**ORGANIZATION:** Maryland Archaeological Conservation Laboratory (MAC Lab)

**ADDRESS:** Jefferson Patterson Park & Museum, 10515 Mackall Rd, St. Leonard, MD 20685

**START DATE:** Opened in 1998

**PARENT ORGANIZATION:** Maryland Historical Trust/Maryland Department of Planning

**CURRENT STAFF NUMBERS:** 10 permanent and contractual staff.

**WEBSITE:** [http://www.jefpat.org/mac_lab.html](http://www.jefpat.org/mac_lab.html)

**OVERVIEW OF MAC Lab:** The Maryland Archaeological Conservation Laboratory is a state-of-the-art archaeological research, conservation, and collections storage facility located at the Jefferson Patterson Park and Museum in southern Maryland. Curators estimate the facility contains 7 to 10 million state owned and federally curated artifacts; this estimate is continuously refined as the inventorying of all collections proceeds. Almost all of these collections were recovered from archaeological sites in Maryland and represent a priceless part of the state's rich heritage. The MAC Lab serves as a clearinghouse for archaeological collections recovered from land-based and underwater projects conducted by state and federal agencies throughout Maryland. The MAC Lab also houses a number of major collections acquired through private donation to the Maryland Historical Trust. All of these collections are available for research, education, and exhibit purposes to students, scholars, museum curators, and educators. In our state-of-the-art conservation laboratory, the staff treats a full range of archaeological artifacts, cleaning and stabilizing them in order to preserve them for future generations.

**AREA OF EXPERTISE:** Treatment and curation of large collections and individual artifacts from prehistoric and historic contexts. Treatment of metal and metal/organic composite artifacts from terrestrial or submarine sites. Treatment of waterlogged organic materials. Laboratory development and design.

**LABORATORY EQUIPMENT:** 320kV x-radiograph, electrolytic reduction tanks w/power supplies and heated circulators, PEG tanks w/ filtration and circulation, 2 freeze-driers, 2 air-abrasives, pneumatic cleaning tools, density meter, pH/ISE meters. Fourier-Transform Infrared Spectrophotometer, UV-Vis Spectrophotometer, darkroom & photo studio, digital cameras, networked database, climate-controlled treatment and storage space, dedicated solvent workspace.

**STAFF:**

*Director Patricia Samford, PhD:*
Patricia Samford holds a doctorate in Anthropology from the University of North Carolina, Chapel Hill and an MA and BA in Anthropology from the College of William and Mary. Her research interests include African diaspora archaeology in the American South and in eighteenth- and nineteenth-century ceramics. She was a staff archaeologist for the Colonial Williamsburg Foundation for thirteen years and has also worked in North Carolina, Maryland, and Bermuda. Samford’s dissertation research was published by the University of Alabama Press and is entitled Subfloor Pits and the Archaeology of Slavery in Colonial Virginia (2007). She has also co-authored a book on archaeology for children entitled Archaeology for Young Explorers: Uncovering History at Colonial Williamsburg (1995) and Intrigue of the Past: North Carolina’s First Peoples; A Teacher’s Activity Guide for Fourth Through Eighth Grades (compiled and edited by Margo L. Price, Patricia Samford and Vincas P. Steponaitis; Research Laboratories of Anthropology, University of North Carolina, Chapel Hill, 2001).

*Deputy Director Scott Strickland:*
Scott Strickland is currently the Deputy Director of the Maryland Archaeological Conservation Laboratory at Jefferson Patterson Park and Museum. He received his B.A. degree in Sociology/Anthropology from St. Mary's College of Maryland and his M.Sc. degree in Archaeological Computing from the University of Southampton. In addition to serving as Deputy Director, he also serves as adjunct faculty at St. Mary's College of Maryland where he teaches Geographic Information Systems and Computational Anthropology. His research interests include pre-Contact Native settlement patterns, post-Contact Anglo-Native Relations, and seventeenth and eighteenth-century Chesapeake history.
Curator of State Collections Rebecca Morehouse:
Rebecca Morehouse received her B.A. in Anthropology and English from the State University of New York, College at Geneseo in 1995 and her M.A. in Anthropology with a concentration in Museum Studies from The George Washington University in 1997. She has twenty years of experience in archaeological collections curation. Prior to becoming the Curator of State Collections at the MAC Lab, she was the Curator for the State Highway Administrations Archaeological Collections (1998-2002). As part of her studies in Anthropology, she interned at the National Park Service, Native American Graves Protection and Repatriation Act Office (1997), Alexandria Archaeology (1996), the Ford’s Theatre National Historic Site (1996-1997), and the New York State Museum (1994).

