. Christopher Goodwin & Associates contracted the CRL to conserve the waterlogged remains of a dugout canoe. The canoe was found by U.S. Army Corps of Engineers personnel at Old Hickory Lake near Nashville, Tennessee. Upon initial recovery, the canoe was allowed to dry out, but it was later placed in a container of water and ethanol for rehydration. Fortunately, no serious warping or collapsing of the wood is apparent, although it is likely that damage to the cellular structure of the wood did occur.

(https://liberalarts.tamu.edu/nautarch/reportlist/old-hickory-lake-dugout-canoe/)

## 1997-2015 La Belle Project

The excavation of *La Belle* by the Texas Historical Commission in 1996-1997 was one of the most innovative and spectacular archaeological excavations of the decade. The THC took an underwater site and made it a land (more or less) excavation by constructing a cofferdam around the ship and pumping out the water. The nearly two million individual artifacts recovered from this fully-loaded barque longue (frigate) belonging to the famous French explorer La Salle included a massive array and quantity of material.

The single largest artifact is the remains of the ship herself. The remains of the ship were disassembled in the field, and some 764 components (keel, keelson, frames, ceiling planking, mast step, pump box, outer planking, etc.) were sent to the CRL for conservation. Conservation was completed in 2015, at which point the timbers were trucked to the Bullock Texas State History Museum and reassembled as part of a working display. The ship and her artifacts are now the centerpiece of the museum.

(https://liberalarts.tamu.edu/nautarch/reportlist/crl-reports-conserving-the-hull-of-the-belle/)

#### 1997-1998 Fairfield Union field cannon

This 3-lb. field cannon was captured by Confederate forces at the Battle of Mansfield, Louisiana, and brought to Texas, where it was buried near Fairfield. When Grover Cleveland was elected president in 1885, the cannon was dug up and fired at the inaugural celebrations. In fact, the cannon gun has played a prominent role in 4th of July celebrations for decades in Fairfield County and was fired until recently. It was brought to CRL, badly in need of repair after decades of being displayed on the courthouse lawn in Fairfield. The bore of the gun had collected an array of pecan shells, cigarette butts, gum, leaves, rain water, and other assorted material. The metal had corroded and its paint was flaking off.

The cannon was treated with ER and sealed with microcrystalline wax and polyurethane.

(https://liberalarts.tamu.edu/nautarch/reportlist/crl-reports-conservation-of-the-fairfield-union-field-cannon/)

## 1997 Ceramic Firepots, Mombasa, Kenya Project

The conservation of ten ceramic firepots from a 17th-century Portuguese ship, the *Santo Antonio de Tanna* that wrecked in Mombasa Harbor, Kenya, in 1697. It was excavated by the Institute of Nautical Archaeology. The firepots from the *Santo Antonio de Tanna* are made of low-fired earthenware and thus are very porous. After they were mechanically cleaned of encrustation, they were, therefore, rinsed extensively to remove any chlorides they may have absorbed from the marine environment. The objects were then thoroughly rinsed using rain water before being put through several baths of deionized water. They were dehydrated and consolidated with a dilute solution of polyvinyl acetate dissolved in acetone. For most earthenware, this impregnating/sealant coat of either polyvinyl acetate or Acryloid B-72 is necessary to keep the friable surfaces from abrading.

 $\label{linear} \begin{tabular}{ll} $$ ($https://liberalarts.tamu.edu/nautarch/reportlist/crl-reports-conservation-of-ceramic-firepots/) \end{tabular}$ 

## 1981-1990 Port Royal, Jamaica Project

The Port Royal Project concentrated for 10 years on the submerged 17th-century remains on Lime Street, near its intersection with Queen and High Streets in the commercial center of the town. At present, eight buildings have been investigated. The work has resulted in a more detailed body of data on the buildings and their in situ artifacts than any previous excavations at Port Royal - on land or on under water.

(https://liberalarts.tamu.edu/nautarch/crl/port-royal-jamaica-project/port-royal-archaeological-excavations/)

#### PUBLIC OUTREACH

#### **Select Publications**

Dostal, C., 2023. X-Ray fluorescence as a method of characterizing inorganic pigment patterns in the work of Julian Onderdonk. *Helivon*, 9(10).

Glenn Grieco, Peter Fix, Carolyn Kennedy, Julia Herbst, Lauren Shultz, Ricardo Borrero, and Christopher Dostal. 2020. Integrating digital and conventional recording techniques for the documentation and reconstruction of an 18th-century wooden ship from Alexandria, VA. *Digital Applications in Archaeology and Cultural Heritage*, Volume 16

Dostal, C. and Yamafune, K., 2018. Photogrammetric texture mapping: A method for increasing the Fidelity of 3D models of cultural heritage materials. *Journal of Archaeological Science: Reports*, 18, pp.430-436.

Dostal, C. 2017. <u>Laser scanning as a methodology for the 3-D digitization of archaeological ship timbers: a case study using the World Trade Center Shipwreck</u> (Doctoral dissertation). Texas A&M University.

