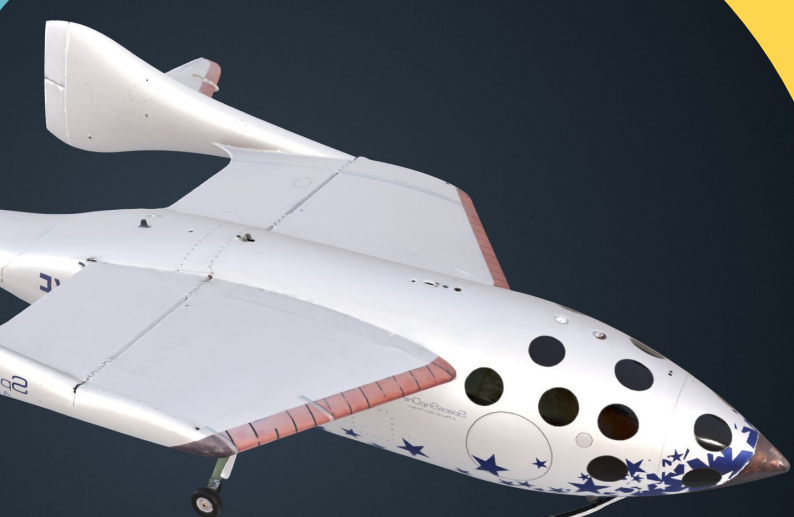
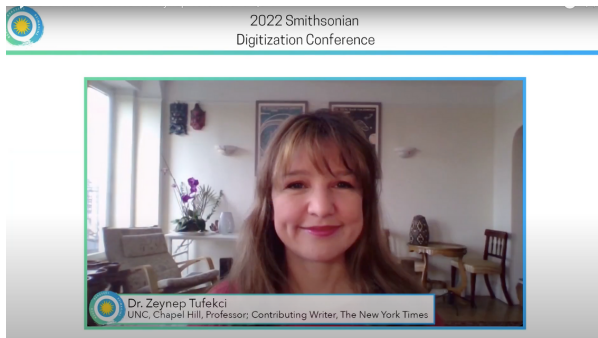


ANNUAL REPORT 2022



Embedded metadata

tag	taggroup	
CircleOfConfusion	Composite	-
DateTimeCreated	Composite	-
DigitalCreationDateTime	Composite	-
ImageSize	Composite	-
LensID	Composite	-
Megapixels	Composite	-
ScaleFactor35efl	Composite	-
ShutterSpeed	Composite	-
DateTimeOriginal	ExifIFD	36867
ExifImageHeight	ExifIFD	4096
ExifImageWidth	ExifIFD	4096
ExifVersion	ExifIFD	3.0



2022 Smithsonian Digitization Conference
keynote speaker Dr. Zeynep Tufekci



NMNH Botany Mass Digitization celebration cake
complete with edible icing scan of a specimen

IT WAS A YEAR OF SIGNATURE EVENTS FOR THE DIGITIZATION PROGRAM OFFICE.

Early in the year we hosted the Smithsonian Digitization Conference as a virtual event. Traditionally, this conference is an “all-hands-on deck” effort for DPO, and re-envisioning it as a virtual event added to the excitement. Our Policy and Analysis team led this effort, and their hard work paid off with a program that reached hundreds of individuals from around the world working in the digital cultural heritage community.

Another signature event of 2022 was the completion of the digitization of the U.S. National Herbarium collection housed at the National Museum of Natural History. This multi-year project, overseen by our Collections Digitization program, resulted in over 3.8 million digitized botanical specimens and associated metadata, making this the first fully digitized herbarium collection in the United States and the recipient of *Apollo* magazine’s top five innovative projects of the year. Even before the completion of this project, the value of large collections datasets such as this one was made evident by its use in some of the earliest machine learning – based research conducted here at the Smithsonian. Now the entire digital collection is available to all and can be used to support research in evolutionary studies, climate change, agriculture, and more.

For our 3D program it was a year of intense efforts to add more 3D models to our online collection and develop new user features in our 3D viewer. Much of the work of this team is leveraged in educational programming, and one effort in particular - an interactive augmented reality (AR) experience on coral reefs developed in collaboration with Adobe and The Hydrous (a marine educational non-profit) - received a Webby Award and two Anthem Awards celebrating “purpose and mission-driven work.”

