Earth and Mineral Sciences
MUSEUM & ART GALLERY

FISCAL YEAR 2019-20

JANE COOK, DIRECTOR
&
JULIANNE SNIDER, MANAGING DIRECTOR

JUNE 30, 2020

College of Earth and Mineral Sciences

John Leone Dean in the College of Earth and Mineral Sciences
Lee Kump

Earth and Mineral Sciences Museum & Art Gallery

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Mission Statement
The mission of the Earth and Mineral Sciences Museum & Art Gallery is to serve the college, University, and broader community as an informed educational and technical resource for science, art, and history of the earth and mineral sciences through the preservation, utilization, and promotion of our diverse collections.

Unless otherwise credited, photographs and images included in this report were created by staff of the College of Earth and Mineral Sciences or staff of the Earth and Mineral Sciences Museum & Art Gallery.

Front Cover: *Coal Picking Tables*, Wildwood, Pennsylvania, 1930, oil painting by Esther Topp Edmunds (1893–1954). Steidle Collection of American Industrial Art catalog number EMS080. Wildwood in Allegheny County, Pennsylvania, was designed as a fully mechanized coal mine—one of the first in the United States. Machine-cut, unsorted material was sent from the mine to the tipple where it was mechanically screened and separated into impurities, crushed coal, and lump coal. Lump coal was loaded onto picking tables—paired, vibrating conveyor belts. At the picking tables workers inspected the coal and removed any substandard material. The picking tables were lit from above by lamps on adjustable arms. These innovations were captured in a black and white photograph published in a coal trade publication. Not allowed into the coal works, Edmonds used the published photograph as reference material for her painting of the tables in operation. Edmonds was an associate professor at the Carnegie Institute in Pittsburgh.

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Letter from the Director

This is an historic time. We are in the midst of a global pandemic that has, as of the date of this writing, killed over a million people worldwide. The physical space of the University closed down for months in spring to support the isolation needed to suppress the outbreak locally. Although classes and research are now happening in limited ways months later, the methods and mood are far from what we knew as normal. In the University Park area thousands have been infected, and more than a hundred have died.

Yet, here we are. The EMS Museum & Art Gallery has continued its stated mission to utilize our collections to tell the community and the world about the on-going story of research and education in the college. It has been a productive and fruitful time. We had significant momentum and accomplishments through the first eight months of the reporting year and we have shown resilience and dynamism in the months of the pandemic.

I thank my predecessor, Russell Graham, for his years of work to re-establish the Museum & Art Gallery as an integral part of the college, to get so much of it out of boxes, and into the hearts and minds of the college and community. We move forward now on firmer ground because of his leadership. Thank you, Russ.

I began the year with the establishment of a formal Vision Statement to augment the museum's mission statement. The EMS Museum & Art Gallery isn't just a museum *in* the college; it is *the museum of the college*. I felt it of critical importance to acknowledge and celebrate the synergy in diversity of the disciplines in EMS, to enable the next steps in the museum's growth and engagement, to pull motivated individuals and resources from all the departments, and tell the big systems story: planet-humans-atoms as one integrated object of study. I am deeply grateful for how this vision has been embraced and amplified by Dean Kump, the museum's advisory board, and the museum staff.

I wish to highlight several major museum happenings that shaped 2019–20:

- Accreditation—although we learned in October 2019 that our application for accreditation by the American Alliance of Museums was not successful, the assessment reports from the Accreditation Committee provide us with critical benchmarking information. The report's data, perspectives, and suggestions have been invaluable in making the case to the Dean and Provost for the targeting of resources to critical needs and opportunities. We plan to re-apply for accreditation after deficiencies are remedied.
- Renovation—In early fall, we began work on the creation of a new, integrated gallery space on the first floor of the Deike Building. We were able to acquire space immediately adjacent to one of our galleries (as the second gallery was given over to an expansion of the college's student center). The result will be a single, large gallery in which to collocate all our art, mineral, and technology content in more integrated, holistic ways

in line with the museum's vision and mission, and address some significant deficiencies identified in the accreditation report. The construction work (delayed several months due to pandemic) is now in full-swing, and we hope to re-open the galleries by mid-2021.

- Staffing—We were fortunate to have Haven Diehl as our hard-working curatorial assistant under an IMLS grant, for most of the year, and were sad to see her go. A surprise hiring opportunity arose in early 2020. Building again on the deficiencies identified in the accreditation report, a case was made successfully to bring onboard a full-time collections manager. You'll hear more about Dr. Julien Kimmig in next year's report, but suffice to say that filling this long-needed position with a stellar candidate is a boon to the care and promotion of the museum's collections. We've also benefitted this year from a number of enthusiastic volunteers, particularly programs and support from a cadre of graduate students from throughout EMS who took the name SoMuSE—the Society for Museum Science Education—led by Claire Cleveland.

Lastly, I'd like to thank the museum's Board of Advisors, chaired by Maureen Feineman, for their unflinching support. I have valued greatly their assistance, oversight, suggestions, and motivating energy, as the challenges of my first year in the position, and of this particularly difficult year, have presented.

Respectfully submitted,
Dr. Jane Cook
Director, EMS Museum & Art Gallery

Earth and Mineral Sciences Museum & Art Gallery Exhibition Activity

The Bearded Lady Project

The year's exhibition activities began with the deinstallation of the traveling exhibit *The Bearded Lady Project: Challenging the Face of Science*. EMS Museum & Art Gallery hosted the exhibit—a collection of 39 black and white framed photographic portraits—in the museum's art and mineral gallery on the ground floor of the Deike Building during the fourth quarter of 2018 and first half of 2019. The project, an ever expanding, collaborative endeavor between artists and geoscientists, has resulted in a number of products including the photography exhibit and a film. The film and the exhibit were central to several outreach activities in and around the museum galleries. *The Bearded Lady Project* was designed to challenge public perceptions of what paleontologists look like. The co-creator of the exhibition, Dr. Ellen Currano, received her Ph.D. in EMS geosciences from Penn State in 2008.

Women's Work and *Mineral is the Medium*

During the fourth quarter of 2019, *Women's Work*, an exhibition featuring painting and prints from the Steidle Collection of American Industrial Art and products of research by women from the Department of Geosciences in the College of Earth and Mineral Sciences, was installed in the museum's art and mineral gallery. Central to the exhibition were twenty-six paintings and prints from the Steidle Collection, all created by 20th century women artists, plus a magnificent 21st century watercolor loaned to the museum by Carolyn Latanision. The art depicted scenes of extractive industries' landscapes and interiors with mines, mills, company towns, transportation, neighborhoods, and laborers that once thrived throughout the Commonwealth. Displays of geoscientific research ranged from senior thesis projects recreating environments based on invertebrate fossils to senior researchers' work exploring the geochemistry of fossil algae.

