

.....  
**Department News P. 1-8**

- 1 ♦ Conservators Working from Home**
- 2 ♦ Digital Preservation of Artwork**
- 3 ♦ Conservation Documentation**
- 4 ♦ Researching the Study Collection**
- 5 ♦ Technical Notes**
- 6 ♦ Identity Reports**
- 7 ♦ Professional Involvement**

**Resources, Support & Contact P. 9**  
.....



**1 ♦ Conservators Working from Home** — With The Met's Fifth Avenue, Cloisters, and Breuer buildings closed, the Department of Photograph Conservation (DPhC) is taking this opportunity to share a bit more about the areas of the conservation profession that may be less familiar to our readers. It is true that a significant portion of a conservation career takes place behind-the-scenes, but it is a misconception that this work is limited to a treatment bench or fume hood in a laboratory. Along with acquisition, exhibition, and loan responsibilities, which involve direct contact with the art, we focus on preservation initiatives, research, education, outreach, and advocacy, all of which can flourish remotely. A (virtual) peek into our home offices reveals the DPhC team engaged in a remarkable array of activities, and we invite you to enjoy this *Working from Home* edition of our quarterly Bulletin.

Supported by virtual private network (VPN) access that facilitates a direct connection to our computers at work, these last many weeks have been filled with academic research, preparing talks, creating online content for Instagram and The Met's website, educating ourselves and emerging conservators, and updating databases and files. Online meetings are essential, as conservators collaborate with allied professionals from across the Museum including scientists, designers,

curators, collection managers, and members of the administration, to name a few. Working from home has become a part of daily life, though we miss the collegiality and easy communication of our bustling lab and our many colleagues, students, and volunteers. A welcome aspect of Monday mornings is our weekly department meeting, offering the team a moment to catch up with and check in on each other, as we discuss the trajectory of the week ahead. As our work carries on apace, the metronome beat of meetings and workflow helps us all to maintain a rhythm of normalcy in these very abnormal times.

When Sherman Fairchild Conservator in Charge of Photograph Conservation **Nora Kennedy** is not attending department heads' meetings that focus on the stewardship of the Museum at this critical juncture in our history, she is meeting with individual staff members to keep up with their progress, helping fundraise for our time-based media conservation program, participating in initiatives to improve conservators' public visibility, and staying connected with colleagues internationally. Nora is on the Board of Directors of the [International Council of Museum's Conservation Committee \(ICOM-CC\)](#), and she and her fellow Board members have worked closely over the past month to reschedule the Triennial Conference originally planned for September 2020 in Beijing to later dates in 2021.



**Katie Sanderson** dedicates untold hours to professional committees, including her roles as Vice Chair of The Met's Forum of Curators, Conservators, and Scientists, and as [American Institute for Conservation's Photographic Materials Group](#) (AIC PMG) Program Chair, selecting talks and planning the professional conference held annually by the AIC. This year's meeting has been shifted to an online platform. Together with Nora, Katie teaches New York University conservation graduate students, maintaining contact with the bumper crop of three photograph conservation majors.

Part-time book conservator **Georgia Southworth** is producing online content with department administrator **Aleya Lehmann**, including this *Bulletin* and our revived Instagram account. She also is working to finalize records from past exhibitions in The Museum System (TMS), The Met's collection database. Consistent and thorough records of research and conservation treatments ensure access to object histories for future generations and inform preservation and exhibition decisions for the artwork. **Diana Díaz-Cañas**, the newest member of our team, is becoming more acquainted with many iconic photographs in The Met's collection by meticulously updating older conservation records in TMS (see page 4). As Coordinator of ICOM-CC's [Photographic Materials Working Group](#) (PMWG), she is currently planning the group's next interim meeting. Diana also is part of the [APOYOnline](#) leadership, currently proofing translations from English to Spanish. Our time-based media conservator **Jonathan Farbowitz** is working with colleagues in a number of departments on upcoming exhibitions and is improving the cataloguing and

storage practices for The Met's time-based media art. Read more below about the preparations underway to establish state-of-the-art digital storage for these artworks (see page 3). Aleya, while keeping the department on schedule, oversees the ongoing administrative tasks of the Department, manages the *Bulletin*, and our Instagram account. She continues to research and catalogue objects from our growing Photograph Conservation Study Collection (PCSC) (see page 5).