Curator of Federal Collections Sara Rivers Cofield:
Sara Rivers Cofield received her Bachelor of Arts from Murray State University in 2000 and her Masters of Applied Anthropology from the University of Maryland, College Park in 2002. She has seven years of experience in prehistoric and historic archaeological fieldwork and its associated laboratory processing stemming from projects in Maryland, Kentucky, Missouri, Tennessee, Jamaica, and Belgium. Since 2002, Sara has focused on curation, collections management, and material culture research. Her past positions include Adjunct Faculty at St. Mary’s College of Maryland (2009-2015), Curation and Conservation Assistant at Historic St. Mary’s City (2002-2004), Research Assistant at Monocacy National Battlefield (2001-2002), and Archaeological Laboratory Aide for the Maryland-National Capital Park and Planning Commission of Prince George’s County (2000-2004). Sara is a member and past chair of the Archaeological Collections Consortium, and she currently serves on the Board of Directors of the Society for Historical Archaeology.

Collections Technician Alice Merkel:
Alice Merkel received her Bachelors of Arts in Anthropology and Linguistics with a strong concentration in Archaeology from Cleveland State University. With a focus in collections management she has conducted early 20th-century research with the Cleveland Museum of Natural History, the Crawford Automotive Museum, and Cuyahoga Community College Archives. For the last seven years she has conducted fieldwork and the accompanying laboratory processing on archaeological sites in Ohio, Virginia, North Carolina and Maryland. As a field staff intern at James Madison’s Montpelier Alice expanded her focus to 18th- and 19th-century landscape archaeology encompassing historical archaeology excavation and reporting. With a focus on site definition, Alice researched site reporting and representation within state level databases. Alice joined the Maryland Archaeological Conservation laboratory at Jefferson Patterson Park and Museum in May 2019, working with both state archaeological collections and the public archaeology program as Collections Assistant.

Patterson Archaeologist Alexandra Glass:
Alex Glass holds an MSc. in Environmental Archaeology from the University College London, a B.A in History, and B.A in Anthropology from the University of Maryland at College Park. She has 13 years of experience conducting both field and lab work primarily in the Mid-Atlantic, as well as England and Italy. Prior to rejoining the MAC Lab, she served as the Lab Director for Applied Archaeology and History Associates in Annapolis, Maryland where she facilitated the processing, analysis, and curation of artifacts generated through CRM and private projects. Her research interests include foodways, plant use, and the archaeology of the colonial Chesapeake with recent research projects consisting of macro-botanical, zooarchaeological, and artifact analyses of both historic and precontact period site collections.

Head Conservator Nichole Doub:
Nichole Doub holds an MSc in Conservation for Archaeology and Museums and a MA in Principles of Conservation from University College London in England and a BA in Classical Archaeology from the University of North Carolina at Chapel Hill. Her specializations include archaeometallurgy and East Mediterranean/Eastern European archaeology. Before coming to work at the MAC Lab, Nichole was the Archaeological Objects Conservator at the Royal Albert Memorial Museum in Exeter, England where she worked on a range of Roman, Anglo Saxon and Medieval material from the Princesshay excavations. She has also participated in conservation projects at the Fitzwilliam Museum (University of Cambridge), the National Trust, English Heritage and the archaeological excavations at Çatalhöyük, Turkey, Noviodunum (Romania) and Kaman Kalehöyük (Turkey).

Conservator, Arianna Johnston:
Arianna Johnston received her MSc in Conservation Practice from the School of History, Archaeology, and Religion from Cardiff University and her BA in Fine Arts from Alfred University. Arianna has interests in composite artifacts and in refining health and safety practices in conservation. She has previous experience working with the Smithsonian Institution National Air and Space Museum, University of Aberdeen, Birmingham Museums Trust, Mathers Museum of World Cultures, and in private practice in objects conservation in Indiana and northern Virginia.