Complimenting *Women's Work* was *Mineral is the Medium*, an exhibit that juxtaposed minerals and rocks from the EMS Museum & Art Gallery's Earth Materials Collection with objects of art made from minerals and rocks. The exhibit grew out of the InterDomain course, ARTH/GEOSC 107N Rocks, Minerals, and the History of Art, developed and taught by Maureen Feineman (Geosciences) and Heather McCune Bruhn (Art History). Natural and manufactured objects on display were viewed

by students in the ARTH/GEOSC 107N course as well as in the course Ancient to Medieval Art ARTH 111 in order to compare real geological specimens and objects made from rocks or minerals to the digital images presented in course lectures. In conjunction with the exhibit, Bruhn conducted multi-station, participatory workshops next to the museum's galleries in which students handled raw geological materials and used artists' tools to alter those materials, e.g., grinding ochre in a mortar and pestle to make naturally pigmented paints. The objective of these workshops was not to create works of art but to foster an understanding of natural materials and to build an understanding of the tangible intersections of science and art. The rocks and minerals used in the workshop were not from the EMS Museum & Art Gallery collections.

Women's Work and *Mineral is the Medium* were scheduled to be on view throughout 2020, the Year of the Woman. Both exhibits were removed from the Deike Building after University buildings were closed due to coronavirus pandemic precautions. Components of the exhibits will be reconfigured and reinstalled in the museum's expanded exhibit gallery during summer 2021 after the ground floor Deike Building renovations are complete.

Found in Collection

On March 5, 2020, *Found in Collection* was installed in a display case in the museum's science gallery. *Found in Collection* was designed to be a changing physical exhibit built from the virtual exhibit/blog created as a feature for the EMS Museum & Art Gallery Facebook page. Initiated by Jacob Kaminski geosciences '19 the virtual *Found in Collection* is an ongoing series of short articles and images of interesting objects from the EMS Museum & Art Gallery collections. Starting in January 2010, Kaminski began volunteering at the museum's Center for Research, Education, and Collections (CERC) as a curatorial assistant helping to rehouse the Earth Materials Collection. As he worked with the collection, he became intrigued by a variety of interesting-looking objects—zincox, gypsum and selenite, uraninite—that rarely are put on exhibit. Kaminski's posts to Facebook garnered many likes and several queries about where the real objects could be seen. Hence a physical *Found in Collection* was created.

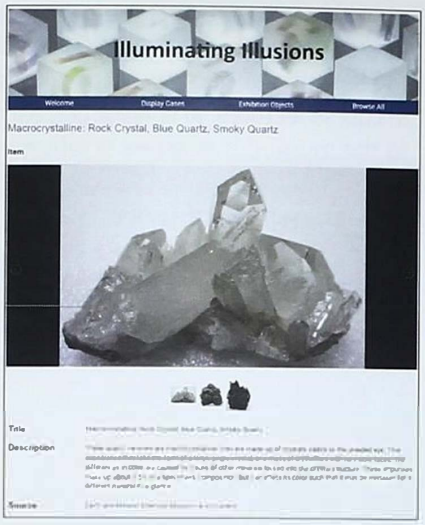
Eclectic Collections and *Illuminating Illusions*

The EMS Museum & Art Gallery participated in two exhibits that were hosted in the first floor lounge of HUB-Robeson Center during 2019 and 2020. Both exhibits were Penn State Museum Consortium (PSUMC) collaborations. PSUMC is a network of museum and archival professionals and education specialists associated with the unique learning facilities and irreplaceable collections at University Park.

Eclectic Collections was a selection of unique objects from the Earth and Mineral Sciences Museum & Art Gallery, Eberly Family Special Collections Library, Frost Entomological Museum, Matson Museum of Anthropology, Palmer Museum of Art, Pasto Agricultural Museum, Penn State All-Sports Museum, Radiation Science and Engineering Center, Woskob Family Gallery, and HUB-Robeson Galleries. The exhibit was designed to encourage viewers to place their own meanings on the objects on display. To some it might appear to be an accumulation of interesting objects. To others it might look like a research collection for science, art, or the humanities.

Illuminating Illusions explored various facets of illusions in science, art, literature, and nature. This PSUMC exhibit showcased objects and illusion examples that were relevant to current culture, scientific discovery, or

both. The EMS Museum & Art Gallery contribution to *Illuminating Illusions* was a suite of seven quartz (SiO2) specimens that each exhibited very different visual characteristics ranging from clear, to iridescent, to a translucent color, to solid bands of color depending on their amorphous, microcrystalline, or macrocrystalline structures. Along with the EMS Museum & Art Gallery, PSUMC member organizations Center for the Performing Arts, Eberly Family Special Collections Library, Frost Entomological Museum, Matson Museum of Anthropology, Palmer Museum of Art, Pasto Agriculture Museum, Penn State Herbarium, Radiation Science and Engineering Center, and the Woskob Family Gallery contributed objects to the exhibit. Illuminating Illusions opened on February 2, 2020. On March 15, 2020 the exhibit was converted to an online display by Penn State's Visual Resources Center.



Deike exhibit gallery renovations

The museum's two exhibit galleries were included in renovation plans for the ground floor of the Deike Building. Plans call for the Ryan Family Student Center to expand into the museum's art and mineral gallery space and the museum's science gallery to incorporate classrooms 008 and 010 into its footprint. The result will be that all of the EMS Museum & Art Gallery exhibitions will be staged in one space. This will allow us to develop integrative exhibitions incorporating pieces from all of our collections to better tell the stories of the research, teaching, and history of the College of Earth and Mineral Sciences. In preparation for the renovation work, museum personnel

emptied every exhibit case, wrapped and packed paintings, minerals, fossils, and all other objects on display, removed labels and graphics, took down lights, and wrapped large pieces that could not be removed from the gallery in archival materials, cushioning, and canvas to keep them safe. By June 2020, the galleries were empty, dark rooms waiting for renovation crews to tear out walls, replace flooring, upgrade the HVAC system, install a new lighting system, and create a new space in which to showcase the EMS Museum & Art Gallery.

Earth and Mineral Sciences Museum & Art Gallery Collections Activity

Steidle Collection of American Industrial Art conservation

Care and conservation of museum collections includes everything done to avoid and ameliorate the deterioration of collection objects and their associated information. These stewardship measures support the EMS Museum & Art Gallery's efforts toward engaging in best practices of collection management, exhibition, interpretation, and preservation of all of the EMS Museum & Art Gallery collections. Preventive conservation measures are carried out by the museum staff, but restorative conservation of works in the Steidle Collection of American Industrial Art is done by professional art conservators. This conservation work is supported by the Steidle Family Art Collection Maintenance Endowment.