In 2022 we also held our first in-person retreat in three years. We thank the Smithsonian Environmental Research Center (SERC) for letting us use facilities on their beautiful campus to hold this all-day event. Being able to regroup in such a bucolic setting after a tough few years was a revitalizing experience for us all.

We closed out the year in gratitude to our colleagues in the Office of the Chief Information Officer, the National Collections Program, the Office of Digital Transformation, and, of course, the Smithsonian collecting units who work with us to create digital collections. We look forward to working with these steadfast partners in implementing the Smithsonian’s strategic priorities, particularly in the digital arena, in 2023.

Diane Zorich
Director, Digitization Program Office, OCIO

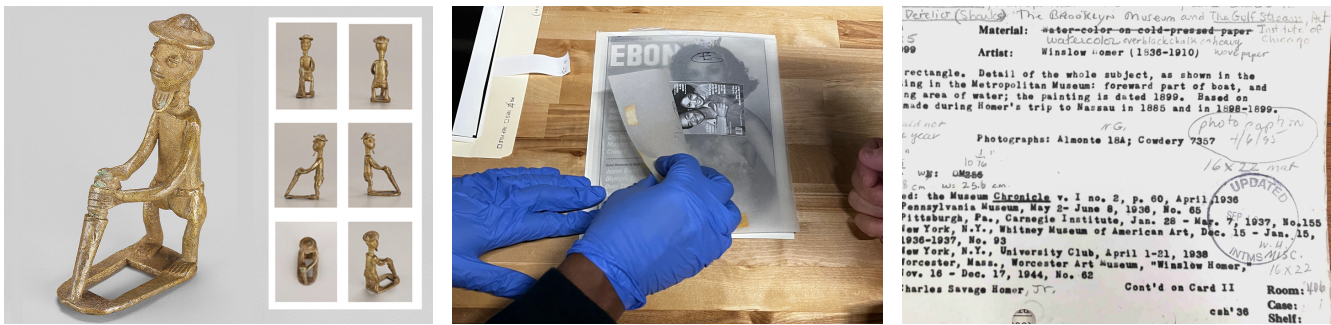
The 3D team had a successful 2022 full of fruitful collaborations. Working closely with colleagues in the museums, we added more objects and stories to our online collection, including iconic objects from [We Belong Here](#), the Title IX 50th Anniversary exhibit at the National Museum of American History, and [¡Presente!](#), the inaugural exhibit of the National Museum of the American Latino. In partnership with Adobe and The Hydrous we produced a [Webby Award-winning interactive](#) (in the category of “most innovative in-person experience that is enhanced with technology”) that tells the story of coral reefs and their imminent threats.

Our team supports institutional priorities that promote equality of access and inclusive content. To this end, we’ve enhanced the Voyager 3D viewer platform with features that allow for multiple languages and integrations with accessibility features. We’re experimenting with [sonification tools](#) to support those who are visually impaired and a [simplified scrolling navigation](#) mode to enable a more guided user experience. We’ve also partnered with the D.C. Public Schools system to create [detailed guides](#) that help educators integrate Smithsonian 3D collections into common web-based teaching platforms that are in use today.

The team takes its leadership role in the field of cultural heritage 3D digitization seriously, sharing its work in 2022 at two international conferences (keynoting at one of these venues), and co-authoring a chapter in the open access publication by the Association of Colleges and Research Libraries (ACRL) publication, **[3D Data Creation to Curation: Community Standards for 3D Data Preservation](#)**. Team members were also authors on [one of the most viewed Current Biology papers](#) of this year. The Voyager open-source 3D viewer developed by the team is being adopted by several education institutions both here and abroad, and many of these institutions are contributing to the codebase to expand the viewer’s capabilities.

Our use of social media to extend the reach and impact of our online resources has paid off in successful social media engagement and online launches. We continue to see creative re-uses of our Open Access 3D assets in art, educational programs, and entertainment. For example, a Reddit user recently combined a 3D model from the patent collection at the National Museum of American History with Arduino technology to construct a [functioning Morse Telegraph Key](#). We continue to support efforts to increase access to our collections and to motivate audiences to interact with the Smithsonian’s 3D offerings in creative and engaging ways.



