

AUTUMN 2021

AMERICAN PHILOSOPHICAL SOCIETY

News



News from PHILOSOPHICAL HALL

Robert M. Hauser, *Executive Officer*



Portrait of Deborah Read Franklin, Benjamin Wilson, after unknown artist, London, c. 1758-1759. Oil on canvas. APS. This is the only surviving portrait of Deborah Franklin. Deborah helped manage the Franklin businesses and household. During Benjamin Franklin's absences from Philadelphia, Deborah became part of his scientific network, sending him information and specimens. Acknowledging her importance in his life, Benjamin Franklin displayed her likeness in his London home.

News

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Thanks to the exceptional efforts and resilience of APS Members, staff, and fellows, the Society has most successfully negotiated the pandemic closure.

WHEN APS FACILITIES CLOSED in March 2020, staff quickly learned to substitute workday interactions and in-person events with Zoom-based events, including the November 2020 and April 2021 APS Meetings. Our repertoire of semi-public and public events, conducted virtually since Spring 2020, now includes David Center Seminars, Indigenous Studies Seminars, writing workshops, book launches, weekly Brown Bag research presentations, and of course, the Society's monthly public lectures. One of our current challenges is to implement a hybrid technology that will perpetuate increased geographic outreach as on-site and in-person events are reestablished.

The Fall 2020 APS Meeting was held virtually from November 11 to 13 with all sessions beginning late enough in the day to accommodate Members on the West Coast. The Meeting featured a keynote address, "A Failure to Heal: Race and Politics in the United States," by Lawrence D. Bobo (APS 2008); Mark J. Thompson's (APS 2017) conversation with Anthony S. Fauci (APS 2001); and David M. Rubenstein's (APS 2019) conversation with Danielle S. Allen (APS 2015), among other events. The Spring 2021 APS Meeting also was held virtually, from April 21 to 23. Among its talks were Paul Moravec's (APS 2010) "*Sanctuary Road: An Oratorio Based on William Still's 'The Underground Railroad Records'*"; "The Fiction of Memory" by Elizabeth F. Loftus (APS 2006), winner of the 2020 Suppes Prize; and Katherine Franke's "Reparations for Slavery and Its Legacy." All Meeting video presentations are available on the Meetings section of the APS website.

The Fall 2021 APS Meeting, like the two before it, will be held virtually, on Thursday November 11 and Friday, November 12,

2021. However, we are planning a spectacular return to in-person Meetings with the Spring 2022 APS Meeting, which will be held Thursday, April 28–Saturday, April 30, 2022.

Throughout the pandemic, the Society guaranteed full salary for all staff, and a substantial Paycheck Protection Program loan, now forgiven, supported that commitment. The shift to virtual meetings and cessation of staff travel also generated substantial savings. While we had feared that the pandemic would reduce giving to the Society, the Fund for the APS actually achieved an all-time high in 2020.

In the past year, the Society also won significant external grant support. The National Endowment for the Humanities supported staff working on *Benjamin Franklin's American Enlightenment: Documenting Early American Science at the American Philosophical Society*. The Institute of Museum and Library Services awarded the APS a National Leadership Grant to develop *Revolutionary City*, a web portal of digitized archival material about Philadelphia in the era of the American Revolution. The National Science Foundation provided support for the Center for Native American and Indigenous Research to partner with the Tunica-Biloxi Tribe of Louisiana and its Language and Cultural Revitalization Program. The Andrew W. Mellon Foundation awarded the APS a five-year renewal of its Native American Scholars Initiative. And the partnership between the APS and the David Library of the American Revolution has amply endowed the David Center for the American Revolution at the APS.

Significant renovation of APS facilities continued during the year. This included installation of ionization units to improve air quality in all four buildings, restoration

of the crumbling facades of Franklin Hall and Richardson Hall, installation of an upgraded chairlift at the entrance to Philosophical Hall, and replacement of handrails at the entrance to Richardson Hall. After years of planning, a major renovation of the basement and sub-basement of Library Hall will install compact shelving on both floors. It will vastly increase the manuscript storage capacity of the Library and make room for the Society's physical artifacts, which are now in a crowded storage room in Richardson Hall. In collaboration with the Philadelphia Chamber Music Society, which has held all of its performances in Franklin Hall during the pandemic, we have installed hardwood on the stage extension in Franklin Hall, replaced all of the video cameras with new high-resolution units, and will soon improve stage lighting.

Our first in-person, semi-public event was held in the Jefferson Garden on Saturday,

June 12. Local Members, Friends of the APS, and their guests celebrated the installation of a model of Benjamin Franklin's pleasure boat on the garden lawn. On June 23, there was an all-staff celebration of the Declaration of Independence in Franklin Hall. This event featured the first public display of a recently discovered holding of the Society—one of eight known paper copies of William J. Stone's official engraving of the Declaration. The text of the Declaration was read by theater director Tina Packer, and members of her troupe read the reply of King George III as well as Frederick Douglass's address of 1852, "What to the Slave Is the Fourth of July?"

Presently, APS facilities are beginning to reopen, first to staff and then to the public. All staff were notified at the beginning of May that they should be vaccinated against COVID-19 and return to work on-site by mid-July 2021. Because of the compact-

shelving project, the Library will not reopen to the public until early 2022.

Although it was not possible to open the *Dr. Franklin, Citizen Scientist* exhibition as originally planned in April 2020, staff undertook two innovative projects: a virtual video tour of the exhibition, with separate versions designed for children and adults (<https://diglib.amphilsoc.org/virtualfranklin/>); and a handsome, full-color catalog with an introductory essay by 2018–2020 Andrew W. Mellon Foundation Postdoctoral Curatorial Fellow Janine Yorimoto Boldt. The in-person exhibition opened in August 2021 and will continue through December on a limited schedule.

This year, I have been sustained by the participation and support of the APS community and by the flexibility and commitment of the staff. I look forward to seeing our Members and Friends again as in-person events resume.



Detail from *The Natural History of Carolina, Florida, and the Bahama Islands*, Vol. 2, Mark Catesby, London, 1771. Bound volume. APS. Supported by English and colonial patrons, British naturalist Mark Catesby traveled to North America to study nature. European scientists were interested in indigenous species like bison, which is illustrated here. Franklin purchased a copy of this book for his Philadelphia colleagues. It is currently displayed in the *Dr. Franklin, Citizen Scientist* exhibition.



Top APS staff attend a celebration of the Declaration of Independence in Franklin Hall on June 23, 2021. The event featured the first public display of the Society's rare paper copy of William J. Stone's official engraving of the Declaration. Photo by Brenna Holland. **Above** APS Member Emanuel Ax gives the April 2021 Meeting Concert in Franklin Hall on April 22, 2021. The world-renowned pianist performed an all-Chopin concert, which was streamed live by the Philadelphia Chamber Music Society.

From the Librarian

As the world emerges from the coronavirus pandemic and the APS adapts to a world altered by the past year and a half . . .

WE ARE EAGER TO REOPEN our Reading Room and provide access to scholars conducting research in our collections. Unfortunately, that has to wait—though for what I hope you will find is a very good reason. In the spring, the Society launched a significant renovation of Library Hall to install new compact shelving for its manuscript holdings, vastly expanding its ability to collect new materials.

These renovations come at a particularly important time. A collection that began in the late 18th century as a cabinet of curiosities sent to the Society by distant correspondents has evolved into one of the premier holdings by an independent research institution. The collection now includes over 13 million pages of manuscripts, 350,000 books, and thousands of hours of audio and visual material. A recent survey of our born-digital collection estimates that we also hold over three terabytes of digital data. In recent years, the Society has enhanced its technology infrastructure so it can promise the same type of long-term care for these new types of records as we do our paper material. At the same time, though, we continue to acquire papers of great significance. As we conducted long-term planning, we realized that our future capability to continue to collect would be substantially curtailed if we did not expand our shelving. The renovation thus ensures that the APS will remain a dynamic collecting institution in both digital and traditional materials.

In fact, one of the highlights of the past year was the Society's ability to add to its collection. Adding to the Society's significant collection of materials related to evolutionary science, a donation from the National Center for Science Education included several boxes of "flare-up files"—correspondence with concerned educators and news clippings that document attempts to teach creationism alongside or



APS Assistant Head of Conservation and Book Conservator Renée Wolcott labels a new box to protect manuscript materials during the compact-shelving move in Library Hall. Photo by Brenna Holland.

instead of evolution in science curriculum. This joined additions to the collection of rare translations of Charles Darwin's works in Amharic, Lithuanian, and Japanese. The Society's early American collections, especially rich in the era of the American Revolution, gained a rare Bill of Rights pamphlet from 1790 that includes two amendments that were not ratified along with the first 10—one related to how members of the House of Representatives would be apportioned to the states, and the other to forbid Congress from giving itself a pay raise. And, with Nahuatl being the most spoken Indigenous language in present-day Philadelphia, the purchase of *Sermonario en lengua Mexicana*, the first edition of the first book of sermons printed in that language in 1577, was a fitting addition to the Library's growing Indigenous language materials.