During the 2019–20 fiscal year, thirty-five oil paintings from the Steidle Collection received conservation treatments. When the paintings were subjected to a piece-by-piece condition assessment in 2013, they were assigned a priority ranking for treatment—priority 1 (in the worst condition needing immediate conservation treatment) through priority 4 (needs no treatment). Highlights from this year's conservation project include having the last four priority 2 paintings treated and purchasing replacement frames for five paintings. Frames replaced were determined to be either not stylistically compatible with the rest of the collection or damaged beyond repair. With the completion of priority 1, urgent restorative conservation needs of oil paintings have been resolved. Preventive conservation of the Steidle Collection continues.

Earth Materials Collection (i.e., Geological Collection) stewardship

Progress on our multi-phased Geological Collection stewardship project continues. The project focuses on databasing, digitizing, rehousing, and providing better environmental conditions for the museum's more than 18,000 earth materials specimens (e.g., rocks, minerals, fossils). We began Phase I of the project in 2013 with three years of funding awarded to the museum by the Institute of Museum and Library Services (IMLS). Phase II began in 2017 and was funded through a second three-year grant from IMLS.

During Phase II we were able to replace outdated, inefficient, wooden collections storage furniture with an array of brand new, customized, powder-coated steel cabinetry built and installed by Delta Designs Ltd. from of Topeka, Kansas. Eighty percent of the earth materials collection have been rehoused in the new cabinetry. In addition to funds for cabinetry, Phase II funding enabled us to: bring in mineral conservator Robert Waller of Protect Heritage Corp. to conduct a piece by piece condition assessment of the earth materials collection; hire Haven Diehl for two years as our curatorial assistant; and purchase materials and supplies for creating microclimates and other specialized storage environments within the new cabinetry. Waller worked with Diehl to identify minerals requiring special handling and housing because of their toxicity, radioactivity, fragility, or other physical and chemical characteristics. Subsequently, Diehl became instrumental in organizing and rehousing the collection based on the storage condition needs of specimen types and the environmental conditions of the museum's collections storage rooms and furniture.

September 30, 2020 marks the end of Phase II of the Geological Collection stewardship project. A proposal will be submitted to IMLS later in 2020 seeking Phase III funding to purchase additional cabinetry for our earth materials and complete the Earth Materials Collection rehousing work and enable as well as launch the first phase of our Technology Collection stewardship project. Museum collections stewardship is a continuing and continuous endeavor that we are committed to for all or our EMS Museum & Art Gallery collections—the Steidle Collection of American Industrial Art, the Earth Materials Collection, and the Technology Collection (e.g., historic mining lamps, mine safety devices, map making tools, teaching and research equipment). By following established best practices of museum collection care and management our diverse yet thematically related collections of the EMS Museum & Art Gallery will continue to be available for research, teaching, learning, and exhibitions into the future.

ExTerra Field Institute and Research Endeavor: Western Alps (E-FIRE) collection

Photo courtesy Josh Garber

The EMS Museum & Art Gallery has been designated the repository for rock samples collected during the international collaborative E-FIRE Field Institutes project. Funding from the project facilitated the purchase of storage furniture and the extension of Haven Diehl's curatorial assistant duties to include developing protocols for housing and managing the collected material at the EMS Museum & Art Gallery Center for Education, Research, and Collections (CERC). Samples collected are assigned International GeoSample Numbers (IGSNs) and registered with the System for Earth Sample Registration (SESAR). To manage the samples housed at CERC, Diehl incorporated the IGSN and SESAR data into the museum's collections management database software to create searchable records of where each sample and its corresponding daughter samples were located in the cabinetry. The collections management database will be instrumental in tracking the use and distribution of the E-FIRE material as well as ensuring the retention and accessibility of archived samples.

"Deike Granites" retrieval and conservation project

The twenty-four igneous-rock panels that were on display on the ground floor of Deike from 1967 to 2004 have spent the last several years laying on pallets on open shelving in an EMS Energy Institute storage facility gathering coal dust...but they have not been forgotten. This year, we worked with Materials Conservation, an architectural conservation company, to conduct a condition assessment of each panel as the first step toward placing

the panels back on display in the college. In 2014, we selected Materials Conservation to assess and remove three large plaster maps from the Steidle Building where they had been many decades. One of the maps, the 1893 plaster map of Pennsylvania geology, underwent a year-long conservation treatment in Materials Conservation's Philadelphia facility before they returned the map to University Park and installed it in the museum's exhibit gallery in the Deike Building. We are looking forward to receiving the assessment report and interacting with this group of talented conservators again as we formulate plans for reinstating the panels as spectacular examples of earth materials and processes.

Loans from the EMS Museum & Art Gallery collections

The EMS Museum & Art Gallery continues to receive a steady stream of loan requests from Penn State faculty and students. This year we loaned objects from our Earth Materials Collection and Education Collection to faculty researchers looking for specimens and objects from the EMS Museum & Art Gallery collections they could use when creating digital presentations and films for teaching and for calibrating laboratory equipment to further their research activities. We supplied objects to graduate students working as teaching assistants and needing three-dimensional examples to help them convey information and concepts to students in their laboratory classes. Additionally, we provided collection objects to students (undergraduate and graduate) acting as content experts and educators in Upward Bound Math and Science camps, Nittany Mineralogical Junior Education Day, and the EMS Geoscience Club's National Fossil Day event held in the HUB-Robeson Center.

EMS Museum & Art Gallery collection acquisitions

The continued success of rehousing EMS Museum & Art Gallery collections has enabled us to implement best practices of collection stewardship. Among these best practices are critically evaluating what objects are in the collections, why they are in the collection, and what needs to be in the collections to fill in gaps. Rather than accept all offered gifts of collection objects, we base our acceptance of objects on their relevance to our mission,

the completeness of their provenance, and the stories the objects can tell. In January 2020, we accepted gift of a family's collection of jewelry and buttons from Julia Nelson Glover, the daughter of Eric Thompson Nelson who received his Ph.D. in fuel technology from the college in 1961. The collection was started by one of Nelson's relatives in the mid-1800's when they lived on the east coast of England. The bulk of the collection is hand-carved from Whitby Jet, a type of gemstone found in the shales of North Yorkshire coastline. Jet is also a type of lignite coal. The Nelson collection also contains objects make in the 19th and 20th centuries from materials that mimic the look of Whitby Jet—black glass, Bakelite, ebonite, and polyester resins. The collection, embodying and illustrating stories of geologic processes, technology and manufacturing, material sciences, and decorative art, is a welcome asset to the diverse collections of the EMS Museum & Art Gallery.