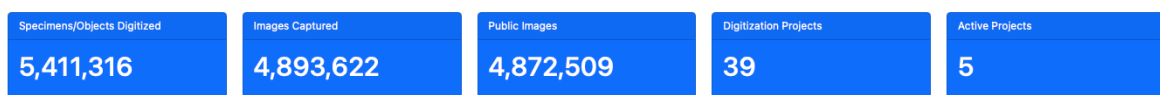


The Digitization Program Office’s (DPO) “Collections Digitization” (formerly “Mass Digitization”) Program continues its programmatic approach to Smithsonian-wide digitization. From the priorities defined in the museums’ Unit Digitization Plans (UDPs), the Collections Digitization Program undertakes a steady stream of mass digitization projects across the Institution year-round. To date, the teams that make up the Collections Digitization Program have digitized 5.5 million objects and specimens. While the easing of COVID pandemic restrictions have improved access to collections, we continue our pandemic-adjusted work digitizing collection records while we continue to ramp up object digitization as collection staff returns to museums.

This year, we added our third team to the program to complement the existing Mass Digitization and Informatics Teams: the new **Imaging Services Team**. This team will provide digital imaging support for newly accessioned objects as well as for small scale collections (particularly at smaller museums and departments that lack staff photographers). To date, the Imaging Services Team has executed projects at the National Museum of Natural History, the National Museum of African Art, the National Portrait Gallery, Smithsonian Gardens, and the Castle Collection. Future projects include work at the Anacostia Community Museum, the National Portrait Gallery, the Hirshhorn Museum and Sculpture Garden, and the National Museum of Natural History.

As part of our continued work with collections record digitization, our **Informatics Team** has completed two projects: digitizing handwritten ledgers documenting tens of thousands of locality records from the National Museum of Natural History’s Department of Paleobiology and digitizing accession records from dozens of handwritten volumes at the National Museum of American History. Work continues with a third project digitizing hundreds of thousands of handwritten object records from the Cooper Hewitt Smithsonian Design Museum’s card catalog.

After completion of the nearly four million-specimen herbarium collection last year, the **Mass Digitization Team** has embarked on two large scale projects and several medium scale projects. In a first-of-its-kind collaboration with the Getty Research Institute, DPO Mass Digitization and the National Museum of African American History and Culture has started planning the archiving and digitization of the four million-photograph Johnson Publishing Company Archive, one of the most important collections of African American culture of the second half of the 20th century. Additionally, the Mass Digitization team has restarted work on two projects that were suspended due to the pandemic: the National Museum of Natural History Paleobiology fossil project and Invertebrate Zoology mollusk project.



This graph shows the progress that the Collection Digitization Program of the Digitization Program Office has had in digitizing the Smithsonian collections.



Every year the Digitization Program Office's Policy and Analysis Program works with the Smithsonian's National Collections Program to collect information from the Smithsonian's museums, libraries and archives (called "collecting units") about the state of their collections and digitization. This Annual Collections & Digitization Assessment quantifies the Smithsonian's objects/ specimens, archives, and libraries holdings, and characterizes the quality of the physical and digital state of the collections. We report the findings to the Office of Planning, Management, & Budget, who include them in Smithsonian's key performance indicators that are shared with Smithsonian stakeholders. The information collected reflects the situation from the previous fiscal year; thus, the numbers reported in 2022 reflect Fiscal Year 2021.

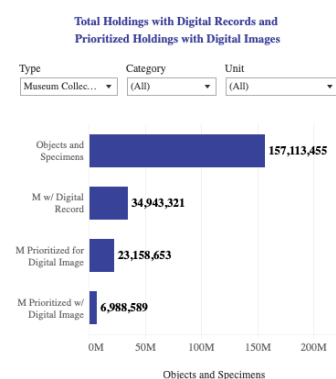
The digitization portion of the assessments show that as of September 30, 2021, the museums, archives and libraries have created a total of over 12 million standard digital records that describe and make the collections discoverable. In addition, these collecting units have created over 13 million standard digital surrogates which represent SI's holdings. ("Surrogates" refer to digital representations such as digital images, audiovisual files, or 3D renderings.) For more detail about the digitization assessment, please visit the [Smithsonian Dashboard](#).

In the fall of 2022 DPO put out the triennial call to museums, libraries and archives for their 2023-2025 Unit Digitization Plans (UDP). These plans report on a variety of topics, such as digitization goals and priorities for the future, and challenges and risks related to funding, staff, and infrastructure. After reviewing the results in the spring of 2023, DPO will publish a summary report on the 2023-2025 UDP findings in the fall of 2023.