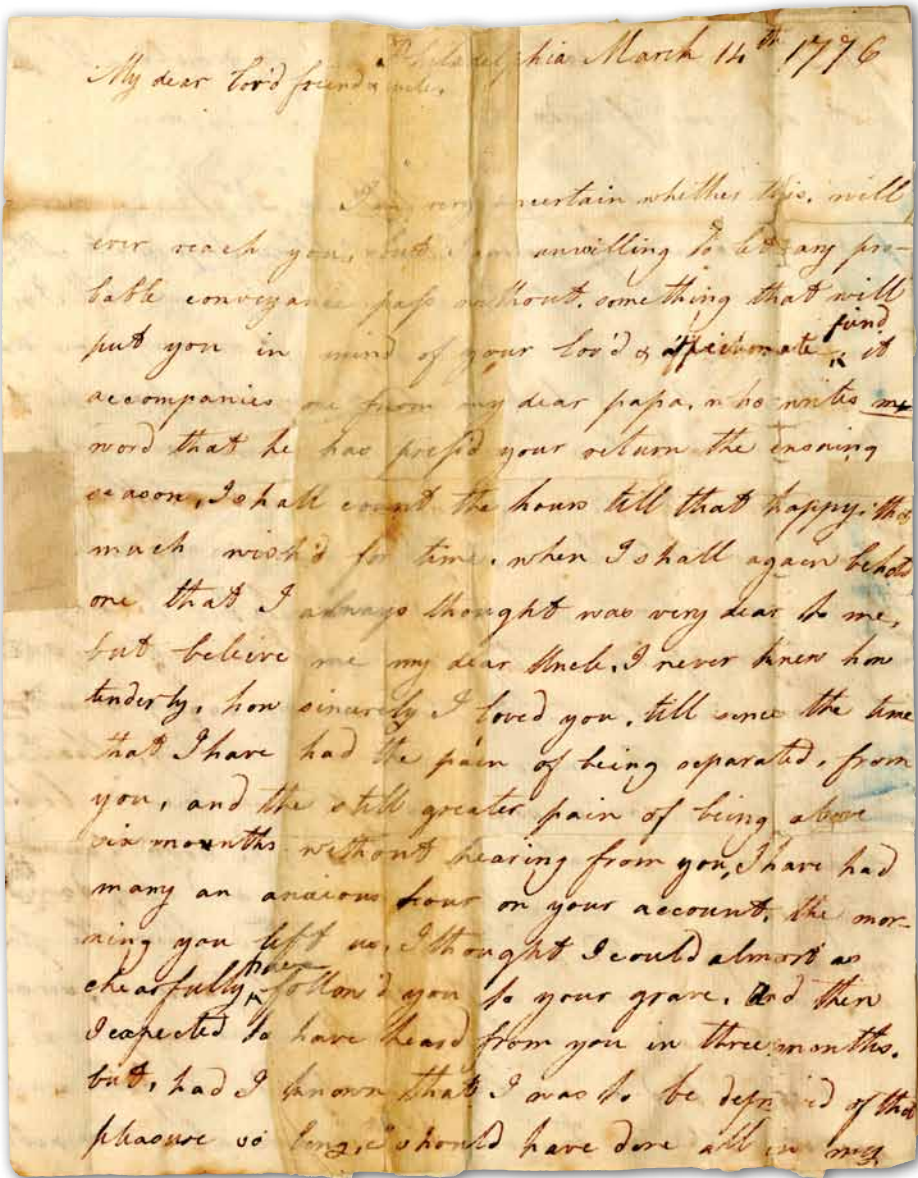
Even while closed, the APS Library & Museum has remained a vibrant center of intellectual exchange and research through its programming. The Library hosted a cohort of long-term fellows who provided the in-person intellectual backbone for what was a largely virtual scholarly community. The David Center for the American Revolution launched a range of new programs and initiatives, most notably a monthly seminar series and digital archives project, *Revolutionary City*. The seminar series uses virtual platforms to connect scholars and history enthusiasts from around the world in lively discussions of working papers from emerging and established scholars. *Revolutionary City* promises to be a key contribution that the APS will make in anticipation of the 250th anniversary of the Declaration of Independence. Thanks to a National Leadership Grant from the

Institute of Museum and Library Services, the Society is laying the foundation for a unified digital repository of all the material held by the APS, the Library Company of Philadelphia, and the Historical Society of Pennsylvania that relates to the American Revolution in Philadelphia. Its immediate goal is to digitize over 100,000 pages. In time, it hopes to expand to include other repositories in the region and around the globe that hold relevant material.

The Society also received word that The Andrew W. Mellon Foundation renewed funding for the Native American Scholars Initiative. This will fund the program, originally started in 2017, through the end of 2026 and support expanded fellowships, programming, and access to its collections for Indigenous scholars and communities.

We offered our usual range of programs this year, though in a much different format. In the fall, we hosted over 40 programs with over 2,400 viewers and participants. In the spring, that nearly doubled to 80 programs with over 4,700 viewers and participants. The Center for Native American and Indigenous Research's monthly Indigenous Studies Seminar expanded its audience dramatically, thanks to its ability to reach far beyond the Philadelphia region. Our Center for Digital Scholarship, already well-positioned for the virtual world, published its latest project, *Investigating Indentured Servitude*, a digital exhibition and open data project that explores the details of over 5,000 indenture contracts registered in Philadelphia between 1771 and 1773. The Museum, meanwhile, had to adapt. Its exhibition, *Dr. Franklin, Citizen Scientist*, was originally slated to open in April 2020. Instead of welcoming guests through its doors, it quickly changed its plans and developed a highly interactive online tour and a beautifully illustrated print catalog.

As we look ahead, we plan to hold in-person events this fall, including the conference "The Meanings of Independence." The gathering aims to begin a conversation about what issues and themes the com-



First page of a letter from Julia Stockton Rush to her uncle Samuel Stockton on March 14, 1776. Julia writes of her meeting, swift courtship, and recent marriage to Dr. Benjamin Rush, a prominent Philadelphia physician. She notes that her mother and father made Dr. Rush aware that "I was at my own disposal . . . they would never say a word to influence me in behalf of any man whatever" in regard to his proposal. As part of the functionality and design testing on the *Revolutionary City* project, this letter was among the primary sources added to the beta web portal. The letter gives a rare glimpse into a woman's life in Philadelphia during the Revolutionary War. Julia Rush letters, 1776-1809.

memorations of 2026 should highlight and confront. We are excited to welcome guests to see *Dr. Franklin, Citizen Scientist* in person more than a year after the exhibition was fully mounted. At the same time, we are looking ahead to our 2022 exhibition on the history of climate science and are

laying the foundation for our 2023 exhibition on pioneering women in science. And of course, we await the reopening of our Reading Room sometime in early 2022, when we can welcome scholars back to our collections in person.

Patrick Spero, *Librarian and Director of the Library & Museum*



2021 Native American Scholars Initiative (NASI) Interns Tieranny Keahna, Dynette Chavez, and Nancy Mendoza-Ruiz with NASI Program Director Tiffanie Hardbarger. Photos by Brenna Holland.

From Moldy to Marvelous: A Humble Scaleboard Textbook Revived



TO A BOOK CONSERVATOR, sometimes a cheap, 385-year-old textbook is more interesting than the finest binding or the most prestigious provenance. Over the course of the last year, I had the privilege of treating a badly damaged copy of Petrus Ramus's *Via Regia ad Geometriam: The Way to Geometry*, a 1636 English translation of a geometry textbook written in the 1560s by a French academician. I loved this book on first sight for several reasons: its crumpled leaves, weak and soft as Kleenex; its split and broken, veneer-thin, oak scaleboard covers; its beautiful woodcuts; and the math problems worked in iron gall ink inside the back cover. The book's history of use and abuse was writ large in its very substance. In honor of the nameless schoolboys and tradesmen who once consulted it, I longed to take up the challenge of making it useful again.

"Scaleboard" is the historical term for the thin, planed or split wooden sheets that were used in scabbards, hat brims, boxes, and between lines of type in printing. Scaleboard bindings, both in England and the American colonies, were cheaper than bindings with cover boards of laminated paper. In England and northern Europe, where sheep grow better than flax, wood was less expensive than linen-based paper. In the American colonies, all paper was imported from England and highly taxed, whereas wood was a local commodity. In both places, scaleboard bindings were reserved for the cheapest, most commonplace books—textbooks, sermons, music books,

and political screeds—and their construction was commensurate with their price.

Before conservation treatment, the scaleboard covers of *Via Regia ad Geometriam* were split and broken, as is common with these thin, brittle wooden boards. The dark staining on the leather binding—and even the losses to the wood—indicated that the spine and bottom of the book had been wet through at some point. Mold attacked and ate the damp text block, dissolving the once high-quality paper and making the remnants weak and pulpy. The leather also shrank as it dried, tearing itself and splitting the thin wood beneath. Only a fragment of the spine leather remained.

To strengthen the weakened paper, I knew I would need to wash it, but I also knew that I could never immerse such frail sheets in a bath of water. Eventually I settled on washing the leaves between dampened pieces of Tek Wipe, a cleaning cloth made of cellulose and polyester microfibers. Conservators have adopted Tek Wipe because of its archival materials, strong capillary action, and reusability. Unlike the cotton blotters that were traditionally used to extract staining from paper, Tek Wipe can be washed and reused indefinitely. Each printed folio of *Via Regia ad Geometriam* was washed between damp Tek Wipe for a total of six to seven hours, emitting a startlingly beery smell, and the damp cloths were regularly replaced as they became dirty.

The washed paper was strong enough to be immersed in a bath of warm, dilute gela-

tin for further strengthening. This process mimicked the original papermakers' "sizing" process, in which each sheet of new-made paper was dipped in dilute animal glue to make the sheet stronger, harder, and more resistant to ink penetration. After drying, the text leaves could be mended, re sewn into a block over two ramie-fiber ribbons, and reunited with their scaleboard covers.