Earth and Mineral Sciences Museum & Art Gallery Outreach Activity

EMS Museum & Art Gallery outreach efforts were expanded in 2019 with the founding of SoMUSE. The Society for Museum Science Education (SoMuSE) is a group for EMS graduate students with an interest in science communication and informal education in a museum setting. An essential part of building awareness of and engagement with the museum throughout the college is to give the students a stake in programming the museum by acting as docents for tours, hosting events in the space that emphasize the museum and college's values, and identifying other students who have similar interests.

Sadly, all in-person outreach endeavors were halted in March 2020 when Pennsylvania shut down in reaction to the coronavirus pandemic. To continue reaching out and expanding our audience, the EMS Museum & Art Gallery increased its on-line presence by increasing collection-related posts on its Facebook site and sharing those posts to other sites, e.g., Industrial Heritage and Art, Natural History Collections, and College of Earth and Mineral Sciences.

Earth and Mineral Sciences Museum & Art Gallery Acheivements

Exhibits

The Bearded Lady Project
Women's Work
Mineral is the Medium
Found in Collection: Objects from Facebook posts
PSU Museum Consortium collaborative exhibit: *Eclectic Collections*
PSU Museum Consortium collaborative exhibit: *Illuminating Illusions*

EMS Museum & Art Gallery Online Presence

Facebook <https://www.facebook.com/EMSMAAG>

Although the EMS Museum & Art Gallery has maintained a Facebook page since December 2017, there was relatively little activity until early 2020. With the mid-March 2020 coronavirus pandemic closures, the EMS Museum & Art Gallery Facebook site became our primary outreach platform. EMS Museum & Art Gallery staff and volunteers created 26 original posts before June 30, 2020.

Found in Collection series

Kaminski, J., *Zincox* (07 February 2020)
Kaminski, J., *Gypsum, Selenite & Desert Roses* (15 February 2020)
Simmons, J. E., *Asphaltum* (26 February 2020)
Simmons, J. E., *Asbestos* (17 March 2020)
Kaminski, J., *Uraninite, Gummite* (24 March 2020)
Diehl, H., *Amethyst* (31 March 2020)
Cook, J., *Shaw's Standard Test for Explosive Mine Gases* (02 April 2020)
Cook, J., *The Obelisk or The Polylith* (05 May 2020)
Diehl, H., *Kobberkis label* (09 April 2020)
Diehl, H., *Gneiss* (10 May 2020)
Snider, J., *Bedford Limestone* (14 May 2020)
Simmons, J. E., *Seal on Rock* (16 April 2020)
Snider, J., *Volcanic Pumice* (18 May 2020)
Simmons, J. E., *Cinnabar* (21 April 2020)
Simmons, J. E., *Sal Ammoniac* (02 May 2020)
Simmons, J. E., *Stone Ax* (31 May 2020)
Simmons, J. E., *Fossil Trackway* (08 June 2020)
Simmons, J. E., *Dendrites on Sandstone* (17 June 2020)
Simmons, J. E., *Mountain Leather* (25 June 2020)
Simmons, J. E., *Peat* (30 June 2020)

Art & Science Online series

Snider, J., *The Drama of Steel* (25 March 2020)
Snider, J., *Women's Work* (29 March 2020)
Snider, J., *Quarries, Kilns & Crushers* (09 April 2020)
Snider, J., *Bee-Hives & By-Products* (27 April 2020)
Snider, J., *Art & Science of Glass* (26 May 2020)

Miscellany

Simmons, J. E., *Darwin's Birthday* (12 February 2020)

Visual Resources Center

The EMS Museum & Art Gallery began working with Penn State's Visual Resources Centre (VRC) in 2019. Using Omeka S publishing platform for connecting digital cultural heritage collections online, VCR has created web pages highlighting EMS Museum & Art Gallery collections.

The Steidle Collection of American Industrial Art
https://exhibitions.psu.edu/s/EMSMuseum-Steidle-collection/page/welcome

The Steidle Collection of American Industrial Art: Women's Work
https://exhibitions.psu.edu/s/EMSMuseum-Steidle-collection/page/women-s-work

Penn State Museum Consortium collaborative exhibits: Illuminating Illusions
https://exhibitions.psu.edu/s/illuminating-illusions/page/welcome

Collections Activities

*Conservation**
Steidle Collection of American Industrial Art

Yarnall Abbott, *Paving Block Cutters*, ca 1936, oil on canvas, 20 x 25"
Edmund Ashe, *Steel*, n.d., oil on canvas, 62 x 48"
Homer Franklin Bair, *Changing a Bee Hive Coke Oven*, n.d., oil on canvas, 24 x 28"
Charmian Christy, *Charcoal Blast Furnace*, 1937, oil on canvas, 18 x 28"

* Care and conservation of museum collections includes everything done to avoid and ameliorate the deterioration of museum collection objects and their associated information. These measures support the museum's efforts to practice good collections stewardship while exhibiting and interpreting its collections to preserve them for future generations. Preventive conservation measures are carried out by the museum staff, but restorative conservation of works in the Steidle Collection of American Industrial Art is done by professional art conservators and is supported by the Steidle Family Art Collection Maintenance Endowment.