Conservator Monica Kitner:
Monica Kitner received her MSc in Conservation for Archaeology and Museums and a MA in Principles of Conservation from University College London in England. She completed her BA in Archaeology, Art History and Religion at Lycoming College in Williamsport, PA. She has experience conserving archaeological and historical objects and has also assisted in the conservation of monumental architecture. Before coming to the MAC Lab, she interned at The Scott Polar Museum and The Fitzwilliam Museum in Cambridge, England and also spent time working in private practice in the D.C. metropolitan area.
**Conservator, Heather Rovardi:**
Heather Rovardi was awarded an MA in the Conservation of Archaeological and Museum Objects from Durham University in the United Kingdom, and a BA in Archaeology and Culture of the Ancient Near East from Lycoming College. In conjunction with archaeological objects, she specializes in the conservation of historical/technical objects and her interests include outdoor sculpture conservation, disaster preparedness and emergency response, and collections care. Heather has previously worked at the Lincolnshire Archives, the Smithsonian Institution National Air and Space Museum, Historic St. Mary’s City, and in private practice within the greater Washington, D. C. metropolitan area.

**CURATION**

**State Curation Experience:** The State of Maryland's archaeological curation program is responsible for the long-term care and preservation of the State's archaeological collections and their associated documentation. These collections, an estimated 8 million artifacts, include a wide range of cultural material representing 12,000 years of human history in Maryland. The majority of these collections have been generated through professional archaeological investigation, although some of the collections have been donated by avocational archaeologists. Along with the perpetual care of the archaeological collections, it is the mission of the State of Maryland's archaeological curation program to make these collections accessible for research and exhibit.

**RECENT ACCESSIONS:**

Data Recovery at the Maynard Burgess House, 18AP64: a mid-19th to mid-20th century African American home.

Data Recovery at the Clagett Brewery Site, 18BC38: a late 18th to late 19th century brewery.

Excavations at the Albermarle Rowhouses, 18BC48-50: early 19th to late 20th century brick rowhouses

Excavations for the Shot Tower Metro Station, 18BC66: 18th to 20th century commercial buildings, includes an 18th century privy

Data Recovery at the Brumbaugh-Kendle-Grove Farmstead, 18WA496: 18th century house site, 19th to 20th century standing farmstead

Archeological Society of Maryland Excavations at the Calverton site, 18CV22: 17th and 18th century town and county seat for Calvert County

Excavations at Zekiah Fort, 18CH808: 17th century/contact period Native American fort

Excavations at the Josiah Henson Birthplace, 18CH928-929: Late 18th to 19th century farm and house site

**CURRENT AND RECENT CURATION PROJECTS:**

The following collections are currently being rehoused and organized, replacing all unstable and acidic packaging materials, identifying artifacts that may need conservation and pulling artifacts into study collection cabinets to make them more accessible to future researchers:

Smith’s St. Leonard, 18CV91: early to mid-18th century plantation site

Shot Tower Metro, 18BC66: 18th to 20th century commercial buildings, includes an 18th century privy

Heater’s Island, 18FR72: 17th century Piscataway village site

The following projects are being conducted in preparation for the collections move that will take place prior to the upcoming MAC Lab expansion and renovation project:

A full box inventory of all the archaeological collections in compactable shelving in collections storage.

A full inventory of the study collections associated with the most significant archaeological collections.

A conservation assessment and full rehouse, where necessary, of all oversize objects.
All digital files associated with the archaeological collections are currently being organized and inventoried.