To deal with the large loss in the front scaleboard, I laminated together two sheets of alkaline cardstock and faced them with an orange Western paper that echoed the color of the exposed oak. I adhered them to the wood with a warm 20-percent gelatin solution, which is a purified form of the animal glue traditionally used with wooden artifacts.

The ramie-ribbon sewing supports were adhered to the repaired boards between the stubs of the original sewing supports so the original structure of the book can still be determined. A new spine of toned Asian paper and Aerocotton now supports the fragmentary leather. The humble scaleboard binding that once accompanied apprentices as they learned a trade is as healed and whole as this conservator's skill can make it. In a year that offered so much tragedy, it was a profound joy to make something new again.

Renée Wolcott, *Assistant Head of Conservation and Book Conservator*



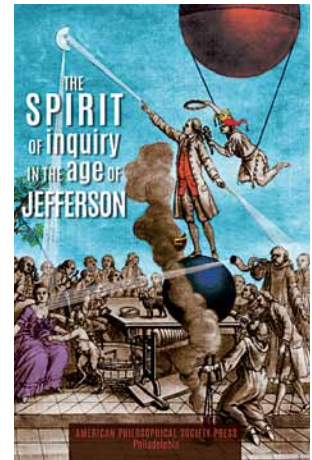
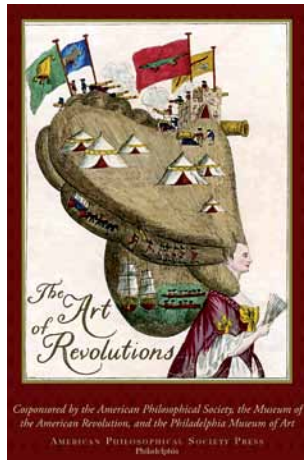
Above Left Before treatment, the front scaleboard had lost a large piece of wood, and the misordered first leaves were detached, soft, and crumpled from mold damage. Photo by Renée Wolcott. Above Repairing the split spine folds and filling the many areas of paper loss took approximately 31 hours. Photo by Renée Wolcott.

From the Publications Office

THIS YEAR, THE APS PRESS PUBLISHED several *Transactions* monographs featuring papers from conferences held at the Society, starting with *The Art of Revolutions* (*Transactions*, Volume 109, Part 5; cosponsored by the APS, the Museum of the American Revolution, and the Philadelphia Museum of Art). This was followed by three other printed collections of conference papers: *The Spirit of Inquiry in the Age of Jefferson* (*Transactions*, Volume 110, Part 2; cosponsored by the APS, the National Constitution Center, the Robert H. Smith International Center for Jefferson Studies, and the Herbert D. Katz Center for Advanced Judaic Studies), *The Past, Present, and Future of Libraries* (*Transactions*, Volume 110, Part 3; cosponsored by the APS, the Gladys Kriebel Delmas Foundation, and the Association of Research Libraries), and *The Power of Maps and the Politics of Borders* (*Transactions*, Volume 110, Part 4). In addition, two other *Transactions* printed this year: *Benjamin Franklin, Swimmer: An Illustrated History* (*Transactions*, Volume 110, Part 1) by Sarah B. Pomeroy (APS 2014) and *What Ever Happened to the U.S. Congress's Portraits of Louis XVI and Marie Antoinette? Retracing the Events that Led to the Conflagration of the Capitol and the Loss of the Pictures on 24–25 August 1814* (*Transactions*, Volume 110, Part 5) by T. Lawrence Larkin.

Three Zoom events took place this summer featuring several of our new titles. We had a book launch for *The Art of Revolutions* on June 30, a book launch for *The Power of Maps and the Politics of Borders* on July 7, and a discussion of *Benjamin Franklin, Swimmer* with Sarah B. Pomeroy on July 14.

The *Proceedings of the American Philosophical Society* is a quarterly journal. Articles and biographical memoirs from Volume 158 through Volume 163 are located in the Publications section of the APS website, under “Current Publications.” Earlier issues are available through JSTOR, the online scholarly library. Volume 163, Number 4 of the *Proceedings* includes three talks from *The Next Influenza Pandemic* symposium, which were given in person at the APS November 2019 Meeting prior to the Society’s shutdown. Print copies of the



Left *The Art of Revolutions* cosponsored by the APS, the Museum of the American Revolution, and the Philadelphia Museum of Art. Center *Benjamin Franklin, Swimmer: An Illustrated History* by Sarah B. Pomeroy. Right *The Spirit of Inquiry in the Age of Jefferson* cosponsored by the APS, the National Constitution Center, the Robert H. Smith International Center for Jefferson Studies, and the Herbert D. Katz Center for Advanced Judaic Studies.

journal mail to subscribers and to scholarly institutions, and are available to Members upon request. If you are a new Member of the Society, or if you are a Member not currently on the mailing list and wish to be, please contact Mary McDonald or Alison Swety Beninato (mmcdonald@amphilsoc.org or aswety@amphilsoc.org) to have your name added to the Member mailing list. There is no cost.

The *Proceedings* journals and *Transactions* monographs are archived with JSTOR. All printed material for both publications, from the first *Transactions* publication in 1771 and the first *Proceedings* journal in 1838, are electronically stored. The APS uses a three-year window to allow sales through the fulfillment service for the most recent publications. JSTOR offers researchers and scholars, as well as APS Members and staff, access to the material.

The Committee on Publications (COP) meets three times a year to discuss manuscripts under consideration for publication. At least two outside reviews are received for each manuscript and sent to the committee prior to each meeting. COP meetings from June 2020 through June 2021 were held via Zoom.

This edition of the *APS News*, as well as issues from 2017 through 2020, are available on the Publications section of the APS website. The newsletter is mailed to Members each year.

The *2020 Yearbook* is on the Members Only website. Members who want to purchase a print copy may contact Mary or Alison (mmcdonald@amphilsoc.org or aswety@amphilsoc.org). Print copies of the *2020 Member Directory* are available to Members upon request.

Mary McDonald, Director of Publications

❖ We Are Accepting Manuscripts! ❖

The APS Press accepts scholarly manuscripts of virtually any length for the *Proceedings* journal and the longer monograph series of publications, including the *Transactions* and *Lightning Rod Press*. Members are invited to submit their manuscripts for possible publication and to encourage their colleagues to consider sending their manuscripts to the APS Press. All manuscripts are sent out for review, read by the Committee on Publications, and fully discussed at a committee meeting before any publication decision is made.

Benjamin Franklin (1706–1790) dedicated himself to research, invention, and sharing knowledge for the “benefit of mankind in general.”

Franklin believed that all people could and should engage with science, and that science could transform society for the better. For these reasons, Franklin was America’s first citizen scientist. *Citizen science* is a modern term that broadly refers to public participation in scientific research. It is science as practiced by nonprofessional scientists in collaboration with professional research teams. Free communication of results is fundamental to citizen science projects. People of all ages, abilities, and backgrounds can join in by volunteering their time to record and share observations on topics of global importance. Citizen scientists believe that evidence-based science can be used to transform society for the better. In many ways, Benjamin Franklin expressed the values of a citizen scientist 200 years before the term came into use.

Dr Franklin,

CITIZEN SCIENTIST

FRANKLIN’S WORKING-CLASS ORIGINS and self-education distinguished him from other elite scientists, known in the 18th century as natural philosophers. He recognized that science could take many forms and that all people could produce useful knowledge, including the soapmakers and sailors in his family. The knowledge and labor of diverse people enabled his success. As a citizen scientist, Franklin founded institutions that used science to benefit and educate others. However, he participated in a system of knowledge production that often reinforced and produced inequality. The American Philosophical Society, an institution founded by Franklin in 1743 for promoting useful knowledge, invites visitors to the exhibition *Dr. Franklin, Citizen Scientist* to reflect on Franklin’s legacy as a citizen scientist.

Au Genie de Franklin [To the Genius of Franklin], Marguerite Gérard after Jean-Honoré Fragonard, Paris, 1778. Etching. APS. This allegorical etching of Benjamin Franklin illustrates the inscription below the image: “*Eripuit coelo fulmen sceptrum que tyrannis*” (“He seized the lightning from the sky and the scepter from the tyrants”).



Transatlantic Currents of Knowledge

IN THE 18TH CENTURY, London was the scientific center of the British Empire. Colonists who desired to be taken seriously as scientists sought the recognition of London's elite individuals and institutions. They sent letters describing their environment along with specimens to contacts in England. Colonists imported books and scientific instruments to support their investigations. However, Europeans valued colonial North America more for its natural resources than for the talents of the people who lived there. One of the object highlights in this section is John Bartram and Benjamin Franklin's American edition of Thomas Short's *Medicina Britannica* (1751), which highlights the circulation of knowledge in the British world.

Franklin participated in this transatlantic exchange of knowledge with great success. From Philadelphia, he built a network with connections on both sides of the Atlantic Ocean. Young Franklin sought patrons to support his early scientific work. Patrons enabled scientists to conduct and publish their research by providing money, supplies, and access to scientific networks. Institutions such as the Royal Society of London and the French Royal Academy of Sciences were patrons for the advancement of knowledge. Wealthy individuals acted for personal glory, as they would be celebrated in resulting publications. This system favored educated, white men who could work within business and political networks to meet sponsors. Those who

lacked connections due to their social status—including most women, men of the working classes, enslaved people, and Indigenous peoples—produced useful knowledge without support or recognition. The occlusion of Indigenous knowledge is represented in the exhibition by Mark Catesby's *Natural History*. Catesby complained that "Indians had burned the woods" preventing him from collecting plant specimens. What Catesby described as a "great disappointment" was an Indigenous land management practice that helped maintain Carolina's ecosystem.