Richard Harrison Crist, *Early Morning Man-Trip*, 1934, oil on canvas, 36 x 50"
Richard Harrison Crist, *Steel Works on Monongahela*, 1933, oil on canvas, 24 x 30"
Richard Harrison Crist, *The Coal Picking Belt*, 1934, oil on canvas, 36 x 51¼"
Richard Harrison Crist, *The Old Mine Mule*, 1934, oil on canvas, 30 x 36"
L. W. Blanchard, *Homestead Mills in Depression*, 1937, oil on canvas, 33 x 41½"
Howard Ellis, *Brick Plant in Winter*, ca 1935, oil on canvas, 36 x 30"
C. Kermit Ewing, *Fairview Avenue*, Pittsburgh PA, 1937, oil on Masonite, 24 x 30"
Aaron Henry Gorson, *Bessemer Blow at Night*, n.d., oil on canvas, 27¼ x 34¼"
Ludwig Henning, *Coke Ovens, Franklin Plant*, 1934, oil on canvas, 32 x 36"
Ludwig Henning, *Refractories Plant, Johnstown, Pa.*, 1935, oil on canvas, 26 x 36"
Walter Huber, *Rolling Mill, Harrisburg, Pa.*, n.d., oil on canvas, 25 x 30"
Walter Huber, *Tapping the Heat: Central Iron and Steel Co., Harrisburg, Pa.*, n.d., oil on canvas, 36 x 30"
Leon Kelly, *Landscape with Two Figures*, n.d., oil on canvas, 12 x 16"
Quentin McChristy, *Miners*, n.d., oil on canvas, 25 x 34"
Clarence McWilliams, *Gas Wells*, n.d., oil on Masonite, 25 x 30"
John Moffitt, *Cornwall Iron Pit*, 1935, oil on canvas, 30 x 36"
Sylvio Carl Regutti, *Sand and Gravel Works*, 1936, oil on canvas, 16 x 20"
Raymond Secrest, *Oil World of Today*, n.d., oil on canvas, 24 x 36"
Inez Dunnick Smith, *The Quarry*, Bellefonte PA, n.d., oil on panel, 24 x 30"
Sara K. Stang, *Oil Well*, ca 1943, oil on canvas, 24 x 30"
Charles J. Taylor, *Neville Island, Pittsburgh, Pa.*, 1928, oil on canvas, 22 x 27"
Alan Thompson, *Millvale, Pa. Company Row*, 1941, oil on canvas, 24 x 33½"
Robert Valentine, *Abandoned Limestone Quarry*, n.d., oil on panel, 16 x 20"
Robert Valentine, *Whiterock Cement Kiln*, n.d., oil on panel, 16 x20"
Robert Valentine, *Bell Mine Tipple, Bellefonte Pa.*, n.d., oil on panel, 16 x 20"
Carl A. Walberg, *Liquid Steel*, ca 1935, oil on canvas, 30 x 40"
Christian Walter, *Beehive Coke Oven Plant*, n.d., oil on canvas, 22 x 30"
Christian Walter, *Bringing in the Gas Well*, n.d., oil on canvas, 32 x 24"
Christian Walter, *Drilling for Oil*, 1937, oil on canvas, 32½ x 24½"
Christian Walter, *The Five-Spot System: Secondary Recovery of Petroleum*, n.d., oil on canvas, 23½ x 32"
Howard L. Worner, *Big Steel*, ca 1951, oil on Masonite, 37 x 57"

Outgoing loans

Maureen Feineman, 3 specimens of native metals, for use in classroom demonstrations
Gabrielle Rossetto Harris, 8 mineral specimens for use at Nittany Mineralogical Society Mineral Junior Education event
Catherine Hanagen, 15 mineral and rock specimens for use in Upward Bound Math and Science Earth Science program
Julie Cosmidis and Jenn Macalady, 31 mineral specimens for equipment calibration use
Lindsey Jacks, 3 fossil specimens for display on Geoscience Club National Fossil Day information table
Allison Karp, 14 vertebrate fossil and osteology specimens for use in GEOSC 201, Paleobiology laboratory sections
Allision Karp Tylor, 15 vertebrate osteology specimens for use as dentition and locomotion teaching materials, Geobiology GEOSC 204

Incoming loans

Carolyn Latanision, original water color painting *Coke Oven Door Shut* for inclusion in *Women's Work* exhibit
Richard Alley, ventifact from Antarctica, for use in planned exhibit on rocks and weather

Material donations

George Henning, books:
Landsberg, Helmut. (1944). *Physical Climatology*. State College, PA: School of Mineral Industries, The Pennsylvania State College. 281 pp.

Pennsylvania State College. School of Mineral Industries. Mineral Industries Extension Service. (1938). *Extension Course in Ferrous Metallurgy, Volume 2, 2nd Edition*. State College, PA: School of Mineral Industries, The Pennsylvania State College. 435 pp.

Jones, Donald C. (1939). *Coal Mining, Volume 1, 2nd Edition*. State College, PA: School of Mineral Industries, Division of Mineral Industries Extension, The Pennsylvania State College. 422 pp.

Jones, Donald C. (1941). *Coal Mining, Volume 2, 2nd Edition*. State College, PA: School of Mineral Industries, Division of Mineral Industries Extension, The Pennsylvania State College. 515 pp.

Julia Nelson Glover, collection of objects carved from Whitby Jet (form of lignite) and jet-like materials plus associated ephemera.

William Betz, Pyrometer: handheld, disappearing filament pyrometer

Scheduled museum tours

Jan 2020, Clarion County Homeschool group, 69 participants

Girl Scout troop, ages 12–13, 19 participants

Programs & events participation

American Alliance of Museums Accreditation Commission visiting committee site visit, 27–29 August 2019

Identifications, questions & consultations

Simmons, J. E., Advised Pennsylvania Fish & Game Commission officers on preservation issue

Snider, J., Walt Jones, Mazon Creek fossils

Publications

Cook, J. Coalescence of Glass Art and Glass Science, *Bul. Am. Cer. Soc., 99*(4): 3–35.

Cook, J. Apparatus and method for forming the outer layers of a glass laminate sheet, 2019, US Patent No. 10358372.

Simmons, J. E. IN REVIEW. 19th century museums. Chapter for *Libraries, Archives, Museums: Western Cultural Heritage Institutions Through the Ages*, Suzanne M Stauffer (ed.). Anticipated publication date spring 2021.

Simmons, J. E. and T. M. Kiser (eds.). 2020. *Museum Registration Methods. 6th edition*. Rowman and Littlefield, Lanham.

Simmons, J. E. and K. F. Latham. 2020. Museum Studies. In *Oxford Bibliographies in Anthropology*, John Jackson (ed.). New York: Oxford University Press, DOI: 10.1093/obo/9780199766567-0244.

Presentations

Cook, J. *Glass is the Solution*, International Festival of Glass, August 26, 2019, Stourbridge, UK.

Cook, J. *Interdisciplinary Approaches to Glass: "A critique by any other name..."*, Robert Minkoff Academic Symposium, October 25, 2019, Brooklyn, NY.

Cook, J. *LGBTQ+ Excellence in STEM: Jane's Excellent Adventure*, Penn State Science Policy Society Panel, November 21, 2019, State College, PA.

Cook, J. *Emotion and Ambiguity: Taking Risks With Scientific Art*, MatSE Materials Visualization Competition Kickoff, January 23, 2020, State College, PA.

Cook, J. *Glass is So Queer*, State College Nerd Night, February 12, 2020, State College, PA.

