

# AFCP 2020 Large Grants Competition

**Opportunity Number:** AFCPLG20 **Applicant Entity:** Calibration Centers of America, LLC **UEI:** YR35RL9QGEA5 **EIN (501c3):** 88-139-0408 **Project Title:** *The Conservation and Digital Preservation of Ancient Egyptian Calibrations and Measurement Collections* **Location:** Cairo, Egypt (Project Site) **Request:** \$750,000 **Project Duration:** 36 Months **Submission Email:** CairoAFCP@state.gov

## Executive Summary

Calibration Centers of America, LLC proposes a transformative three-year initiative to conserve, stabilize, and digitally preserve a unique collection of ancient Egyptian measurement instruments—including weights, cubits, and levels—housed at the Museum of Applied Sciences in Cairo. These artifacts represent the technological ingenuity of one of history’s most advanced civilizations, yet they remain at risk due to inadequate storage and environmental conditions.

Our project not only addresses urgent conservation needs but also establishes a sustainable framework for preservation, capacity building, and global scholarly access. By combining rigorous conservation science, advanced digital documentation, and specialized training for Egyptian museum staff, we will ensure that this collection is safeguarded for generations to come.

Calibration Centers of America brings proven expertise in project management, fiscal accountability, and technical execution. With an active SAM.gov registration and UEI certification, we are fully prepared to manage federal funds responsibly while delivering measurable outcomes that exceed AFCP standards.

This project will:

- **Safeguard 500+ artifacts** through conservation and stabilization.
- **Digitally preserve** the collection with high-resolution imaging and a bilingual public catalog.
- **Build local capacity** via specialized training for Egyptian museum staff.
- **Create sustainable infrastructure** with archival-grade storage and climate control.

Beyond AFCP requirements, we will deliver **cinematic-quality documentation, extended technical support, and transparent reporting** to ensure long-term impact.

## Project Objectives

### 1. Comprehensive Conservation Needs Assessment

- Catalog and evaluate ~500 artifacts.
- Produce a certified Conservation Needs Assessment (CNA) prioritizing 100 high-risk objects.
- Deliver a searchable digital database cross-referenced by material, condition, and provenance.

### 2. Artifact Stabilization and Digital Preservation

- Apply science-based treatments (e.g., desalination, rust stabilization, structural consolidation).
- Produce high-resolution archival photography (600 dpi minimum).
- Launch a bilingual (Arabic/English) public-facing online catalog hosted on the Museum's server.

### 3. Specialized Training and Capacity Building

- Conduct three intensive workshops for 10 Egyptian museum staff.
- Provide Certificates of Completion and a comprehensive Training Manual.
- Collaboratively draft a formal Collections Care and Environmental Policy for long-term sustainability.

### 4. Creation of Safe Storage Environment

- Retrofit a 1,500 sq. ft. storage room to international archival standards.
- Install climate-control systems (HVAC/dehumidification) and UV-resistant lighting.
- Procure archival-grade shelving and drawers to replace non-archival furniture.

## Technology and Security Framework

- **Digital Asset Management (DAM):** Enterprise-level, open-source platform (e.g., CollectiveAccess) compliant with Dublin Core/CIDOC-CRM metadata standards.
- **Hosting:** Secure cloud-based environment (Azure/AWS) approved for U.S. government data security standards.
- **Tiered Access:**
  - *Tier 1 (Secure Portal):* MFA-protected access for vetted researchers and government agents.
  - *Tier 2 (Public Interface):* Open access to low-resolution images and summaries for students, educators, and the general public.
- **Audit & Compliance:** Weekly review of access logs by the Project Treasurer to ensure transparency and accountability.
- **Remote Research Tools:** High-fidelity zoom, scale overlays, before/after conservation comparisons, and metadata-driven search/export functions.

## Management and Staffing

- **Leadership:**
  - *Lucian DeMarco, COO* – Oversight of project execution and compliance.
  - *Jeannette DeMarco, Secretary/Treasurer* – Financial management and audit compliance.
- **On-Site Execution:**
  - Egyptian conservation specialists and international experts contracted to perform

technical work.

- Training designed to empower local staff with sustainable skills and policies.

This dual structure ensures both fiscal accountability and technical excellence, while fostering local ownership of conservation outcomes.