As the first American-born colonist to receive international praise for his research, Franklin ensured recognition for American science. A 1762 letter from Scottish philosopher David Hume calling Franklin the "first Philosopher" from America concludes this section of the exhibition and sets up the next section, which looks at Franklin's accomplishments.

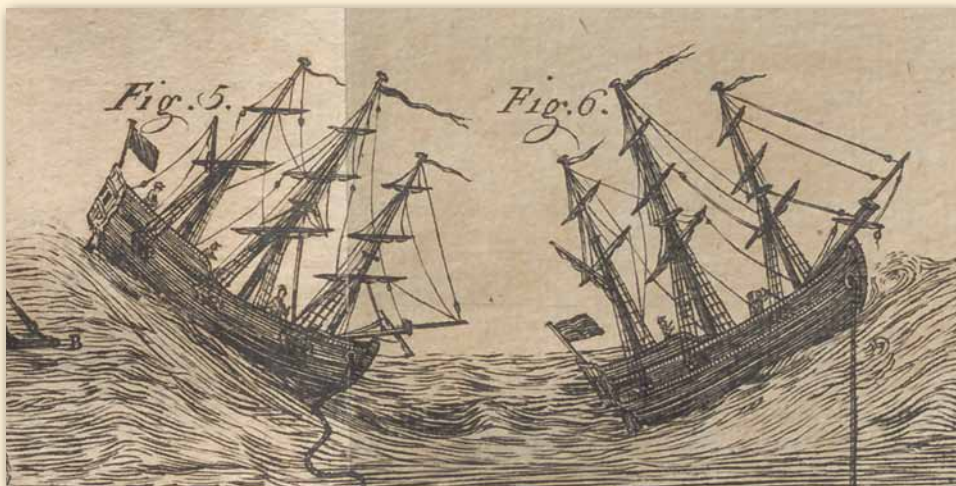
Useful Knowledge in the Making

AS A CITIZEN SCIENTIST, Franklin was committed to being useful to others and freely shared his inventions and ideas. He addressed some of society's most pressing issues, from maritime navigation and counterfeit currency, to smallpox epidemics and destructive electrical storms. Franklin approached scientific challenges by drawing on both his theoretical knowledge and practical experiences. He turned any available space into a laboratory, including homes, workshops, and ships. Careful ob-

servations and controlled experimentation characterized Franklin's scientific practice. Remembered as a singular genius, Franklin recognized that all people could produce useful knowledge and worked closely with family, friends, and enslaved members of his household. Operating within a society that privileged knowledge produced by elite white men, many of Franklin's collaborators and sources went uncredited. This section of the exhibition explores Franklin's interest in printing, maritime science, electricity, household sciences, and the study of human difference.

Scientific Type

AT AGE 12, Benjamin Franklin became an apprentice to his brother James, from whom he learned the printing trade. His time working in a print shop gave Franklin a lifelong appreciation for the knowledge of tradespeople. The printed texts he worked with exposed him to new worlds and ideas. In 1728 he established a print shop in Philadelphia, through which he made influential connections. Mastering and later experimenting with print technology, Franklin recognized the power of words and images to share knowledge with many audiences. Retiring as a printer in 1748, the citizen scientist nevertheless continued to use print to shape society. Exhibition highlights from Franklin's career as a printer include the only known surviving copy of "Batchelors-Hall" (1731), an artistic publication highlighting Franklin's skill as a printer, and examples of nature-print currency utilizing a printing technique invented by Franklin and Joseph Breintnall.



Between the Sea and Sky

GROWING UP NEAR BOSTON HARBOR with seafaring relatives, Franklin showed interest in the sea from his youth. Crossing the Atlantic as a political official, Franklin used his time at sea to study the ocean. As a citizen scientist, he desired to improve the speed and safety of sea travel, knowing that maritime science had political and economic consequences. He worked with his cousin, Timothy Folger, to create the first chart of the Gulf Stream. The American edition of this chart, which appeared in the *Transactions of the American Philosophical Society* (1786), is included in the exhibition. Through his experiments and observations, Franklin came to appreciate the relationship between water and air, leading him to speculate on climate in his “Meteorological Observations,” also on display. His publications on water and climate late in his life reveal that his passion for the sea never wavered.

Experiencing Electricity

FRANKLIN'S INTEREST IN ELECTRICITY began in 1745 when the Library Company of Philadelphia received electrical equipment and descriptions of experiments from its London patron, Peter Collinson. The Library Company, founded in 1731 by Franklin and his fellow tradesmen to increase access to knowledge, gave Franklin the space and tools to perform his first electrical experiments. So began an obsession with a topic that had already taken Europe by storm. Franklin developed new theories and inventions, working around the city and out of his home. The interna-

tional publication of his electrical writings made him a celebrity and led to important political appointments. Highlights from Franklin's electrical work include a 1750 letter in which Peter Collinson informs Franklin that he is preparing Franklin's writings for publication; a first edition of *Experiments and Observations on Electricity* (1751); the 1753 *Poor Richard's Almanack* featuring Franklin's instructions on erecting lightning rods; and a battery of Leyden jars possibly used by Franklin.

Scientific Homes

FRANKLIN'S CITIZEN SCIENCE began in the home, where diverse people produced and exchanged useful knowledge. Household and trade sciences, often dismissed as the labor of women and tradespeople, shaped Franklin's scientific practice even after he entered elite circles. His parents operated a soap- and candlemaking business from their Boston residence. His mother-in-law, Sarah White Read, made medicines in their Philadelphia home where he and Deborah ran a press. All of these sciences turned his homes into laboratories and inspired his inventions, including “the Franklin Stove” and lightning rod. Franklin used his London and Paris residences as scientific gathering places. The members of the Franklin households, including enslaved people, enabled his success. Copies of his family's crown soap recipe written by Jane Franklin Mecom, a letter from Polly Stevenson on scientific topics, and a portrait of Deborah Franklin enliven this section and provide an opportunity to discuss women in science.

Observations on Humankind

PEOPLE HAVE LONG ASSOCIATED qualities such as moral character and intelligence with appearance, culture, and country of origin. These assumptions shaped the way many 18th-century scientists, including Franklin, investigated the sources of human differences. They incorrectly concluded that people were born with unchangeable qualities signified by their skin color. Westerners organized people into a spectrum based on complexion. They linked positive qualities to the lightest complexions and negative qualities to the darkest complexions. The English, identifying as “purely white,” reserved the very best qualities for themselves. The destructive effects of their research, which offered support for racism and white supremacy, endure in modern society. Examples of publications by the Royal Society and the American Philosophical Society are exhibited as evidence of institutions and individuals participating in these unscrupulous practices.

Throughout his lifetime, Franklin reflected on his own prejudices and confronted and modified his views on human difference. Some of his writings on public policy and education reveal these changes and are included in the exhibition. As a citizen scientist, he was willing to learn and grow.

Detail from “Maritime Observations,” Benjamin Franklin, Philadelphia, 1786. Bound volume. APS. In the *Transactions of the American Philosophical Society*, Franklin described inventions and improvements to boating practices, illustrated here. He based some of his designs on technologies developed by Pacific Islanders and Native Americans.

Pennsylvania Currency, Benjamin Franklin and David Hall, Philadelphia, 1764. Stereotype and letterpress. Duane Family Collection, APS. Gift of Morris Duane, 1957–1980. Franklin realized his and Joseph Breintnall's nature-printing invention could be useful against counterfeiting because the unique patterns of leaves and fabrics were not easily reproduced. Franklin started printing currency using this technology in 1739 for the colonial government.

Premier Voyage Aérien, Ch. Launois and N. Sauvage, Paris, c. 1783. Hand-colored engraving. APS. As minister to France from 1777 to 1785, Franklin lived near Paris, a scientific center where technology reached new heights. This print shows the view he and his guests enjoyed of the first piloted balloon flight on November 21, 1783.

Miniature Portrait of Benjamin Franklin, unknown artist, after Mason Chamberlin, after 1762. Watercolor on ivory. APS.



For the “Benefit of Mankind in General”

FRANKLIN REMAINED committed to advancing useful knowledge for the “Benefit of Mankind in General” even as his responsibilities as a public servant demanded more of his time. He believed that “there is no Rank in Natural Knowledge of equal Dignity and Importance with that of being . . . a good Neighbour or Friend, a good Subject or Citizen.” Franklin applied his privileged position to civic improvement by founding or patronizing institutions that promoted research and education, empowering the next generation of American citizen scientists. Many of these institutions still exist today, including the American Philosophical Society, the Library Company of Philadelphia, Pennsylvania Hospital, and the University of Pennsylvania. Publications and artifacts relating to these institutions are featured in the exhibition, including a copy of the APS’s founding document, *A Proposal for promoting Useful Knowledge among the British Plantations in America*. However, in Franklin’s lifetime, the vast majority of people who benefited from these institutions were elite, white men.

When Franklin died, his work as a citizen scientist had made him the most recognizable American in the world. He had risen above his working-class origins and counted presidents and kings among his friends. In contrast, his sister Jane Franklin Mecom’s world rarely extended beyond her birthplace of Boston, except through the letters she and her brother exchanged their entire lives. This contrast



Above and Below Dr. Franklin, Citizen Scientist exhibition at the APS Museum. Photos by Brent Wahl.

concludes the exhibition through the pairing of two letters. One is a 1789 letter written by George Washington to the ailing Franklin in which Washington praises Franklin’s “philosophic mind” and assures him that his contributions to the country will never be forgotten. The other letter was written by Mecom in 1786. She states that “Thousands of Boyles Clarks and Newtons have Probably been lost to the world, and lived and died in Ignorans and meanness, nearly for want of being Placed in favourable situations, and Injoying Proper Advantages, very few we know is Able to beat thro all Impedements and Arive to any Grat Degre of superiority in Understanding.” In summary, she is reflecting on structural inequality. Mecom wondered how many potential Sir Robert Boyles, Samuel Clarkes, and Sir Isaac

Newtons had been “lost to the world” because they were not born into privileged circumstances. Denied formal education, married at 15, and forced to support her aging parents, 12 children, and other family, Mecom watched her brother “beat thro all Impedements” using advantages unavailable to her. Her life and legacy stand in stark contrast to her brother’s.