Cook, J. *Glass is a Verb and So Are You*, Saturday Morning Science, University of Toledo, February 22, 2020, Toledo, OH. Online at https://www.knowledgestream.org/presentations/bon-bon-chemistry-chocolate

Cook, J. *Broader Impacts in NSF Proposals*, MATSE594, October 3, 2019, State College, PA.

Cook, J. *Good Design and Best Practices for Poster Presentations*, MASTSE 496, February 28, 2020, State College, PA.

Cook, J. *Introduction to Museum Practice*, ARTH409, March 19, 2020, via Zoom.

Cook, J. *Virtual Studio Tour and Gallery Talk with Jane Cook*, ART350, April 7, 2020, via Zoom.

Simmons, J. E. *Collection Conundrums*, Collections Stewardship Professional Network, American Alliance of Museums (CS-AAM), virtual meeting, 28 May 2020.

Snider, J. *Scientific observation in geoscience: Geoscientists' conceptualizations of learning, teaching, and using geological observation.* Dissertation defense, Curriculum & Instruction, Science Education, Penn State, 3 June 2019.

Snider, J. *Targeting diversity and inclusivity through creative programs based on traditional exhibits.* Small Museum Association annual conference, College Park, Maryland, 16–18 February 2020.

Snider, J. *Adaptation and evolution: Reassessment of collection use and interpretation.* Society for the Preservation of Natural History Collections (SPNHC) / International Committee for Museums and Collections of Natural History of the International Council of Museums (ICOM NATHIST) 2020 Virtual Meeting, 8–12 June 2020.

Teaching & instruction

Cook, J. Blowpipe Chemistry, Master Class, University of Wolverhampton School of Art, August 19–22, 2019, Wolverhampton, UK

Cook, J. Glass Science for Glass Artists, Glass Lab, Massachusetts Institute of Technology, September 13–15, 2019, Cambridge, MA

Cook, J. & Snider, J. (Fall 2019) MatScE 496, Independent Study. Art, History, Technical and Scientific Underpinning of Glass and Ceramic

Cook, J. & Snider, J. (Spring 2020) MatScE 496, Independent Study. Art, History, Technical and Scientific Underpinning of Glass and Ceramic Materials

Simmons, J. E., Universidad Nacional de Colombia, Administración de Colecciones, for the Maestría en Museología y Gestión del Patrimonio program, 09–27 March 2020

Simmons, J. E., Museum Study LLC, Collection Management and Museum Law, 05–30 August 2019

Simmons, J. E., Museum Study LLC, Policies for Managing Collections, 03–28 June 2019

Simmons, J. E., Transmitting Science, Care of Natural History Collections (with Greg McDonald), Sabadell, Spain, 18–22 November 2019

Snider, J. COMM 471 Public Relations Media and Methods; class project guest participant, Fall 2019

Snider, J. Introduction to the Art of Science: Scientific Illustration. Transmitting Science, Capellades, Spain, 11–15 November 2019

Professional development

Cook, J. International Festival of Glass, August 19–27, 2019, Stourbridge, UK.

Cook, J. Robert M. Minkoff Foundation Academic Symposium, October 24–26, 2019, Brooklyn, NY.

Cook, J. Futureproofing Natural History Collections: Creating Sustainable Financial Models for Research Resources, AAM Jan 22, 2020

Cook, J. Creativity & Collaboration: Transforming the Historic Penn Museum, Mid-Atlantic Association of Museums, April 1, 2020, Zoom.

Cook, J. Preparing to Reopen: Strategy, Planning & Process on the Road to Reopening Museums, Cuseums, May 6, 2020, Zoom.

Cook, J. Restricted Funds for Operations, Association of Registrars and Collections Specialists, May 7, 2020, Zoom.

Cook, J. Continuity of Operations Planning, Association of Registrars and Collections Specialists, May 14, 2020, Zoom.

Cook, J. Exploring the Future of Museums in the Era of Coronavirus, Cuseum, May 20, 2020, Zoom.

Cook, J. Collections Distancing, Collections Stewardship Professional Network of AAM, May 21, 2020, Zoom.

Cook, J. The "Contactless" Future: Reimagining the Visitor Experience in the Era of Coronavirus, Cuseum, May 27, 2020, Zoom.

Cook, J. Deaccessions and Direct Care, Collections Stewardship Professional Network of AAM, May 27, 2020, Zoom.

Cook, J. Collections Conundrum, Collections Stewardship Professional Network of AAM, May 28, 2020, Zoom.

Cook, J. The Onsite Member Experience After Coronavirus Closures, Cuseum, June 1, 2020, Zoom.

Cook, J. Tapping into Fresh Ideas & Networks to Navigate the "New Normal," Cuseum, June 3, 2020, Zoom.

Cook, J. Preparing for the Reopening of Museums: The Aftermath of a Pandemic, International Council of Museum, June 24, 2020, Zoom.

Cook, J. Reducing Touchpoints, Cuseum, June 24, 2020, Zoom.

Cook, J., Simmons, J. E. & Snider, J. Small Museums Association (SMA) annual conference, 16–18 February 2020. College Park, Maryland

Simmons, J. E. & Snider, J. Association of Registrars and Collections Specialists (ARCS), 05-08 November 2019, Philadelphia

Simmons J. E. & Snider, J. Society for the Preservation of Natural History Collections (SPNHC), virtual meeting, 08–12 June 2020

Simmons, J. E. & Snider, J. Museum study tour, Germany, 24 November–06 December 2019:
- Senckenberg Museum, Frankfurt am Main
- Naturkunde-Museum, Coburg
- Veste Coburg (castle), Coburg
- Europäisches Museum für Modernes Glas, Coburg
- Museum für Naturkunde, Berlin (in-depth behind-the-scenes collection tour)
- Altes Museum, Berlin
- Pergamonmuseum, Berlin
- Deutsches Historisches Museum, Alexander von Humboldt exhibit, Berlin
- Naturkunde-Museum, Bamberg
- Albrecht-Dürer Haus, Nuremberg
- Staatssammlung für Anthropologie und Paläoanatomie, Munich
- Alte Pinokothek, Munich
- Lenbachhaus Museum, Munich
- Geologisches Museum München, Ludwig-Maximilians-Universität, Munich
- Paläontologisches Museum, Ludwig-Maximilians-Universität, Munich
- Museum für Mensch und Natur, Munich
- Geopark Ries, Nördlingen
- RiesKraterMuseum, Nördlingen
- Zoologische Staatssammlung, Munich