We have started a bi-weekly reading group that includes our two research fellows, **Caroline Gil** and **Bryanna Knotts**, our part-time TBM conservator, **Sasha Arden**, and current NYU graduate students **Tess Hamilton**, **Natasha Kung**, and **Cat Stephens**, and pre-program volunteer **Rachel Czajkowski**. Our current assignment is *Conservation Treatment Methodology* by Barbara Appelbaum, a foundational book that draws heavily on the theory behind conservation practice and offers an excellent jumping-off-point for discussions about decision-making and ethics.

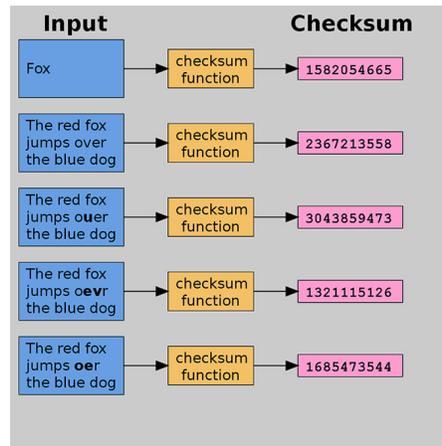
Read on to learn more about the many talks and workshops we are contributing to upcoming conferences, including the online AIC annual meeting (see page 8) as well as projects underway by Research Scholar Bryanna Knotts and Andrew W. Mellon Fellow Caroline Gil (see page 7).

This *Bulletin* celebrates our sustained commitment to research, education, and advocacy as we work to fulfill the Museum's mission while *Working from Home*.

**Department of  
Photograph Conservation**

**Follow Us**  
**@metphotoconservation**

**Images:** ♦ Left: Research Scholar Bryanna Knotts with her assistant Posey (6 months). Image credit: Dane Denby ♦ Center: Assistant Administrator Aleya Lehmann. Image credit: Mark Bench ♦ Right: Sherman Fairchild Conservator in Charge Nora Kennedy. Image credit: Nora Kennedy



**2 ♦ Digital Preservation of Artwork** — The Met has nearly 300 time-based media artworks in its collection, including film, video, audio, or software-based works. Most of these artworks arrive at the museum in the form of digital files—videos, audio files, computer source code, or scans of motion picture film or slides. In caring for these artworks, staff and Fellows in the Department of Photograph Conservation must engage in digital preservation—the process of ensuring that valuable data remains accessible and authentic over time. With remote access to their work computers, staff and Fellows can even perform some of this work from home.

Prior to Jonathan Farbowitz becoming the Museum's first time-based media conservator in 2019, The Met had been gradually improving its digital storage practices. Alexandra Nichols (former Sherman Fairchild Fellow in Conservation) and Sasha Arden (Digital Media Assistant in Photograph Conservation and student in [Time-Based Media Art Conservation at NYU's Institute of Fine Arts](#)), with assistance from collection managers Meredith Reiss and Catherine Burns, transferred files off of vulnerable hard drives, USB flash drives, and DVDs to a server dedicated to storing time-based media artworks. This was essential to make sure artwork files would remain accessible since physical storage devices like hard drives and DVDs have finite lifespans. Nevertheless, storing data in only one physical location still presents risks. Saving multiple copies of a file in different locations is a critical principle of digital preservation, equivalent to not putting all one's eggs in the same basket. Most guidelines recommend storing three identical copies of data in three geographically separated places.

Fortunately, unlike unique physical objects and analog media (like videotapes or audio cassettes), time-based media conservators can create multiple identical copies of digital files with no loss of fidelity.