Unequal opportunities and rewards for people based on gender, race, ethnicity, religion, and class continue to shape society. We rephrased Mecom’s letter to ask visitors: How many people, like her, have been “lost to the world” because they were born into circumstances beyond their control?

**Janine Yorimoto Boldt with
Emily A. Margolis, Andrew W. Mellon
Foundation Postdoctoral Curatorial Fellows**



Museum Education Programs

AS APS AUDIENCES HAVE GROWN more comfortable with virtual platforms, staff continued to provide offerings for learners in grades 4–12, educators, and the public throughout the year. From continuing creation of digital educational resources, to organizing Zoom-based programs for adults and working with students to document weather data, it has been another meaningful year of promoting useful knowledge.

As Head of Education Programs Michael Madeja and Museum Education Coordinator Alexandra Rospond became more comfortable with systems for sharing digital resources on the APS website, the Museum Guides did the same. Museum Guide Craig Fox worked with the Center for Digital Scholarship to create a set of education materials for the Franklin Ledgers database through the National Endowment for the Humanities CARES-funded *Benjamin Franklin's American Enlightenment* projects. Elsewhere on the website, Museum Guides Caroline Phelps and Caitlin O'Donnell were able to pair digital exhibitions and galleries with educational resources. Since last year, these types of digital resources have flourished and greatly bolstered the Educator Resources webpage.

Now comfortable with Zoom and its many applications for digital engagement, the department has debuted many virtual programs for its audiences. And perhaps more significantly, many of these programs were able to speak to or achieve goals stated



One cent Benjamin Franklin stamp, 1892. APS. Franklin helped improve the postal system by devising a series of account books (ledgers) to standardize postage and improve record-keeping. The digital educational resource Franklin Ledgers allows students to work with Franklin's recently digitized ledgers to get a glimpse into the details of Franklin's life and see what it would have been like to be a postal employee in the 18th century.

in the APS IDEA initiative to increase inclusion, diversity, equity, and access at the Society. With features on women's history, an inaugural Pride-themed talk, and incorporation of accessible features on Zoom, the department moved from reflection and planning to implementation on many fronts. These programs balance rigorous research on often serious topics with fun and levity. Whether it was birthday hats and noisemakers for Benjamin Franklin's birthday or a peek

behind the red curtain for a program on the Peale Family, the department took its charge of educating in a friendly, accessible manner seriously.

This year, in partnership with the Center for Digital Scholarship, the Education Programs Department launched the pilot phase of a Community Science Weather Data project. Inspired by the historic weather journals of Thomas Jefferson, David Rittenhouse, James Madison, and Ann Haines found in the APS collections, the pilot continues a tradition of citizen science at the Society. Engaging with close to 100 students from two schools, the project aims to introduce students to the nature of meteorological data, its collection, and how all can be involved in scientific work. Working with Bodine High School's AP Environmental Science students and eighth graders from Newtown Middle School, Alexandra Rospond spearheaded the project by utilizing virtual learning techniques and technologies learned over the past year. Students collected weather data at two points in the day and filled in sheets formatted after those historic weather journals. The students gathered data, such as regular observations and daily temperatures, between mid-March and the end of May. With all of the lessons learned for both staff and students, the project will continue on to a new phase in the next school year.

Michael Madeja,
Head of Education Programs

BENJAMIN FRANKLIN (1706-1790) DEDICATED HIMSELF TO RESEARCH, invention, and sharing knowledge for the "Benefit of Mankind in General." Franklin believed that "all people could and should engage with science, and that science could make our society for the better. For these reasons, Franklin was America's first citizen scientist."

Franklin's working classification and self-education distinguished him from other elite scientists, known in the 18th century as natural philosophers. He recognized that science could take many forms and that all people could produce useful knowledge, including the soapmakers and scribes in his family. The knowledge and labor of diverse people enabled his success.

As a citizen scientist, Franklin owned institutions that used science to benefit and educate others. However, he participated in a system of knowledge production that often minimized and produced inequality. The American Philosophical Society (APS), an institution founded by Franklin in 1743 for promoting useful knowledge, invites you to reflect on Franklin's legacy as a citizen scientist.

HOW CAN YOU CONTINUE AND IMPROVE FRANKLIN'S MISSION?



ENTER



MEMBERS ELECTED



Class 1: Mathematical and Physical Sciences

Joseph S. Francisco, President's Distinguished Professor of Earth and Environmental Science, Professor of Chemistry, University of Pennsylvania; William E. Moore Distinguished Professor Emeritus of Earth and Atmospheric Sciences and Chemistry, Purdue University

Barbara V. Jacak, Director, Nuclear Science Division, Lawrence Berkeley National Laboratory, Professor of Physics, University of California, Berkeley

Deb Niemeier, Clark Distinguished Chair Professor, Department of Civil and Environmental Engineering, Director, Maryland Transportation Institute, University of Maryland

Daniel G. Nocera, Patterson Rockwood Professor of Energy, Department of Chemistry and Chemical Biology, Harvard University; Founder and Board of Directors, Kula Bio

Billie Lee Turner II, Distinguished Sustainability Scientist, Global Institute of Sustainability and Innovation, Regents Professor, Gilbert F. White Professor of Environment and Society, School of Geographical Sciences and Urban Planning and School of Sustainability, Arizona State University; Distinguished Research Professor of Geography, Clark University

Neil deGrasse Tyson, Frederick P. Rose Director of the Hayden Planetarium, Rose Center for Earth and Space, American Museum of Natural History

Class 2: Biological Sciences

Anna Katherine "Kay" Behrensmeier, Senior Research Geologist, Curator of Vertebrate Paleontology, Department of Paleobiology, National Museum of Natural History, Smithsonian Institution

Kristen Hawkes, Distinguished Professor, Department of Anthropology, University of Utah

Marc Kirschner, Professor of Systems Biology, Chair, Department of Systems Biology, Harvard Medical School, John Franklin Enders University Professor, Harvard University

Trudy Frances Charlene Mackay, Self Family Endowed Chair of Human Genetics, Professor of Genetics and Biochemistry, and Director, Clemson Center for Human Genetics, Clemson University

Gene E. Robinson, Director, Carl R. Woese Institute for Genomic Biology, Swanlund Chair and Center for Advanced Study Professor, Professor of Integrative Biology, Professor of Entomology, University of Illinois, Urbana-Champaign

Class 3: Social Sciences

Daron Acemoglu, Institute Professor, Massachusetts Institute of Technology

David W. Blight, Sterling Professor of History, of African American Studies, and of American Studies, Director, Gilder Lehrman Center for the Study of Slavery, Resistance, and Abolition, Yale University

Philip Joseph Deloria, Leverett Saltonstall Professor of History, Harvard University

Arlie Russell Hochschild, Professor Emerita of Sociology, University of California, Berkeley

Sheila Jasanoff, Pforzheimer Professor of Science and Technology Studies, Kennedy School of Government, Harvard University

Diana L. Kormos-Buchwald, Director and General Editor, Einstein Papers Project, Robert M. Abbey Professor of History, Division of the Humanities and Social Sciences, California Institute of Technology

Cecilia Elena Rouse, Lawrence and Shirley Katzman and Lewis and Anna Ernst Professor in the Economics of Education, Professor of Economics and Public Affairs, Princeton University

Class 4: Humanities

Elizabeth Anderson, Arthur F. Thurnau Professor, John Dewey Distinguished University Professor of Philosophy and Women's Studies, University of Michigan, Ann Arbor

Kathleen Mary Coleman, James Loeb Professor of the Classics, Chair, Department of Classics, Harvard University

Ronald Egan, Confucius Institute Professor of Sinology, Department of East Asian Languages and Cultures, Stanford University; Emeritus Professor of Chinese, Department of East Asian Languages and Cultural Studies, University of California, Santa Barbara

Mary Miller, Director, Getty Research Institute; Specialist in Mesoamerican Art

Richard J. Powell, John Spencer Bassett Professor of Art and Art History, Duke University

Class 5: The Arts, Professions, and Leaders in Public and Private Affairs

Tomiko Brown-Nagin, Professor of History, Daniel P. S. Paul Professor of Constitutional Law, Dean, Radcliffe Institute for Advanced Study, Harvard University

Lydia Davis, Short story writer, novelist, essayist, and translator; Professor of English Emerita, SUNY Albany