Dewolf, H., 2017. The Conservation Research Laboratory and Conservation of Artifacts from the Mardi Gras Shipwreck Project. *Historical Archaeology*, 51, pp.410-417.

Fix, P.D., 2015. <u>Archaeological watercraft: a review and critical analysis of the practice</u>. Texas A&M University.

Smith, C.W., 2003. <u>Archaeological conservation using polymers: practical applications for organic artifact stabilization</u> (Vol. 6). Texas A&M University Press.

Smith, C.W. and Grider, S., 2001. Views and Commentaries: The Emergency Conservation of Waterlogged Bibles from the Memorabilia Assemblage Following the Collapse of the Texas A&M University Bonfire. *International Journal of Historical Archaeology*, 5, pp.309-316.

Hamilton, D. 1999. Methods of Conserving Archaeological Materials from Underwater Sites. Texas A&M University.

Dewolf, H.C., 1998. <u>Chinese porcelain and seventeenth-century Port Royal, Jamaica</u>. Texas A&M University.

#### Conferences Symposia Organized (2019-2024)

Dostal, C. 2024. *The Conservation of Materials from Underwater Sites*. Society for Historical Archaeology. Oakland, CA.

Dostal, C. 2023. *Ex-Situ Conservation*. International Symposium for the Conservation of Underwater Archaeology. Formentera, Spain.

Nayling, N, Dostal, C, and Auer, J. 2023. *Digital Approaches in Nautical Archaeology*. Society for Historical Archaeology. Lisbon, Portugal.

Dostal, C. 2022. *Current Research in the Conservation Research Laboratory at Texas A&M University*. Society for Historical Archaeology. Philadelphia, PA.

Dostal, C. 2020. *Current Research in the Conservation Research Laboratory at Texas A&M University.* Society for Historical Archaeology. Boston, MA.

### Lectures & Public Talks (2019-2024)

Dostal, C. 2022. A City Built on Ships: Reconstructing The 18th-Century Ships Excavated from The Waterfront of Alexandria, VA. Lecture for Alexandria Archaeology, Alexandria, VA. October 26<sup>th</sup>, 2022.

Dostal, C. 2022. *The Conservation of Wood Vessels at the Conservation Research Laboratory at Texas A&M University.* Lecture for the International Expert's Meeting on the Extraction and Conservation of the Phoenician Wreck *Mazarron 2*. Barcelona, Spain. May 6<sup>th</sup>, 2022.

Dostal, C. 2022. *Conservation of Waterlogged Archaeological Material*. Invited lecture for the Conservation and Restoration Activity Committee, Universiteit van Amsterdam. February of 2022.

Kennedy, C. 2022. *Conservation of Waterlogged Materials*. Invited lecture for Capital Park Museum (Baton Rouge, LA) Mardi Gras Shipwreck anniversary event. Delivered remotely, January 20<sup>th</sup>, 2022.

Dostal, C. 2021. An Overview of Conservation of Archaeological Materials from Underwater Sites. Lecture for Intro Conservación de Bienes Culturales y Arqueológicos, for Centro Universitario Regional del Este - UdelaR. Maldonado, Uruguay. Invited by Dr. Rodrigo de Oliveira Torres, for Centro de Investigaciones del Patrimonio Costero (CIPAC), del Centro Universitário Regional del Este (CURE), Uruguay. November 19<sup>th</sup>, 2021

Dostal, C. 2021. *Current Projects at the Conservation Research Laboratory*. Lecture for the Institute of Nautical Archaeology Board Meeting, Williamsburg VA. October 15<sup>th</sup>, 2021.

Dostal, C. 2021. A City Built on Ships: Reconstructing The 18th-Century Ships Excavated from The Waterfront of Alexandria, VA. Lecture for the Brazoria County Historical Museum. October 7<sup>th</sup>, 2021.

Dostal, C. 2021. Between Science, History, and Art: Reconstructing the 18<sup>th</sup>-Cenutry Ships Excavated from the Waterfront of Alexandria, VA. Lecture for Cultural Heritage 360 Arts & Humanities Workshop, Durham University. April 29<sup>th</sup>, 2021.

Dostal, C. 2021. *Reconstructing the 18<sup>th</sup>-Century World Trade Center Ship*. Lecture for the Chicago Society of the Archaeological Institute of America. April 9<sup>th</sup>, 2021.

Dostal, C. 2021. A City Built on Ships: Reconstructing The 18th-Century Ships Excavated from The Waterfront of Alexandria, VA. Lecture for the Toledo Society of the Archaeological Institute of America. March 19<sup>th</sup>, 2021.

Dostal, C. 2020. *The Conservation of Waterlogged Archaeological Material*. Lecture for Global Maritime Archaeology. Invited by Prof. Timmy Gambin, Department of Classics and Archaeology, University of Malta. May 1<sup>st</sup>, 2020.

Dostal, C. 2020. *The Alexandria Ship Project*. Lecture for Global Maritime Archaeology. Invited by Prof. Timmy Gambin, Department of Classics and Archaeology, University of Malta. April 24<sup>th</sup>, 2020.

#### Social Media

https://www.facebook.com/ConservationLabTAMU

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