Snider, J. COVID-19 informational webinars for museums and cultural institution, 30 March–30 June 2020:
- IMLS/CDC webinar: Mitigating COVID-19 When Managing Paper-Based, Circulating, and Other Types of Collections
- C2C webinar: Collection Care in the Age of COVID-19
- AAM: Coronavirus Crisis Management for Museum
- ARCS: Collections Care During COVID-10
- DEXIBIT webinar: Engaging visitor while Closed: Visitor Attractions Respond to COVID-10
- CUSEUM webinar: Preparing to Reopen: Strategy, Planning & Process on the Road to Reopening Museums
- ARCS Emergency Sub-Committee webinar: Continuity of Operations Planning (COOP)
- ARCS online chat: Museum Collections Insurance Providers response to COVID-19
- CS-AAM Collections Distancing webinar
- AIC/FAIC webinar: Advocation for Collections During Challenging Times
- AAM webinar: collection sustainability rubric
- ICOM webinar: Preparing for the Reopening of Museums: The Aftermath of a Pandemic

Professional Service
- Cook, J., Faculty Advisor, Out in STEM Annual Conference, November 14–17, 2019, Detroit, MI
- Simmons, J. E., Board member, Association of Registrars and Collections Specialists (ARCS)
- Simmons, J. E., Publications Committee Chair, Association of Registrars and Collections Specialists (ARCS)
- Simmons, J. E., Liaison, Global Initiatives Task Force, Association of Registrars and Collections Specialists (ARCS)
- Simmons, J. E., Advisory Board Member, Collections Management Policy project, Conservation Center for Art and Historic Artifacts (CCAHA), Philadelphia
- Simmons, J. E., Committee member, Connecting to Collections Outreach Committee
- Simmons, J. E., Committee member, American Alliance of Museums, Ethics Committee of the Curators Committee
- Simmons, J. E., Interviewee, Museos en Contexto, El registro y gestión de colecciones, air date 15 March 2020, http://unradio.unal.edu.co/nc/detalle/cat/museos-en-contexto/article/el-registro-y-gestion-de-colecciones-entrevista-a-john-simmons.html
- Simmons, J. E., Reviewer, *Collection Forum*, Journal of the Society for the Preservation of Natural History Collections
- Simmons, J. E., Reviewer, Rowman & Littlefield's museum studies series book proposals
- Snider, J., EMS Museum & Art Gallery representative, Integrated Safety Plan, Penn State Environmental Health & Safety.
- Snider, J., Advisory Board member, Penn State All-Sports Museum
- Snider, J., Member, Penn State All-Sports Museum Exhibits and Collections Sub-committee
- Snider, J., Member, Penn State Special Services Building Tenants' Emergency Preparedness Group
- Snider, J., Past Chair, PSU Museum Consortium
- Snider, J., Committee Chair, PSUMC COVID-19 Reopening Task Force
- Snider, J., Peer Reviewer, Institute of Museum and Library Services (IMLS), Museums for America: Collections Stewardship grants program

Snider, J., Peer Reviewer, National Association for Research in Science Teaching (NARST), Annual Conference submissions: Science Learning in Informal Contexts strand

Snider, J., Peer Reviewer, *Physical Review Physics Education Research Journal* of the American Physical Society

Awards received

Simmons, J. E., Spiritus Award for Excellence in Service and Management of Herpetological and Ichthyological Collections, American Society of Ichthyologists and Herpetologists, July 2019

Press & listings

"Museum director takes over with an eye on expansion," *Penn State News*, December 14, 2020

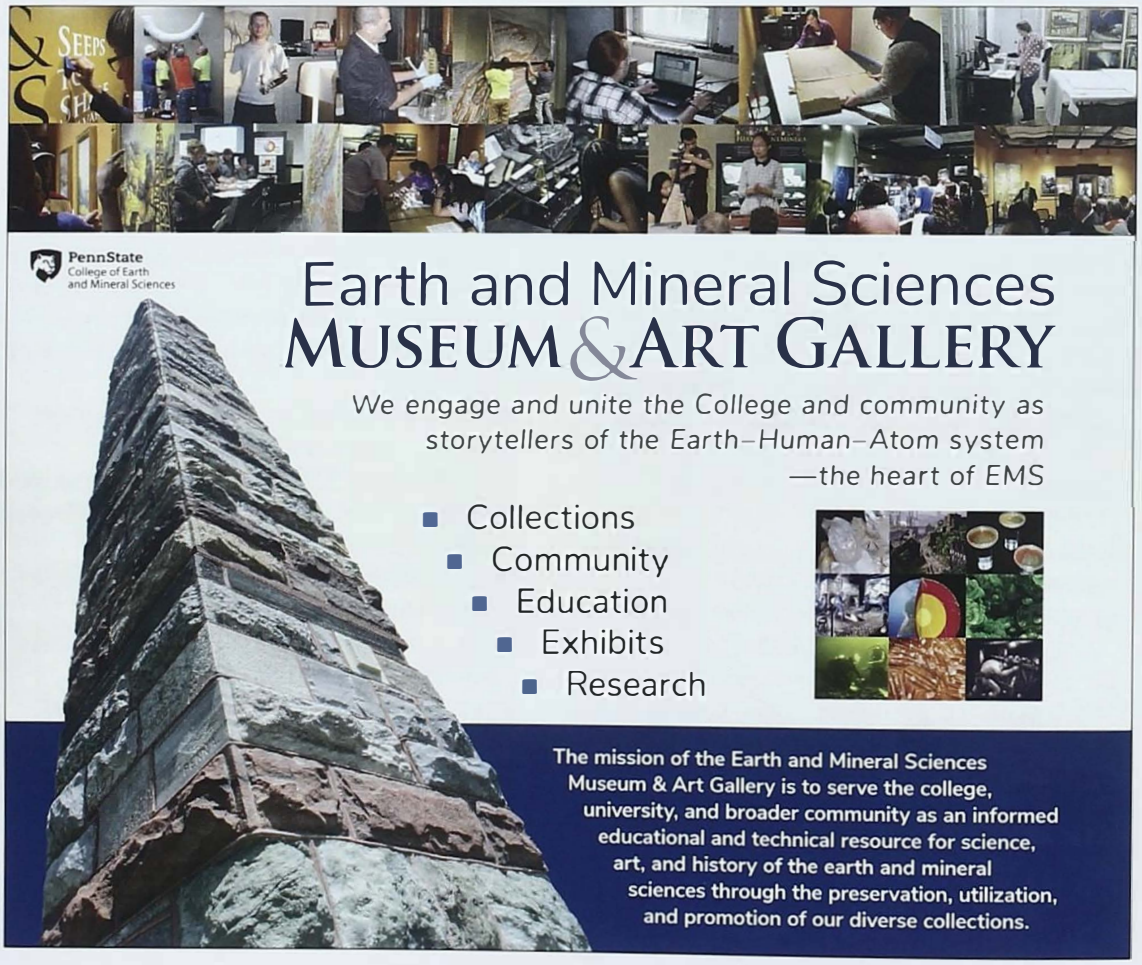
"Qualities of Line," solo, invited. The David R. Neumann Gallery, 2020. State College, PA.