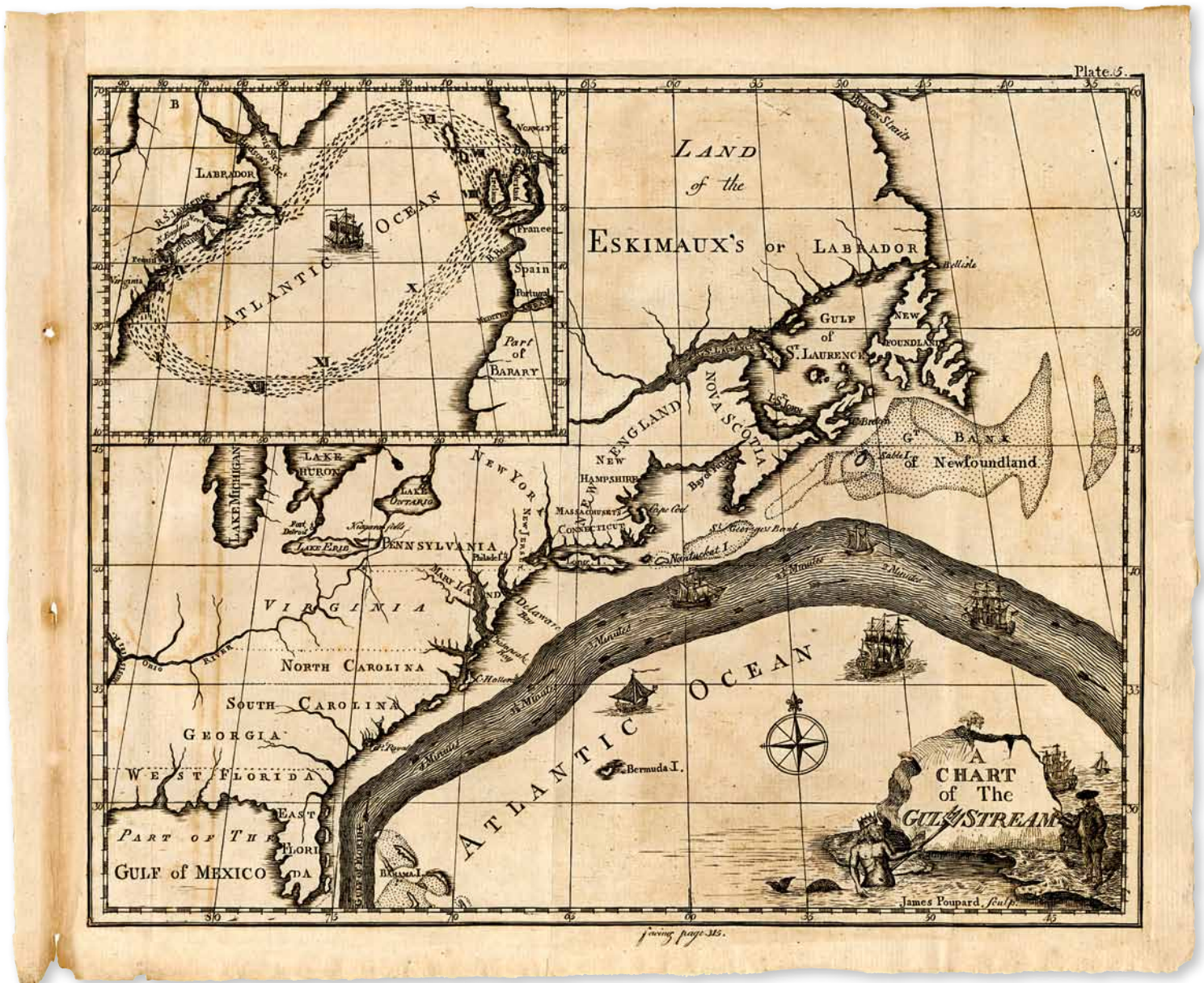


Chart of the Gulf Stream, Benjamin Franklin and Timothy Folger, Philadelphia, 1786. Engraving from bound volume. APS. Timothy Folger and his cousin Benjamin Franklin were the first to chart the Gulf Stream in 1768. Understood by sailors like Folger but unfamiliar to officials, this warm current impacted transatlantic travel. The first American chart appeared in the *Transactions of the American Philosophical Society*.

Denyce Graves, Operatic Mezzo-Soprano; Rosa Ponselle Distinguished Faculty Artist (Voice), Peabody Institute, Johns Hopkins University

Joy Harjo, U.S. Poet Laureate, Musician

Indra Nooyi, Former Chief Executive Officer, PepsiCo; Board of Directors, Amazon; Co-Chair, Board of Directors, AdvanceCT (Connecticut Economic Resource Center); Class of 1951 Chair for the Study of Leadership, West Point

Darren Walker, President, Ford Foundation

International Members

Michael Victor Berry, Melville Wills Professor of Physics Emeritus, University of Bristol

Mireille Delmas-Marty, Member, French Academy of Moral and Political Sciences; Professor Emeritus, Collège de France

Charles Godfray, Director, Oxford Martin School, Professor of Population Biology, Department of Zoology, University of Oxford

Moshe Halbertal, Professor of Jewish Thought and Philosophy, Hebrew University; Gross Professor of Law, New York University Law School

Deborah Howard, Professor Emerita of Architectural History, Faculty of Architecture and History of Art, Fellow, St. John's College, University of Cambridge

Sarah Stroumsa, Alice and Jack Ormut Professor of Arabic Studies Emerita, Hebrew University of Jerusalem

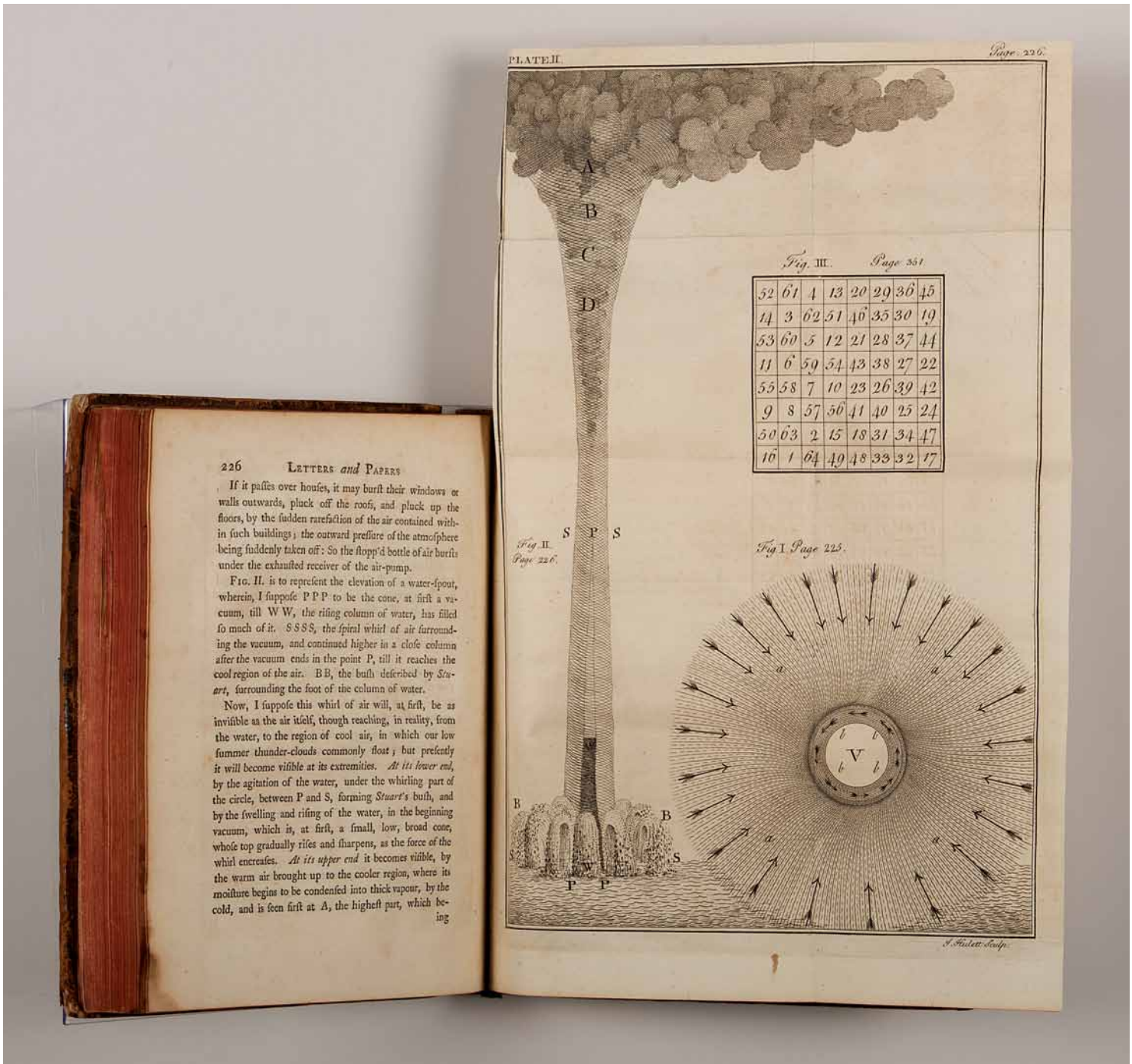
K. VijayRaghavan, Principal Scientific Advisor, Government of India