DPO completed its work with the OCIO Office of Research Computing in 2022 to compile and analyze responses to the Unit Data Management Plan for At-Risk Digital Assets survey from research and collecting units. The final report, [Endangered Assets: A Summary Report of the 2020 Data Management Plan \(DMP\) Survey of At-Risk Digital Assets at the Smithsonian](#), is available on DPO's SharePoint site. We thank Keri Thompson and Beth Stern of OCIO's Research Computing office for joining us in this effort.

In March, the DPO met a new challenge when it hosted the 2022 Smithsonian Digitization Conference entirely online. The 2022 conference theme was *Reach, Reassess, Reimagine* and featured speakers from a variety of disciplines from around the world. The conference opened with a keynote address by Zeynep Tufekci, sociologist and contributing writer to *The New York Times*, whose work examines the impact of new technologies on societies and systems. In addition, the 2022 conference offered panel discussions, demonstrations and talks by Smithsonian staff doing ground-breaking work in the digital realm. The conference concluded with Becky Kobberod, the Smithsonian's Head of Digital Transformation, in conversation with Meroë Park, SI Deputy Secretary and Chief Operating Officer, and Allison Willcox, Deputy Director at the National Museum of Natural History about digital transformation at the Smithsonian. The [full program and links to recordings](#) of the 2022 conference offerings are available on the DPO website.

DPO continues to develop topics and coordinate events in partnership with colleagues around the Smithsonian for the Digital Foundations webinar series to develop and deepen digital literacy, competency, and capacity-building for all staff. The 2022 series offered a variety of topics including best practices and tools to visualize data for greater insights; partnering with Wikipedia to amplify the Smithsonian's digital assets available through SI Open Access; and a new tool, SI Thesaurus, being developed by DPO and unit staff to sustainably publish their thesauri.



Thanks to generous support from Meta, AWS, Crowley, Digital Transitions, Bright Machines, Direct Dimensions and Picturae, the 2022 (virtual) Smithsonian Digitization Conference was again a successful event. Their support allowed us to bring in world-wide leaders to give keynotes and conference presentations. All told, the conference had 1,290 registrants representing over 500 organizations from 27 different countries.

With Verizon's major, multi-year support of the "Our Shared Future: Reckoning with our Racial Past" Initiative, we 3D- scanned several dozen collection objects from Smithsonian museums, with many more to follow in the coming years.

DPO contributed the 3D scans of the Apollo 11 command module for "Moonwalk", the virtual reality experience co-developed with Meta at the popular "FUTURES" exhibition (2021-2022) at the Smithsonian's Arts and Industries Building (AIB). The experience let visitors explore the lunar landscape as it has seldom been seen before. "FUTURES" - part exhibition, part festival - was the Smithsonian's first major building-wide exploration of the future.

Amazon Web Services continued hosting the Smithsonian's Open Access dataset of millions of collection objects and records at no cost. This dataset, part of the AWS Public Dataset Program, provides an essential service to the Smithsonian, allowing millions of users access to our digital content.

DPO continued to pursue discussions with technology companies about collaborations that can help scale up 3D capture of Smithsonian collections and enhance opportunities for more virtual engagement with the Smithsonian. One of these partnerships, begun in 2021 with Adobe and The Hydrous, resulted in a one-of-a-kind augmented reality (AR) experience that was endorsed under the UN Decade of Ocean Science for Sustainable Development. The Smithsonian's 3D collections provided the foundation for this project, a prime example of how Open Access collections support partnerships. Another partnership is underway with Epic Games, which has agreed to process the very large dataset from the 3D scanning of the Space Shuttle Discovery into a model that will excite space enthusiasts and the general public alike.

Thanks to a collaboration with Digital Transitions, DPO's Collections Digitization program can continue its successful Quality Digitization Training Series, a recurring training program for Smithsonian photographers and imaging staff.

Another partner, FARO Technologies, is a founding supporter of the Smithsonian's 3D Digitization Program, offering us use of its 3D laser scanning technology for high-precision 3D measurement, imaging, and comparison of parts and compound structures. In 2022, the DPO 3D program took part in FARO's ConnectEd webinar series, discussing how the program is using 3D technology to fulfill the Smithsonian's mission.