The following collections are currently be catalogued by volunteers at the Maryland Historical Trust's archaeology lab:

Levering Coffee House, 18BC51: late 18th to 19th century residential and commercial buildings

**CURRENT LOANS TO INSTITUTIONS FOR EXHIBIT OR RESEARCH:**

- RFL Museum of African American History, Baltimore MD
- Fort McHenry, Baltimore, MD
- Historic London Town and Gardens
- Walters Art Museum, Baltimore, MD
- University of Delaware Center for Archaeological Research, Newark, DE
- National Museum of Natural History, Smithsonian, Washington, DC
- Havre de Grace Maritime Museum, Havre de Grace, MD
- Susquehanna State Park
- Heart of the Chesapeake Heritage Area/Sailwinds Visitor Center
- University of Tennessee, Knoxville
- University of Maryland, College Park
- St. Mary’s College of Maryland

**Federal Curation Experience:** Curation of 1,108 cubic feet of artifacts, 56.8 linear feet of records, and 33.6 GB of digital data for 29 Federally-owned facilities or military installations. The MAC Lab ensures that these collections are stored and inventoried in accordance with Federal regulation 36CFR§79. In addition to maintaining the artifacts according to professional museum standards, the Federal curator administers loans, creates educational materials for clients, and generates web pages that make the collections accessible for research.

**CURRENT AND RECENT FEDERAL CURATION PROJECTS:**

**Naval District Washington:** Projects are underway to ensure that all of the Navy’s collections and project reports are represented in the Digital Archaeological Record (tDAR), and to create educational exhibits for the Naval Air Station Patuxent River and its Webster Field Annex.

**National Institutes of Health:** NIH became the MAC Lab’s newest federal client in 2020, representing 11 discrete projects/accessions. Work is underway to inventory the collection and rehouse their associated records as part of the intake process.

**Current Rehousing Projects:**

Old Baltimore, 18HA30: First county seat of Baltimore county, c. 1680s-1710s.

Spence Collection, 18ST233, 329, 330, 386, 540: avocational collection from a c. 1637-1940 Jesuit settlement.

**CONSERVATION**

**CURRENT AND RECENT CONSERVATION PROJECTS:**

**Alexandria Archaeology: Carlyle Warehouse** - The first public building in Alexandria, VA was uncovered during development excavations. The wood foundations were removed by the MAC Lab conservation staff and are currently undergoing polyethylene glycol impregnation and vacuum freeze drying, making it possible for the timbers to go on future display.

**Washington County Historical Society: Maryland Cavalry Helmet** - The cavalry helmet is part of a significant early 19th-century uniform assemblage in the collection of the Washington County Historical Society that is connected to Jacob Huyett, a past resident of the county who served during the War of 1812. Conservation staff cleaned and stabilized the object for continued display.

**Independence National Historical Park: Revolutionary War Musket** – The musket was archaeologically recovered from a privy belonging to a Quaker household occupied by British and American troops in Philadelphia. MAC Lab x-radiography identified the gun as a French Naval musket and staff stabilized the artifact for display.
RESEARCH

Southern Maryland Regional Center: The Southern Maryland Regional Center (SMRC) is a satellite office of the Maryland Historical Trust, and is currently administered by the MAC Lab. Since its creation in the early 1980s, the SMRC has conducted archaeological fieldwork throughout Southern Maryland, and has provided local citizens, non-profit institutions, and government agencies with advice and guidance on numerous issues related to archaeology and historic preservation. Hundreds of newly-found sites have been recorded by SMRC archaeologists over the years. Excavations have been conducted on sites as diverse as a Late Woodland palisaded village, a Contact Period Native American house site, the 17th c. home of the third Lord Baltimore, and a 19th c. lighthouse and Civil War hospital.

JPPM Public Archaeology Program: This project, administered by MAC Lab staff, has been ongoing since 1996. It is designed specifically to allow members of the public, of all ages, to join professional archaeologists in the excavation of an actual site. Field work takes place for about 2 months a year, with lab work the rest of the year. Hundreds of volunteers from across North America have gotten to help excavate a 17th c. quarters site, a post-bellum African-American house site, and an 18th c. plantation complex.

CURRENT AND PAST RESEARCH PROJECTS:

Developing a Computerized Catalog for the State of Maryland’s Archaeological Collections (NEH I): This project was designed to make some of Maryland’s most important archaeological collections more easily accessible by researchers, educators, and institutions. More than 30 collections, representing a wide range of time periods and geographical locations in the state, were selected for inclusion in the project. Using funding from the National Endowment for the Humanities, the Maryland Historical Trust, the Maryland State Highway Administration, and the Academy of Natural Science’s Estuarine Research Center, approximately 3,000,000 artifacts from these 30+ collections were cataloged, and the information entered into a database. Finding aids summarizing the discoveries at each of the sites were written and posted on the JPPM webpage.