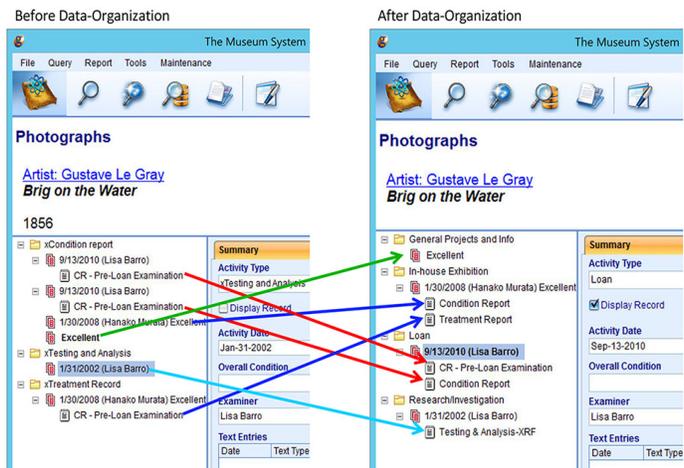
To improve the redundancy and geographic separation of its storage, The Met has entered into contract with an external storage vendor. Before copies are sent to the vendor, The Met's files will need to be prepared and cataloged. This includes updating naming conventions for files and folders to ensure that they connect properly to the object records in the Museum's collection management system. Over remote computer connections, staff can continue to access these artwork files and complete parts of this project. In the coming months, they will do the equivalent of pulling an artwork out of storage, checking its condition, making sure it is cataloged properly, and returning it to storage in a brand-new crate, all from the safety of their homes. By the project's end, staff will have looked at and improved the storage of nearly every time-based media artwork in the Museum's collection.

Maintaining the bit-for-bit integrity of files, called *fixity*, over time is also an important precept of digital preservation. Currently, The Met does not have fixity information for many of its files. For a variety of reasons, digital files can change even while sitting in storage. In the same way photograph conservators perform condition checks and conduct analysis of artworks for any observable changes, time-based media conservators have methods to check whether the files in storage have changed over time.

**Department of  
Photograph Conservation**

**Follow Us**  
**@metphotoconservation**

**Images:** ♦ Left: Associate Conservator of Time-Based Media Jonathan Farbowitz. Image credit: Catherine Ahn  
♦ Center: Diagram illustrating how a checksum value radically changes, even when a tiny bit of content in a file changes (see text on page 4). Source: Wikipedia ♦ Right: Assistant Conservator Diana Díaz-Cañías. Image credit: Braden Friscia



A value called a checksum is used to determine whether a file has changed. A *checksum* consists of a sequence of letters and numbers that results when a mathematical algorithm (such as Message Digest algorithm version 5 or MD5) is run across all of a file's data (see page 3). For example, the MD5 checksum of the image file of Jonathan working from home used in this *Bulletin* is 5ed1f774adb79ab50d341d216c6b3424. A checksum is often called the digital equivalent of a file's "fingerprint", the unique identifier against which to compare future checksums generated from the same file. If even one bit of data in the file changes (a single 1 or 0 in the binary content of the file), running the algorithm anew will result in a completely different checksum. Thus, comparing an original checksum value (created when the file is placed in storage) to a newly generated value will determine whether a file has changed.

During this project, staff will validate existing checksums or generate new ones for files that do not have them. After files are transferred to the storage vendor, the vendor will verify these checksums on a regular schedule to make sure the files have not changed. If any changes are identified in The Met's storage or the vendor's storage, the Museum will be able to access one of the identical copies held in a geographically distinct location. Although there is no substitute for working on artworks onsite, it is still gratifying to be able to use this time in quarantine to make considerable progress in caring for the Museum's time-based media artworks.