Finally, with assistance from colleagues in the Smithsonian's Office of Advancement, we are pursuing a partnership with Booz Allen Hamilton, who is supporting the Smithsonian's Data Science Lab's work as part of the American Women's History Initiative. DPO is a junior partner in this effort.

THE 2022
SMITHSONIAN
DIGITIZATION
CONFERENCE WAS
SPONSORED BY





- **Ken Allen** joined DPO in November 2022 as a program officer for the Johnson Publishing Archive mass digitization project with the National Museum of African American History and Culture (NMAAHC) in November 2022. He has worked in digital imaging since the first digital cameras became available. He managed Ken Allen Studios, which provided digitization and fine art printing services for fifteen years before founding Brooklyn PrintWorks in 2020. He spent his early years at Kodak and then Leaf, launching digital cameras and scanners. He followed digital images along the workflow, working for several years as a client manager in digital asset management and web content management integrations. For him, the holistic experience informed an understanding of the value of each step in the digitization effort.

- **Sara Goodhand** joined the Digitization Program Office in May 2022 to support the Informatics projects. Many years ago, Sara found her passion for museums and libraries while volunteering with multiple local historical societies and museums. After receiving her degree in Public History from Stevenson University, she began a career in libraries and technology serving the U.S. Department of State. In her spare time she stays active and likes to learn new technical skills.



- **Eric Maslowski's** passion for all things 3D was kicked-off by a digital brick cow from his youth. Since that pivotal moment he has been captivated by the intentional and creative use of technology wearing many hats in the process (designer, developer, UX, etc.). He has spent the last 20 years demystifying technologies (3D Scanning, VR/AR, 3D Printing, etc.) while building high impact teams/products for academia, research, healthcare, and entertainment. Eric recently joined the DPO team as product lead for Packrat, Smithsonian's system of record for 3D Data.

- **Erin Mazzei** joined the Digitization Program Office in October 2022 to support the Mass Digitization team. After receiving an M.F.A in Photography from the University of Georgia in 2016, she returned to her home state of Texas to put her fifteen plus years of professional photography experience to use at Texas State University as a digital imaging specialist. She has always been enthusiastic about expanding public access to libraries, museums, and digital knowledge, and her passion for the creative possibilities of digitization continues to grow. She also enjoys exploring the great, medium, and small outdoors with a camera in hand and usually remembers to drink enough water.



- **Miguel Pinto:** Miguel is an educator who came to us through a partnership between the DC Public School System and Smithsonian. In his short time working with DPO's 3D Program, he was able to audit and provide feedback on the 3D website's usability for educators, and he created bilingual instructional videos showing educators how to embed Smithsonian 3D models into their existing web tools, which was turned into the published [Educator Tools page](#).

- **Daniel Pogue** was a member of the Latino Museum Studies Undergraduate program and spent the fall in DC working with the 3D team in DPO. They made educational content for our website, experimented making several SparkAR filters with Smithsonian 3D data, and created a 3D animation for display in an exhibit in 2023.



Digitization Program Office Advisory Committee (DPAC)

Members advise the DPO about its programs and plans and serve as conduits of information from DPO to their units. Members serve three-year terms and are drawn from across the Smithsonian, representing the many diverse units and professions that exist in the Institution

In 2022, Lindsey Burkholder (OA), Jaqueline Chapman (SLA, currently detailed to NMNH Informatics), and Sherri Berger (NMAH) completed their terms on the Committee. We thank them for their years of service and sage advice. We also welcomed the following new members, who will serve until 2025:

- Erin Blasco, Public Affairs Specialist, Social Media, OPA
- Cody Coltharp, Interactive Designer, OUSE
- Sylvia Orli, Digitization Coordinator, NMNH
- Mike Trizna, Data Scientist, Research Computing, OCIO

DPO staff served on or led several internal Smithsonian committees including:

- Audiovisual Archivists Institutional Leadership Committee (AVAIL)
- Collections Information Management Committee (CIMC)
- DAMS Quarterly Working Group
- IRM Pool Fund Allocations Committee
- OCIO Inclusion, Diversity, Equity and Access Committee (OCIO-IDEA)
- Smithsonian GUID Working Group
- Smithsonian 3D Interest Group (Lead)
- Smithsonian Institution Archives and Special Collections (SIASC)
- Strategic Priorities Digital Team D5 (Digitization prioritization, preservation, and funding) (Co-lead)

AWARDS

[AR Reef](#), an educational, augmented reality experience and a collaboration between Adobe, The Hydrous, and the DPO 3D Program won the 2022 *Webby Award for Best Virtual & Remote Partner Experience* and two *Anthem Awards (Bronze)* for Sustainability, Environment, & Climate Innovation Product, Innovation, or Service, and Sustainability, Environment & Climate Partnership or Collaboration Awareness.