2021

NEWS OF MEMBERS

Rosalie Silberman Abella was appointed the Samuel LL.M. '55 S.J.D. '59 and Judith Pizar Visiting Professor of Law at Harvard Law School. • **Paul Alivisatos** was named the next president of the University of Chicago. • **Paul Alivisatos** was named the John D. MacArthur Distinguished Service Professor in the Department of Chemistry, the Pritzker School of Molecular Engineering, and the College at the University of Chicago. • **Frances H. Arnold** was appointed co-chair of the President's Council of Advisors on Science and Technology. • **Mary Beckerle** was elected a member of the National Academy of Sciences. • **Stephen J. Benkovic** was elected a Foreign Member of the Royal Society. • **Ben Bernanke** was elected a member of the National Academy of Sciences. • **Michael Berry** was admitted as an Honorary Fellow of the Learned Society of Wales. • **Noam Chomsky** was awarded the 2021 United Sigma Intelligence Association Award. • **Joanne Chory** was awarded the 2020 Pearl Meister Greengard Prize. • **Michael Cook** received the 2020 Middle East Medievalists Lifetime Achievement Award. • **Regna Darnell** received the 2020 Lifetime Service Award from the Women's Caucus, Canadian Anthropology Society. • **Regna Darnell** received the 2020 Lifetime Service Award from the American Society for Ethnohistory. • **Peter B. Dervan** was awarded the 2022 Priestley Medal by the American Chemical Society. • **Rita Dove** received the 2021 LA Review of Books (LARB) - UCR Department of Creative Writing Lifetime Achievement Award. • **Anthony S. Fauci** received the WHYY Lifelong Learning Award. • **Anthony S. Fauci** received the National Academy of Sciences' 2021 Public Welfare Medal. • **Anthony S. Fauci** was appointed chief medical adviser to President Biden upon his election. • **Anthony S. Fauci** received the 2021 Ivan Allen Jr. Prize for Social Courage from the Georgia Institute of Technology. • **Anthony S. Fauci** received the 2020 Harris Dean's Award from the University of Chicago. • **Anthony S. Fauci** received the 2021 Dan David Prize for Public Health. • **Anthony S. Fauci** received the Legend in Leadership Award of the Yale School of Management's Chief Executive Leadership Institute. • **Anthony S. Fauci** was named McGill University's 67th Beatty Lecturer. • **Roger W. Ferguson, Jr.** was named to the Corning Board of Directors. • **Roger W. Ferguson, Jr.** joined the Council on Foreign Relations' David Rockefeller Studies Program as the Steven A. Tananbaum Distinguished Fellow for International Economics. • **Howard Gardner** was awarded the 2021 United Sigma Intelligence Association Award. • **Henry Louis Gates, Jr.** received the Don M. Randel Award for Humanistic Studies from the American Academy of Arts and Sciences. • **Atul Gawande** served on

the Biden administration's transition COVID-19 advisory team from November 2020 until January 20, 2021, when the transition advisory team was disbanded. • **Andrea Ghez** was awarded the 2020 Nobel Prize in Physics. • **Louise Glück** was awarded the 2020 Nobel Prize in Literature. • **Claudia Goldin** was awarded the 2020 Erwin Plein Nemmers Prize in Economics. • **Jane Goodall** was awarded the 2021 Templeton Prize. • **Jeffrey I. Gordon** was awarded the 2021 George M. Kober Medal from the Association of American Physicians. • **Nina Jablonski** was elected a member of the National Academy of Sciences. • **Sheila Jasanoff** was elected a member of the American Academy of Arts and Sciences. • **Robert Jervis** was elected a member of the National Academy of Sciences. • **Carl June** was elected to AC Immune's Board of Directors. • **Carl June** received the 2021 Dan David Prize for Molecular Medicine. • **Linda K. Kerber** delivered the ACLS 2020 Charles Homer Haskins Prize Lecture. • **Nicholas Kristof** was awarded the inaugural Aurora Humanitarian Journalism Award. • **Vijay Kumar** was elected a member of the American Academy of Arts and Sciences. • **Risa Lavizzo-Mourey** was elected a trustee of the Howard Hughes Medical Institute. • **Jianguo "Jack" Liu** received the 2021 Gunnerus Award in Sustainability Science. • **Glenn Loury** joined the Archbridge Institute's Board of Academic Advisors. • **Thomas Lovejoy** was elected a member of the National Academy of Sciences. • **Jane Lubchenco** was appointed deputy director for climate and environment in the White House Office of Science and Technology Policy. • **Margaret H. Marshall** received the 2021 Bolch Prize for the Rule of Law. • **Paul Moravec's Sanctuary Road** was nominated for a 2021 Grammy Award in the "Best Choral Performance" category. • **Margaret Murnane** was awarded the 2021 Benjamin Franklin Medal in Physics. • **Alondra Nelson** was appointed deputy director of science and society at the White House Office of Science and Technology Policy. • **William Nordhaus** received the 2020 Daniel Patrick Moynihan Prize from the American Academy of Political and Social Science. • **Martha C. Nussbaum** was awarded the 2021 Holberg Prize. • **Olufunmilayo Olopade** was elected a member of the National Academy of Sciences. • **Stuart H. Orkin** received the 2021 Gruber Genetics Prize. • **Giorgio Parisi** received the 2021 Wolf Prize in Physics. • **Claire L. Parkinson** was awarded the 2020 Roger Revelle Medal from the AGU. • **Phillip James Edwin Peebles** was appointed a Companion of the Order of Canada. • **Roger Penrose** was awarded the 2020 Nobel Prize in Physics. • **Veerabhadran Ramanathan** was awarded the Blue Planet Prize by Japan's Asahi Glass Foundation. • **Mary Robinson** received the Benjamin Franklin House Medal for Leadership. • **Martine A. Rothblatt** received the Meritorious Service to Aviation Award from the National Business Aviation Association. • **Sara Seager** was appointed an Officer of the Order of Canada. • **Randy Schekman** was appointed to Eureka Therapeutics' Scientific Advisory Board. • **Sabine Schmidtke** was elected a corresponding member of the Austrian Academy of Sciences. • **Kathryn Sikink** was elected a Fellow of the American Academy of Political and Social Science. • **Ruth J. Simmons** was reappointed to the Federal Reserve Bank of Dallas' Houston Branch board by the Federal Reserve Board of Governors for a three-year term. • **Susan Solomon** received the NAS Award for Chemistry in Service to Society. • **Gayatri Chakravorty Spivak** was elected a member of the American Academy of Arts and Sciences. • **Joan A. Steitz**



Waterspout, Experiments and Observations on Electricity, 4th ed., Benjamin Franklin, London, 1769. Bound volume. APS. Gift of the Metropolitan Museum of Art. Franklin and his colleagues debated the cause of waterspouts. He correctly theorized that water is pulled upward into a swirling tower, illustrated here. Others incorrectly believed that waterspouts pulled water downward from the sky.

received the 2021 Wolf Prize in Medicine. • **David S. Tatel** has notified President Biden that he will assume senior status effective upon the appointment of his successor. • **Marc Tessier-Lavigne** was appointed an Officer of the Order of Canada. • **Sarah Thomas** was appointed to the Natural History Museum’s Board of Trustees. • **Laurence H. Tribe** was appointed to the Presidential Commission on the Supreme Court of the United States. • **Billie Tsien** was appointed by President Biden to the Commission of Fine Arts. • **Peter H. von Hippel** received the 2021 Ignacio Tinoco Award from

the Biophysical Society. • **Warren M. Washington** was awarded the 2021 GCSE Lifetime Achievement Award for Science, Service, and Leadership. • **Edward Witten** was awarded the 2021 United Sigma Intelligence Association Award. • **Susan R. Wolf** was selected to serve as a Phi Beta Kappa Visiting Scholar during the 2020–2021 academic year. • **Jan Ziolkowski** was elected to the Finnish Academy of Science and Letters. • **Maria T. Zuber** was appointed co-chair of the President’s Council of Advisors on Science and Technology.

Investing in Our Future

WITH THE APS GRANT AND FELLOWSHIP PROGRAM



Lewis and Clark Fund for Exploration and Field Research Grant recipient Sara Gonzalez scuba dives in Playa Blanca, during a six-week exploratory and research collection trip along the coast of Chile. Photo by Kersten Schnurle.

AS IS ABUNDANTLY EVIDENT through our Members' involvement, a deep connection exists between the APS Grant and Fellowship program and the APS Membership. APS Members, both past and present, are intricately linked with the Society's support of scholarly research in all fields of knowledge—from receiving APS support as young scholars, to evaluating grant and fellowship applications, serving on committees, and contributing to the continuation of various programs. A further demonstration came during the pandemic as generous donations, largely from Members, allowed the Society to supplement grants given in 2020 so that less research time was lost than might have been otherwise.

A remarkable number of Members received APS grants in support of their work prior to election to the APS. In 1933, the APS awarded its first General Research Grant based on submitted applications. From 1934 to 2005, 433 grants were made to scholars later elected to APS Membership, with a number of future Members receiving more than one grant.

Many grant recipients also supported APS research programs prior to their election. Innumerable letters of support were submitted on behalf of applicants to the various programs. Because the Franklin Research Grant program—once known as the General

Research Grant program due to its funding of work in all fields of knowledge—covers so much territory, hundreds of expert readers are called up each year. Past grant recipients and APS Members, often one and the same, frequently step up to fill the need.

Besides serving as evaluators, APS Members have answered the call to serve on the committees that meet annually or semiannually to determine who will receive awards. Currently, Prudence Harper (APS 1994, grant in 1986), Elizabeth Cropper (APS 1998, grant in 1973), Regna Darnell (APS 2004, grant in 1984), Bruce Kuklick (APS 2004, grants in 1969, 1971, and 1979), Jeffrey Hamburger (APS 2010, fellowship in 2007), and Richard Kagan (APS 2011, grants in 1973 and 1975) are all serving terms on selection committees.

Some of our former grant recipients have risen to the highest levels of the APS—serving as Librarians (Richard H. Shryock, APS 1944; Edward Carter, APS 1983) and Executive Officers (George Corner, APS 1940; Richard Dunn, APS 1998; Mary Maples Dunn, APS 1999), with Whitfield Bell, Jr. (APS 1964) as the only person to serve in both roles.

We look forward to seeing what our recent grant recipients accomplish and to a future of working together!