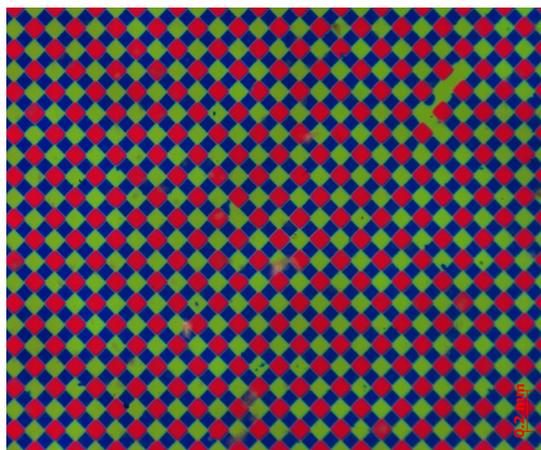
**3 ♦ Conservation Documentation** — A core ethical principle in conservation is the creation of thorough written and photographic documentation, and the retention of these records into the future. Conservators record any and all information about an artwork before, during and after exhibitions or loans, detailing technical analysis, materials research, and conservation treatment interventions. This documentation tells the history of an object, and functions as a critical resource for conservators, collection managers, and curators as they make decisions collectively about how best to use and care for the collection.

Documentation standards evolve, especially with the emergence of new tools, software, and systems. The Met tracks every object using a collections management system called The Museum System or TMS. The Department of Photograph Conservation has used TMS for nearly two decades to manage the documentation of photographs, books, time-based media, and related materials in The Met's collection resulting in a rich resource of over 22,000 conservation records. Conservators enter information into an object's TMS record according to activity, such as an exhibition, a loan, an acquisition, or a research project. Each of these larger activities may require a variety of documents, for example, condition and treatment reports, correspondence, installation instructions, or technical analysis. All of these reports are attached to the appropriate activity record, creating a useful hierarchy of data that is easy to understand.

**Department of  
Photograph Conservation**

**Follow Us  
@metphotoconservation**

**Images:** ♦ Left: Gustave Le Gray (French). *Brig on the Water*, 1856. Albumen silver print from glass negative. Gift of A. Hyatt Mayor, 1976. (1976.645.1) Image credit: Imaging Department ♦ Right: A diagram showing the shift from an older hierarchy to the new one using the TMS object record for Gustave Le Gray's 1856 *Brig on the Water* as an example. These updates establish consistency across our conservation documentation, and ensure they meet our department's current standards. Schematic image credit: Diana Díaz-Cañas



Why does this matter? First, the need for conservation documentation is in the American Institute for Conservation's (AIC) [Code of Ethics](#). Second, having clean, organized data allows conservators to spend more time with the objects and less time at their computers. This period of working from home provides a rare opportunity to focus on older records that are organized differently or only in paper files.

While working from home, Assistant Conservator Diana Díaz-Cañas is tackling the updating of over 6,000 older TMS records, elevating them to our department's current standards. Consistency is key, and this work requires a conservator's focused concentration and meticulous eye.

**4 ♦ Researching the Study Collection** — The Photograph Conservation Study Collection (PCSC) is a repository for a wide range of examples of photographic processes, presentation formats, condition issues, and general history that serves as a study tool for staff, Fellows and interns alike. The PCSC comprises non-acquisitioned objects that may be used for a variety of practical and research functions. Access to the PCSC objects is not restricted, allowing emerging conservators to learn about the wide range of photographic processes by examination under magnification and up-close visual comparison to known examples. Our Study Collection includes some severely damaged materials that offer wonderful opportunities for controlled treatment exploration. Many fine examples of rare color processes build our understanding of these unique historic precursors. Equipment and tools used in the production of photographs also populate the collection, serving

as teaching tools and—like the nineteenth-century printing frame pictured, above right—when shared with a class or visiting donors, can help bring to life and clarify an otherwise mysterious technique.