The NMNH Department of Botany U.S. National Herbarium digitization project was short-listed for the Apollo Magazine 2022 Award in Digital Innovation [Apollo Awards 2022 Digital Innovation shortlist | Apollo Magazine \(apollo-magazine.com\)](#)

PUBLICATIONS

Blundell, Jon, Jasmine L. Clark, Katherine E. DeVet and Juliet L Hardesty. "Metadata Requirements for 3D Data," in *3D Data Creation to Curation: Community Standards for 3D Data Preservation*. 2022. pp. 157-202.

Neil P. Kelley, Randall B. Irmis, Paige E. dePolo, Paula J. Noble, Danielle Montague-Judd, Holly Little, **Jon Blundell**, Cornelia Rasmussen, Lawrence M.E. Percival, Tamsin A. Mather, Nicholas D. Pyenson. Grouping behavior in a Triassic marine apex predator. *Current Biology*, December 2022. [10.1016/j.cub.2022.11.005](https://doi.org/10.1016/j.cub.2022.11.005).

You Retweeted

Lonnie G. Bunch III @SmithsonianSec · Jun 16, 2022

This project is a victory for scientific research. It's also an innovative model that we have shared with technologists, museum directors, digitization specialists, and scientists from around the globe. My congrats to @SmithsonianDPO @SixDIGI @NMNH and teams across Smithsonian.

Smithsonian @smithsonian · Jun 10, 2022

If you were a Smithsonian herbarium specimen collected in 1838, this would be the ride of a lifetime. In our largest digitization project, we used a conveyor belt system to digitize more than 3.8 million herbarium sheets, now available to all through #SmithsonianOpenAccess.

Show this thread



0:05 13.5K views

Top Collections Digitization Tweet

Smithsonian 3D @Smithsonian3D

#OnThisDay in 1975 breakthrough musical "The Wiz" debuted on #Broadway. These boots from the collections of @NMAAHC were worn by Carl Hall in the title role during the 1984 revival run. Explore them in #3D s.si.edu/3JEFT5q



ALT

11:25 AM · Jan 5, 2022

33 Retweets 2 Quote Tweets 105 Likes

Top 3D Digitization Tweet

15,362

14,234

6,775

586,293



SUBSCRIBERS



SUBSCRIBERS



SUBSCRIBERS



IEWS



Most Viewed 3D Model
"George Washington", SAAM
65,134 Views

Website Visitors: **278,294**

3D Model Views: **1,372,824**

OUTREACH

DPO staff presented their work at over a dozen conferences, workshops, and classrooms during the year. These presentations included keynotes (at the Gumma Museum of Natural History, Japan), professional conference presentations and papers (2D+3D Photography; IDigBio), presentations at Smithsonian-related events (Affiliates Conference, Digital Foundations webinars), and technology forums (Digital Transitions roundtable), and presentations in graduate university courses (George Washington University, Georgetown, University of Maryland).



Collections Digitization Imaging Services Team Lead Nathan Ian Anderson presenting at the 2022 Fall Round Table held by Digital Transitions in DC.

The Washington Post
Democracy Dies in Darkness

‘Sea monster’ graveyard mystery solved? Fossils offer signs of 230-million-year-old migration.



By [Mark Johnson](#)

December 19, 2022 at 11:00 a.m. EST

Smithsonian
MAGAZINE

SMITHSONIAN VOICES
From the Smithsonian Museums



NATIONAL MUSEUM OF NATURAL HISTORY

2022 in Review: The National Herbarium Goes Digital

In May, the museum completed a groundbreaking digitization process that brought nearly four million pressed plants online.

Jack Tamisiea

December 20th, 2022



NATIONAL AIR AND SPACE MUSEUM

Smithsonian

Visit

What's On

Explore

Learn

Give

Conserving and Digitizing Alan Shepard's Mercury Freedom 7 Suit

May 05, 2022



SCIENTIFIC AMERICAN.