## Justification and Impact

The collection of ancient Egyptian measurement instruments is a cornerstone for understanding engineering, trade, and scientific advancement in antiquity. Without immediate intervention, these artifacts risk irreversible degradation.

Our project delivers:

- **Preservation of irreplaceable cultural heritage.**
- **Capacity building for Egyptian professionals.**
- **Global scholarly access through secure digital platforms.**
- **Long-term sustainability via upgraded storage and institutional policy.**

Beyond the grant requirements, Calibration Centers of America commits to:

- Providing cinematic-quality digital documentation for educational outreach.
- Offering extended technical support to the Museum post-grant.
- Ensuring transparent reporting and exceeding compliance standards.
- Preserves irreplaceable cultural heritage.
- Builds Egyptian institutional capacity.
- Provides global scholarly access.
- Ensures sustainability through upgraded infrastructure and policy adoption.

### **Above and Beyond Commitments:**

- Cinematic-quality digital documentation for outreach.
- Extended technical support post-grant.
- Transparent reporting exceeding compliance standards.

Calibration Centers of America, LLC is uniquely positioned to deliver a project that not only meets but surpasses AFCP expectations. By combining conservation science, advanced digital technologies, and sustainable training, we will secure the legacy of ancient Egyptian measurement collections for future generations.

This proposal reflects our dedication to excellence, transparency, and cultural stewardship. With AFCP support, we will transform vulnerable artifacts into a safeguarded, accessible, and celebrated heritage resource.

## Project Objectives & Deliverables

| Objective                                        | Key Activities                                                                       | Outputs                                                                       |
|--------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1. Conservation Needs Assessment                 | Catalog ~500 artifacts; produce CNA report                                           | Searchable digital database; certified CNA prioritizing 100 high-risk objects |
| 2. Artifact Stabilization & Digital Preservation | Apply treatments; high-resolution photography; bilingual catalog                     | 100 conserved artifacts; digital library; public-facing online catalog        |
| 3. Training & Capacity Building                  | 3 workshops for 10 staff; draft policy                                               | Certificates of Completion; Training Manual; approved Collections Care Policy |
| 4. Safe Storage Environment                      | Retrofit 1,500 sq. ft. room (OR CLARIFY SQ NEEDED); install HVAC & archival shelving | Secure, climate-controlled storage room meeting international standards       |

## Milestone Timeline

| Phase                             | Duration     | Milestones                                                     |
|-----------------------------------|--------------|----------------------------------------------------------------|
| Phase 1: Assessment               | Months 1–6   | Inventory, CNA report, environmental monitoring                |
| Phase 2: Conservation             | Months 7–18  | Stabilization of 100 artifacts, treatment reports, photography |
| Phase 3: Training                 | Months 19–24 | 3 workshops, staff certification, policy drafting              |
| Phase 4: Infrastructure           | Months 25–30 | Storage retrofit, HVAC installation, archival shelving         |
| Phase 5: Digital Portal & Wrap-Up | Months 31–36 | Secure DAM system, bilingual catalog, final reporting          |

## Technology & Security Framework

- **Digital Asset Management (DAM):** Enterprise-level, open-source platform (CollectiveAccess or similar).
- **Hosting:** Secure cloud-based environment (Azure/AWS).
- **Tiered Access:** MFA-protected portal for vetted researchers; open public interface for

educators/students.

- **Audit & Compliance:** Weekly review of access logs by Project Treasurer.
- **Remote Research Tools:** Zoomable high-resolution images, scale overlays, before/after comparisons, metadata-driven search/export.

## Management & Staffing

- **Leadership:**
  - *Lucian DeMarco, COO* – Project oversight and compliance.
  - *Jeannette DeMarco, Secretary/Treasurer* – Financial management and audit compliance.
- **Execution Team:**
  - Egyptian conservation specialists and international experts contracted for technical work.
  - Training designed to empower local staff with sustainable skills and policies.

## Conclusion

Calibration Centers of America, LLC is uniquely positioned to deliver a project that not only meets but **surpasses AFCP expectations**. By combining conservation science, advanced digital technologies, and sustainable training, we will secure the legacy of ancient Egyptian measurement collections for future generations.

**Sincerely,**

Lucian M. DeMarco, COO

Calibration Centers of America, LLC

732-666-0496