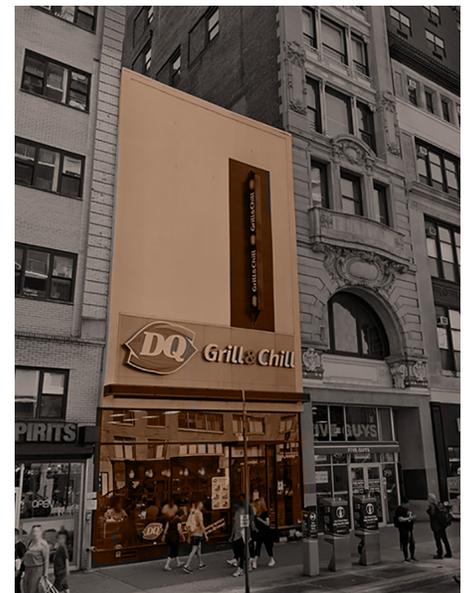
To make Study Collection materials easily searchable and more accessible, they are catalogued in our museum-wide database, The Museum System or TMS. Our administrator, Aleya Lehmann, has been researching the information necessary for cataloguing a collection of over 600 late 19th-century photographs, primarily cartes-de-visite and cabinet cards. The cataloguing process typically involves assigning a descriptive title, and recording the medium, size, and provenance for each photograph. Additionally, when possible, identification of the artist or photography studio will be assigned as a “Constituent ID”.

To date, over 100 photography studios active in the late 1800s have been researched. Details gleaned from online photography databases, ancestry databases, newspaper archives, and municipal archives help augment the records and build out the picture for each photographer, especially regarding where and when they were active. Research sometimes enlivens history as well. One revealing case was that of photographer Marcellin Dellac, who arrived in New York from France in 1869 at the age of nine. By 1885, he had set up a studio at 54 West 14th Street in a townhouse he shared with the photographers Robinson & Roe and various other commercial tenants. The story, in pictures, of the history of his studio building appears on the following page.

**Department of  
Photograph Conservation**

**Follow Us**  
**@metphotoconservation**

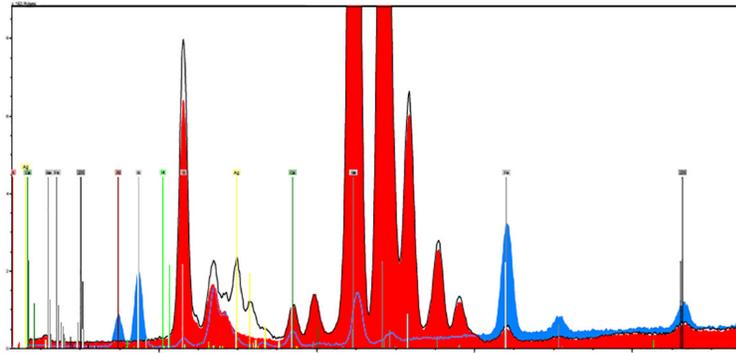
**Images:** ♦ Left: Students from a New York University Museum Studies class use the PCSC photographs to create a timeline of the history of photography during a class held in the Department. Image credit: Nora Kennedy ♦ Center: A magnified view from the PCSC Spencer color transparency sample collection of (according to the Spencer labels) “Paget screenplate 25.3.13”. Image credit: Photograph Conservation Department ♦ Right: During a Mellon Collaborative Workshop in Photograph Conservation, colleague Sabrina Esmeraldo uses a printing frame from the PCSC to create a printed-out silver image from a 19th-century paper negative graciously loaned for this purpose by curator and photo historian Roger Taylor. Image credit: Nora Kennedy



## Department of Photograph Conservation

Follow Us  
@metphotoconservation

**Images:** In-depth research into photographer Marcellin Dellac enabled us to narrow the date range for a specific portrait of his to ca. 1885-1886 based on the estimated age of the sitter, our discoveries of the sitter's birth date, and the years that Dellac was working exclusively at this address, 54 West 14th Street, from ca. 1885 to 1898. Pictured here, over the years, in highlight, is Dellac's studio building. ♦ Above, ca. 1892. Image credit: [Photographic Views of New York City, Milstein Division, The New York Public Library](#) ♦ Below left, ca. 1904. Image credit: [Landmarks Preservation Commission/Library of Congress Prints and Photographs Division](#) ♦ Center, ca. 1939-1941. Image credit: [NYC Municipal Archives](#) ♦ Right, 2019. Image credit: [Google Maps](#)



XRF spectra representative of those acquired in areas of maximum image density (darker areas, black trace), areas of minimum image density (lighter areas, red trace), and in the secondary support (blue trace). The strongest peaks for barium are shown out of range for the sake of clarity.