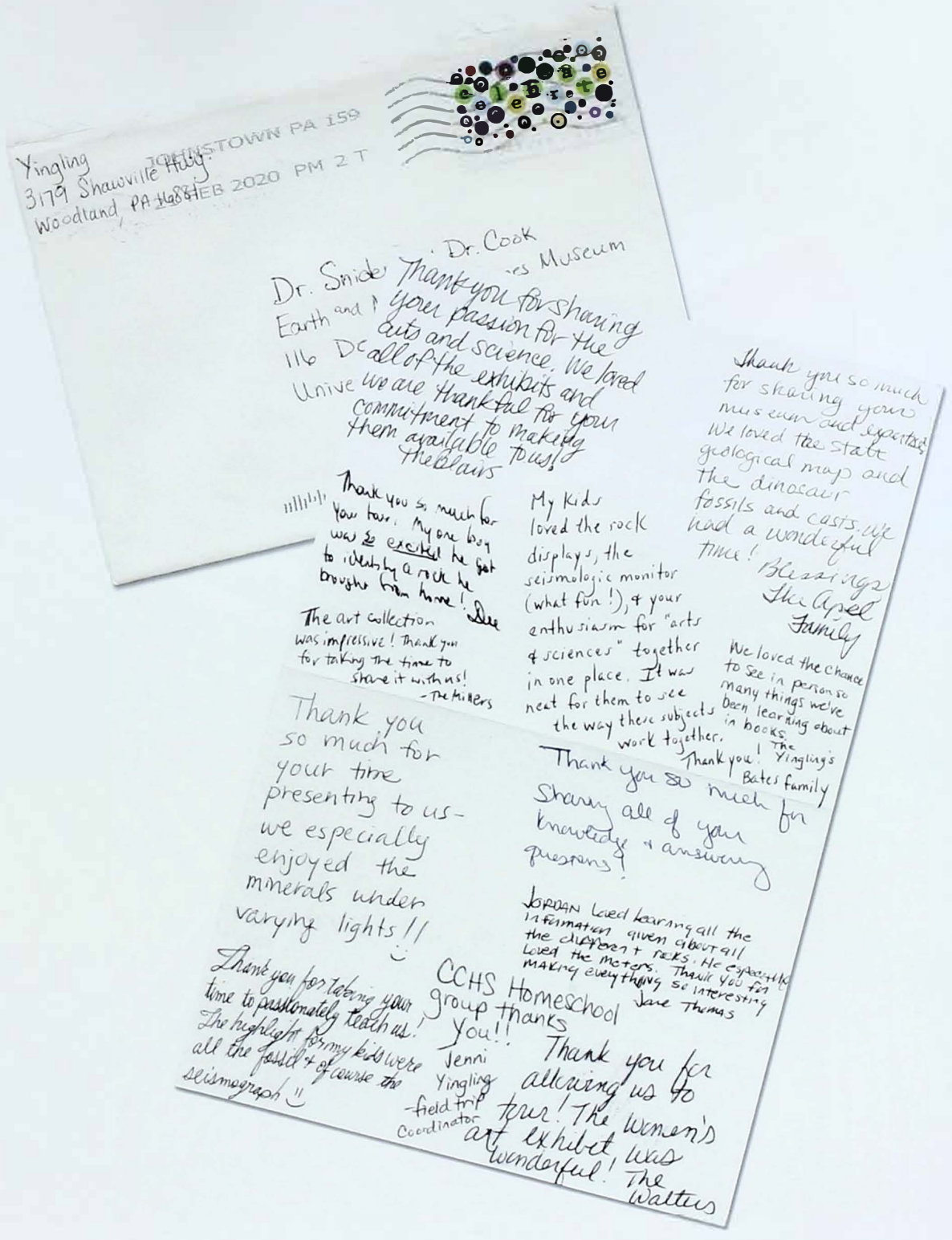
Employees

Haven Diehl

Volunteers

Sidharth Agrawal
Hu Barnes
Chris Brida
Claire Cleveland
Patty Craig
Michelle Crowl
Stacy Davidson
Maureen Feineman
Katy Gerace
David C. Glick
Rachel Gutierrez
James Guyton
Gabriella Rossetto Harris
Ken Hickman
Jake Kaminski
Jonathan Mathews
John Mauro
Cissy Ming
Linda Musser
Carlo Pantano
Julia Plummer
Michelle Ritchie
John E. Simmons
Amara Solari
Howard "Chip" Steidle, Jr.

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3179 Shawville Hwy.
Woodland, PA 16881
JOHNSTOWN PA 159
FEB 2020 PM 2 T
Dr. Snider
Dr. Cook
Earth and
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Unive
Thank you for sharing your passion for the arts and science. We loved all of the exhibits and we are thankful for your commitment to making them available to us!
The Blairs
Thank you so much for your time. My one boy was so excited he got to identify a rock he brought from home!
The art collection was impressive! Thank you for taking the time to share it with us!
-The Millers
My kids loved the rock displays, the seismologic monitor (what fun!), & your enthusiasm for "arts & sciences" together in one place. It was neat for them to see the way these subjects work together.
Thank you!
Bates family
Thank you so much for sharing your museum and expertise! We loved the state geological maps and the dinosaur fossils and casts. We had a wonderful time!
Blessings
The Aysel Family
We loved the chance to see in person so many things we've been learning about in books.
The Yinglings
Thank you so much for your time presenting to us - we especially enjoyed the minerals under varying lights!!
Thank you so much for sharing all of your knowledge & answering questions!
JORDAN loved learning all the information given about all the different rocks. He especially loved the meters. Thank YOU for MAKING everything so interesting
Jane Thomas
Thank you for taking your time to passionately teach us! The highlight for my kids were all the fossils & of course the seismograph!!
CCHS Homeschool group thanks you!!
Jenni Yingling
-field trip Coordinator
Thank you for allowing us to tour! The Women's art exhibit was wonderful!
The Walters

Earth and Mineral Sciences
MUSEUM & ART GALLERY

Earth and Mineral Sciences Museum & Art Gallery
Ground Floor, Deike Building (one half block south of Burrowes and Pollock Roads)
Penn State University Park Campus
814-865-6336
museum@ems.psu.edu
https://museum.ems.psu.edu/

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