Linda Musumeci, *Director of Grants and Fellowships*

A Peculiar Craft

IN JEFFERSON GARDEN



PASSERSBY might have noticed the newest artist installation in Jefferson Garden, *A Peculiar Craft*. The installation brings to life sketches of a boat found in the Franklin-Bache Papers. Artists Ben Neiditz and Zach Fay used the sketches and information gleaned from APS staff to construct Franklin's *Boat for pleasure or fishing parties on the Delaware River*. As has

become the norm for these installations, the creation speaks to themes in the exhibition located across the street in Philosophical Hall. Drawing from *Dr. Franklin, Citizen Scientist's* object list and themes, *A Peculiar Craft* prompts viewers to think about Franklin's connections to the water, the science of studying it, and the labor and economics behind understanding its rhythms.

The boat in both the sketches and in the garden has sails that can rotate on two different axes. Unique in this way, the sketches and idea of the installation inspired not only staff but APS Members and the artists as well.

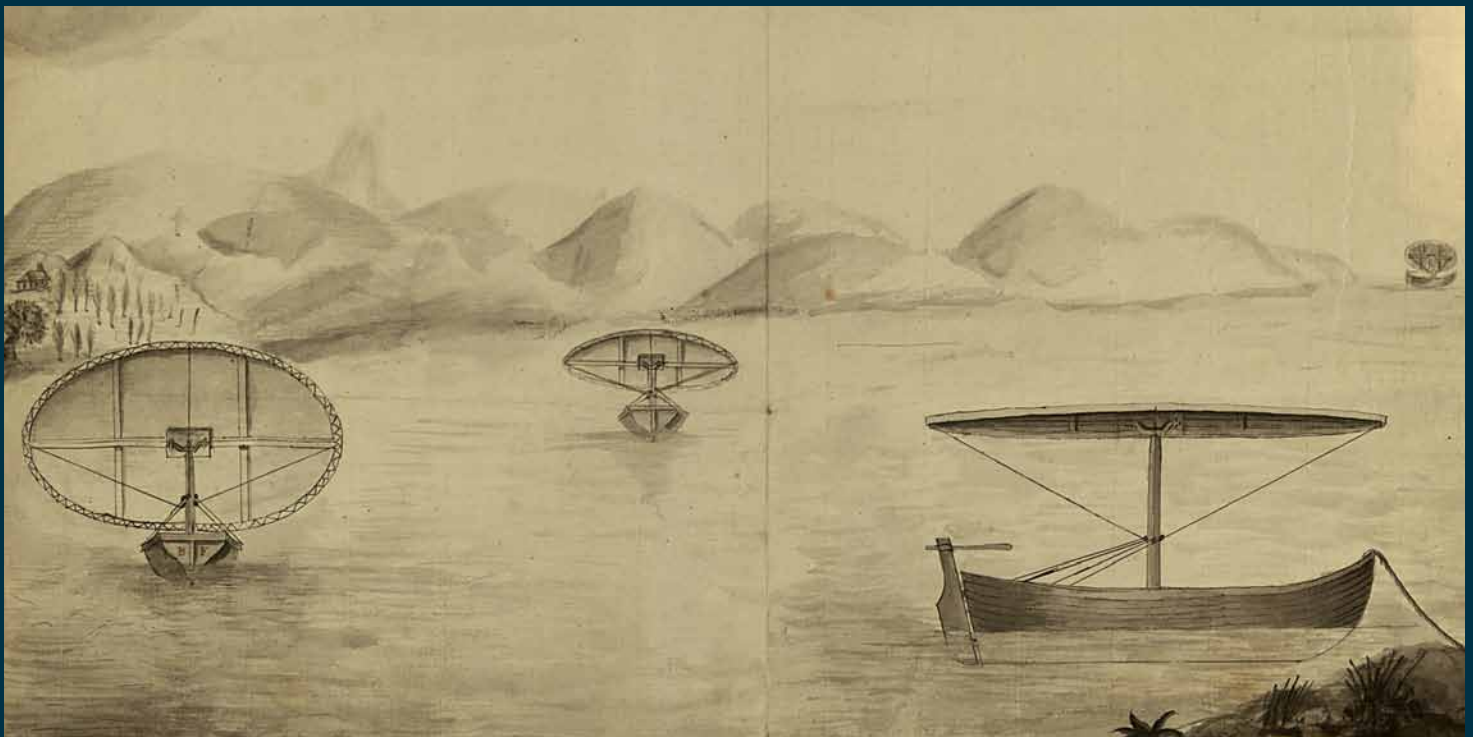
Sarah B. Pomeroy (APS 2014) provided an interpretive label for the installation, drawn from her recent APS Press publication, *Benjamin Franklin, Swimmer: An Illustrated History*. As Dr. Pomeroy noted: "for Benjamin Franklin water was both a passion and a

subject. He was the first to chart the Gulf Stream and investigated water pollution in Philadelphia. Water was also a source of pleasure for Franklin. In his *Autobiography* he wrote about his fascination with the sea, whether navigating it in boats or swimming through it. Franklin's youthful inventions included swimming paddles (like fins) and an early method of kitesurfing. Franklin praised swimming for promoting health, hygiene, and safety. His advice about water safety and the importance of teaching everyone to swim remains relevant. Swimming has always been 'useful knowledge.' And while his printing-house comrades imbibed strong beer, Franklin—the 'Water-American'—would insist on drinking water instead."

Meanwhile, the artists drew additional inspiration by Franklin's improvisational and tinkering spirit and kept the construction of the vessel to what was observable in the sketches from the APS collection. When asked about the installation, Neiditz mentioned that "additional details or features came from our imaginings of what the sketched boat might look like in person. The only deviations we made were done to allow the wind to move the sail without a sailor present. If you are here on a blustery day (or if you are patient enough to wait for a gust), the mast and sail should spin around, changing direction along with the wind."

We hope you have time to sail by Jefferson Garden and catch such a glimpse. *A Peculiar Craft* will be in the garden through December 2021.

Michael Madeja, *Head of Education Programs*



Top Left Artists Ben Neiditz and Zach Fay install *A Peculiar Craft* in Jefferson Garden. Photo by Michael Madeja. **Above** *Boat for pleasure or fishing parties on the Delaware River*. Watercolor sketch. Franklin-Bache Papers, APS.

AMERICAN PHILOSOPHICAL SOCIETY

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November 2020 Awards

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John Frederick Lewis Award: **Keith Marshall Jones III**, in recognition of his book *John Laurance: The Immigrant Founding Father America Never Knew*.

Karl Spencer Lashley Award: Jointly to **Winrich Freiwald** and **Doris Tsao**, in recognition of their groundbreaking discoveries of primate cortical areas that selectively encode visual information about faces, the computational principles underlying face encoding in these areas, and the implications of these discoveries for social cognition.

Henry M. Phillips Prize in Jurisprudence: **Owen M. Fiss**, in recognition of his lifetime of contributions to American law and jurisprudence, most especially his inspirational interpretation of legal equality in terms of overcoming and resisting social stratification; his pathbreaking explication of how courts might realize constitutional values in the real world of government institutions; his global writings illuminating human rights as ideals rooted in both universal principles and national self-determination; his mentorship of generations of legal scholars, both in the United States and abroad; and his abiding faith in the power of law to light our way toward a just future.

April 2021 Awards

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Patrick Suppes Prize in Psychology: **Elizabeth Loftus**, in recognition of her demonstrations that memories are generally altered, false memories can be implanted, and the changes in law and therapy this knowledge has caused.

Magellanic Premium Medal: **Fabiola Gianotti**, in recognition of her role in the discovery of the Higgs boson and her leadership in elementary particle physics. From the design and construction of the ATLAS detector to the analysis of the data and discovery of the Higgs, Gianotti played a leading role in this milestone event. Today she serves as the Director-General of the European Organization for Nuclear Research (CERN) and is leading the quest to understand matter, energy, space, and time at the most fundamental level.

APS Museum Reopening

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The APS Museum has reopened! Staff look forward to welcoming APS Members, Friends, and the public back into Philosophical Hall this year. Starting in August 2021, the exhibition *Dr. Franklin, Citizen Scientist* will be open to the public. The APS will be following guidance from the City of Philadelphia and the CDC throughout this period of public access. Restrictions and health and safety procedures are likely to change based on that guidance, so be sure to check the APS website for current information.

Upcoming Meetings of the APS

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Wednesday–Friday, November 10–12, 2021

The Society's November 2021 Meeting will be held virtually. For information regarding required pre-registration for these sessions, please contact Director of Meetings Ann S. Westcott at westcott@amphilsoc.org.

Thursday–Saturday, April 28–30, 2022

With April 2022, in-person Society Meetings will resume. Much anticipated, this Meeting is planned to be an especially celebratory occasion to renew old friendships, welcome newly elected Society Members, and, of course, enjoy great talks. Please mark the dates of Thursday, April 28 through Saturday, April 30 firmly on your calendar and plan to be with us for the fun and fellowship.

Thursday–Saturday, November 17–19, 2022

A Word about the Penrose Association

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A planned gift offers a way for you to establish a lasting legacy at the American Philosophical Society through a substantial contribution that may not be possible during your lifetime. The Society gratefully recognizes those who have named us as a beneficiary in their wills, made us the beneficiary of a retirement account or insurance policy, or established a charitable trust or annuity as members of the Richard A. F. Penrose, Jr., Association. For more information about planned giving options and tax benefits, and to discuss how you would like your gift to be used, please contact Linda Jacobs at 215-440-3434 or ljacobs@amphil-soc.org.