Developing a Records Catalog Database for the State of Maryland’s Archaeological Collections (NEH III): This was a follow-up to the NEH I project. The field and lab records and photos from each of the 30+ NEH I sites were organized, scanned, and re-housed in archival storage containers. Nearly 100,000 pages and images were scanned during this project. The scanned records were entered into a database that allowed .pdfs of the records to be viewed. The NEH I project finding aids posted on the JPPM webpage were modified to reflect the addition of the records data.

A Comparative Archæological Study of Colonial Chesapeake Culture (NEH II): This project was designed to synthesize the field and artifact data from 18 colonial sites from Maryland and Virginia. It was conducted by a consortium of institutions, including the Colonial Williamsburg Foundation, the Anne Arundel County Lost Towns Project, George Washington’s Fredericksburg Foundation, the Mount Vernon Ladies’ Association, and the Association for the Preservation of Virginia Antiquities Jamestown Rediscovery Project. The Maryland Archaeological Conservation Laboratory served as the lead institution. Funding was provided by the National Endowment for the Humanities (NEH) (RZ-20896-02) and the Virginia Department of Historic Resources. As a result of the project, a database was developed (www.chesapeakearchaeology.org) that included summaries of each of the sites, a downloadable artifact database and selected artifact distribution maps, a gallery of artifact photos, copies of reports and papers about the sites, and other analytical data.

Diagnostic Artifacts of Maryland: This project, initially funded by the National Center for Preservation Technology and Training, was designed to create an on-line identification guide to the artifacts typically found on archaeological sites in Maryland. It started with prehistoric and colonial ceramics, and has since been expanded to include various types of small metal objects, projectile points and 19th century ceramics (2009-2016). Other artifact classes will be added in the future. It is intended for use by both professionals and non-professionals, and has been very well received by both audiences.

20,000 Years of Environmental Change in Maryland: This project, funded by an anonymous donor, examined all known paleobotanical data from archaeological sites in Maryland. More than 80 sites were found to have good paleobotanical data. This information was entered into a database, and summaries of each of the sites were prepared. This information will all be made available on-line, along with a synthesis of environmental change in Maryland since the arrival of humans, which will be written for a popular audience. The paleobotanical database will hopefully be combined with similar data from Virginia and elsewhere.

Maryland Unearthed: A Guide to Archaeological Collections at the Maryland Archaeological Conservation Laboratory: Maryland Unearthed provides searchable online access to archaeological collections from 268 archaeological sites curated by the lab. General information about each site, including site type, a brief description and number of archaeological features is available, as well as site summary pages and more detailed site descriptions from the Maryland Historical Trust’s Archeological Synthesis Project.

Equestrian Artifacts of the English Tobacco Colonies: Federal Curator Sara Rivers Cofield received a a $25,000 grant from The Conservation fund to study horse-related artifacts of colonial Maryland and Virginia for purposes of expanding the Diagnostic
Artifacts in Maryland website and authoring a scholarly publication on the artifacts of the saddle horse. DAIM sections on spurs, stirrups, bridle bosses, and leather ornaments will be expanded, and new sections will be added on bits, saddles, horseshoes, and artifacts of horse care.

CURRENT AND RECENT PUBLIC OUTREACH PROJECTS:

Artifacts of Outlander Travelling Exhibit: This project was designed to promote the MAC Lab’s archaeological collections by connecting them to the popular *Outlander* book series by Diana Gabaldon and television series on Starz. The travelling exhibit features 195 artifacts from 30 different archaeological sites throughout Maryland, illustrating how mid-18th-century material culture from Maryland compares to the portrayal of 1740s Scotland in the *Outlander* series. The exhibit covers themes like firearms, travel on horseback, 18th-century medicine, and clothing. Upon request from public libraries and other educational institutions, the exhibit generally travels to a new location every two months.

Artifacts of Outlander Online Exhibit: The popularity of the travelling exhibit led to the creation of an online exhibit with more detailed information on each object displayed in the original exhibit. [http://www.jefpat.org/Outlander/index.html](http://www.jefpat.org/Outlander/index.html)