How Indigenous Groups Are Using 3-D Technology to Preserve Ancient Practices

To safeguard fragile cultural objects, some groups are replicating them with digital models

By Rachel Parsons on June 29, 2022

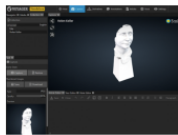
- [Enter the Sea Dragon](#) is a new online interactive that incorporates 3D models, curatorial research and storytelling in the Smithsonian 3D Voyager viewer using a new scrolling style interface)



- [Smithsonian 3D Labs](#) (a new space for experimentation and special projects involving 3D models in the Voyager viewer.)

Smithsonian 3D Labs

Special projects and experiments



Voyager Story Standalone

Create a Voyager scene directly from your browser!

[Learn more »](#)



Voyager Sonification

Hear the shape of a 3D model with the Voyager sonification tool!

[Learn more »](#)



Voyager Paint

Add some color to a Smithsonian object!

[Learn more »](#)

- A New Entomology Digitization System (Staff from Collections Digitization and the National Museum of Natural History visited the [Museum für Naturkunde Berlin](#) in May to examine a new entomology digitization conveyor system created by Picturae.)



- Quality Digitization Training Series – In September, DPO's Collections Digitization team sponsored another workshop in this training series for Smithsonian photographers and imaging staff that focused on Hasselblad equipment and software.

A Special Note:

We dedicate this report and the work it represents to our late friend and colleague, Effie Kapsalis, Senior Program Officer for Digital Strategy in the Smithsonian's Office of Digital Transformation. Effie was an ardent champion of equal access to collections and information and a wonderful collaborator who was devoted to bringing the stories of the unsung and unseen to light. She offered unwavering support to the DPO program and many kindnesses to our team.

Digitization Program Office Staff

Diane Zorich
Director, Digitization Program Office

Ken Allen
Collections Digitization, Mass Digitization Program Officer

Nathan Ian Anderson
Collections Digitization, Imaging Services Team Lead

Jon Blundell
3D Program Officer

Jamie Cope
3D Program Lead Developer

Megan Dattoria
3D Program Officer

Sara Goodhand
Collections Digitization, Informatics Program Officer

Keturah Kiehl Pratt
Policy & Analysis Support

Eric Maslowski
3D Program Product Lead (Packrat)

Erin Mazzei
Collections Digitization, Mass Digitization Program Officer

Jeanine Nault
Collections Digitization, Mass Digitization Team Lead

Jaap Otte
Director of Development, OCIO

Ken Rahaim
Supervisor, Collections Digitization Program

Vincent Rossi
Supervisor, 3D Program

Luis J. Villanueva
Collections Digitization, Informatics Team Lead

Jessica Warner
Senior Policy & Analysis Program Officer



The DPO team is known for its exuberance...

... but we're also down to earth. (DPO team retreat, held at SERC.)

From left: Jeanine Nault, Diane Zorich, Megan Dattoria, Nathan Anderson, Sara Goodhand, Luis Villanueva, Jessica Warner, Jaap Otte, Jaime Cope, Keturah Kiehl Pratt, Jon Blundell, Vince Rossi

Additional Image Credits

Cover: upper left image: 3D render of jacket and brassiere worn by Selena Quintanilla-Pérez at the 1994 Tejano Music Awards (id 1999.0104) from the National Museum of American History. Left image of silhouette portraits from the Bache Album at the National Portrait Gallery digitized by the Collection Digitization Imaging Services Team. Left image of 3D render of SpaceShipOne, the air craft to take the first commercial flight into space (id nasm_A20050459000) from the National Air and Space Museum. Left visual representation showing a botanical specimen from the National Museum of Natural History's Botany department and its associated metadata as presented via Collection Digitization's Informatics Team's utility and dashboard 'Osprey'.

Page 3: bottom image: 3D render of garments from the National Museum of American History exhibition "Girlhood (It's Complicated)"

Page 4: from top left: Akan gold weight imaged with seven views, digitized by the Collections Digitization Imaging Services Team; courtesy of the National Museum of African Art, Smithsonian Institution. Middle image showing cover of *Ebony* magazine from the Johnson Company Publishing Archive. Right image of curatorial notecard courtesy Cooper Hewitt Smithsonian Design Museum.

Annual Report Design: Nathan Ian Anderson.