**5 ♦ Technical Notes** — Over the years, technical analysis has been carried out on numerous photographic works in The Met’s collection. Conservators often turn to conservation scientists and technical analysis to make informed treatment and exhibition decisions. The data gleaned from analytical techniques, such as X-ray fluorescence (XRF) and Raman spectroscopy, reveal more about a photograph than what we can see with the naked eye, even when aided by magnification. They can help to determine the primary components of the image material, identify the photographic process, and tell us about the composition of the support based on the presence or absence of certain chemical elements.

For instance, when the Adolphe Dallymagne gelatin silver print *A Russian Lady* (51.565.41) was exhibited in 2017, XRF analysis carried out by Silvia Centeno in the Department of Scientific Research (DSR) confirmed that it is not a carbon print, as it previously had been catalogued. The analysis determined the presence of silver, barium, and a relatively large quantity of sulfur indicating that this is a silver image over a baryta layer. Continuing to advance our knowledge about the material composition of the photographs in the collection informs not only their optimal preservation care, but also a deeper technical understanding of artists’ working practices.

We’re pleased that discoveries such as these are being made available to the public on The Met’s website. The results of individual analytical reports will be accessible in the ‘Technical Notes’ section of relevant object pages. The notes vary in length and complexity depending on the depth of analysis, as seen

with examples of existing technical notes on the website [here](#) and [here](#). We hope that sharing the data will encourage visitors to explore our collections on a deeper level. If you would like to learn more about the types of analytical techniques and the range of equipment used by scientists in the DSR, you can find a comprehensive list [here](#).

**6 ♦ Identity Reports** — Working from home has provided a welcome opportunity to dive into researching The Met’s time-based media (TBM) collection. One way to contribute to the Museum’s scholarship on collections is by drafting what are called “Identity Reports” on The Met’s more complex, time-based artworks. Documenting an artwork’s significant properties is one of the pillars of the TBM conservation profession. Various reporting templates, approaches, and writing styles have been utilized by TBM conservators over time, including Identity Reports, Iteration Reports and Technical Narratives.

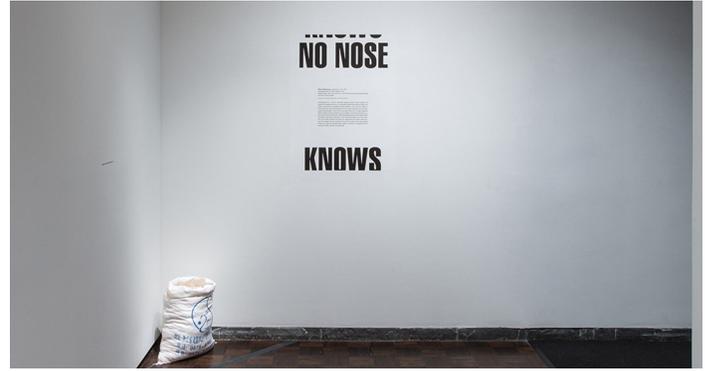
Because TBM artworks rely less on a unique physical object, and more on an installation of artwork components with many possible variables, the reigning philosophy is that no amount of information is too much. Though it is a complex task to weed through email threads, interviews, and questionnaires to get to the ‘meat’ of the artwork, these reports are ultimately a matter of collecting, organizing, and interpreting information about the artwork in a meaningful framework.

An Identity Report is critical for establishing distinguishing features, specifying the intended experience, and outlining the variable parameters of an artwork. For example, *NoNoseKnows*

**Department of  
Photograph Conservation**

**Follow Us**  
**@metphotoconservation**

**Images:** ♦ Left: Adolphe Dallymagne (French). *A Russian Lady*, ca. 1870s. Gelatin silver print, 11.5” x 8”. Gift of Lincoln Kirstein, 1951. Inscription: Collection of G. Nadar. (51.565.41) Image credit: Imaging Department ♦ Right: XRF spectra showing the presence of silver, barium, and a relatively large quantity of sulfur, indicating that this is a silver image over a baryta layer. Image credit: Silvia A. Centeno



by Mika Rottenberg (2016.556) shown at The Met Breuer in *The Body Politic: Video from The Met Collection* in 2017, is clear about the large sack of pearls that must sit outside the viewing room as being essential to the artwork. The report is informed by the artist or gallery-provided installation instructions and is meant to capture the decision-making process. It gets to the nitty-gritty of the anatomy of the work by listing dedicated components (perhaps a modified CRT monitor), pinpointing work-defining properties, such as the work's dependence upon, or the acceptable variability of, its constituent parts, and identifying risks associated with the technologies employed in the work. Each museum employs its own reporting strategy. You can peruse a few examples here: [The Met](#), [MoMA](#), [SAAM](#), and [Matters in Media Art](#).

**7 ♦ Professional Involvement** — Participation in the growing body of scholarship that supports the conservation of cultural heritage is one of the tenets of our field and attending regularly scheduled conferences is a great way to engage in this professional conversation. Conferences offer us the opportunity to share research, continue our own professional development, and catch up with counterparts in sister institutions and allied fields. As many domestic and international professional associations are moving their conferences to online platforms this year due to the coronavirus, many of the DPhC conservators are preparing presentations to deliver virtually.

#### From the AIC Annual Meeting, 2019:

[New Tactics Panel – The Evolving Role of the Conservator of Contemporary Art](#). As part of the 2019 AIC program, former Fellow Alex Nichols presents a talk (see 34:34 to 45:45) and Glenn Wharton and Nora Kennedy join a panel discussion (see 55:08 onwards).

**AIC Annual Meeting, 2020: “[Conservation: Reactive and Proactive](#)”**, how climate change and a volatile economy are affecting the preservation priorities in collecting institutions.

[Introduction to Digital Preservation and Storage](#), Jonathan Farbowitz, Amy Brost, Alexandra Nichols, Tawnya Keller, and Mike Thuman. June 17-19, 2020, 1-3pm.

Conservation of a Software-Based Sound Installation: MoMA's restaging of David Tudor & Composers "Inside Electronics Rainforest V (Variation 1), or Rainforest in the Field", with Caroline Gil. July 14, 2020.

El cuarto del Quenepón: Collaborative and Cross-Disciplinary Approaches in the Preservation of Time-Based Media on the Web, with Caroline Gil, Amye McCarther, Danielle Calle and Claire Fox. July 14, 2020.

The Niepce Heliograph, at the Harry Ransom Center. Diana Díaz-Cañas and Heather Brown. August 14, 2020.

#### Other staff and Fellow Involvements, 2020:

12 PHOTOS & 12 VOICES: The Acton Photograph Archive Digitization Project, Villa La Pietra, NYU, Florence, Italy. Nora Kennedy is one of 12 speakers and panelists. May 19, 2020.

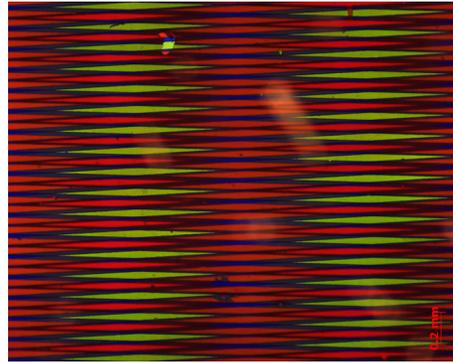
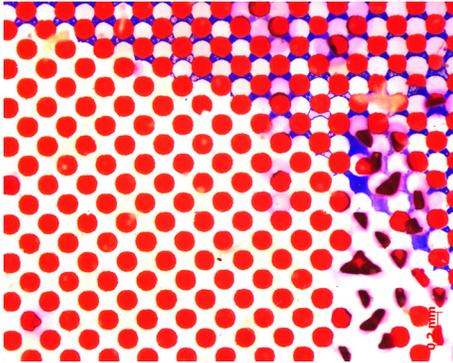
Disk Imaging Workshop, National Museum of African American History and Culture, with Caroline Gil and Eddy Colloton, Date TBD.

[Conservation of Video Art Workshop](#), hosted by MoMA. Funded by the Andrew W. Mellon Foundation, with Caroline Gil. Date TBD.

**Department of  
Photograph Conservation**

**Follow Us**  
[@metphotoconservation](#)

**Images:** ♦ Left: Andrew W. Mellon Fellow Caroline Gil. Image credit: Caroline Gil ♦ Right: Installation view of the large sack of pearls, an essential part of Mika Rottenberg's TBM artwork *NoNoseKnows* at The Met Breuer in 2017. Mika Rottenberg (Argentine). *NoNoseKnows*, 2015. Single-channel digital video, color, sound, 22 min., commercial woven polypropylene bag, and 50 kilos cultured pearls. Purchase, Lila Acheson Wallace Gift, 2016. (2016.556) Image credit: Imaging Department



### Pandemic Online Resources

Guidelines and recommendations for care of collections as well as the health and safety of museum professionals have been posted by many museum, library and archive associations globally. Please see below for more information from various organizations.

**International Council on Museums (ICOM)** [Recommendations for the conservation of museum collections during the pandemic](#)

**Institute of Museum and Library Services (IMLS)** [COVID-19 Resources for Libraries and Museums and Research on safe handling of collections and reopening in light of COVID-19](#)

**American Alliance of Museums (AAM)** [Managing Collections Care During Pandemics](#)

**Foundation for Advancement in Conservation (FAIC)** [Collections Care in the Age of COVID-19](#)

**American Institute for Conservation (AIC)** [Online Community Resources](#)

**Library of Congress (LOC)** [The impact of hand sanitizers on collection materials](#)

**American Library Association (ALA)** [Handling Library Materials and Collections During a Pandemic](#)

**Canadian Conservation Institute (CCI)** [Caring for Heritage Collections during the COVID-19 Pandemic](#)

**Department Info & Contact**  
Department of Photograph Conservation/Sherman Fairchild Center for Works on Paper and Photograph Conservation  
The Metropolitan Museum of Art  
1000 Fifth Avenue  
New York, NY 10028  
212-570-3810  
[aleyalehmann@metmuseum.org](mailto:aleyalehmann@metmuseum.org)  
[metmuseum.org/about-the-met](http://metmuseum.org/about-the-met)

**Bulletin No. 18**  
Editors: Nora W. Kennedy and Georgia Southworth  
Managing Editor: Aleya Lehmann

[Bulletin No. 17](#) March 2020

[Bulletin No. 16](#) December 2019

### Support

With steadfast commitment and support from our friends, The Met's Photograph Conservation Department continues to thrive and be a crucial resource for the preservation of works of art, as well as a vibrant center for research.

To learn more about how you can become involved and support this critical area at The Met, please contact:

**Office of Development**  
212-650-2352 or by email at [marilyn.hernandez@metmuseum.org](mailto:marilyn.hernandez@metmuseum.org)

**Contribute Online**  
Donations can be made [online](#). Within "Tell Us About Your Donation" please indicate that your donation is "For Department of Photograph Conservation".

**Department of Photograph Conservation**

**Follow Us**  
[@metphotoconservation](#)

**Images:** ♦ Three magnified views of the PCSC Spencer color transparency sample collection include (according to the Spencer labels) "Thames 3, redblue" (left), "Warner Powrie" (center), and "Thames 28.5.09" (right). One of the challenges in the early history of color photography was to introduce a means of presenting three colors in a repeating pattern that would translate into a full-color image when viewed with the naked eye. Image credits: Photograph Conservation Department