THIS PAST YEAR has been filled with brown bags, seminars, conferences, and public lectures—all the events that usually appear on the APS calendar—guided by the advice and leadership of the committees that govern the Society.

The 2023 election of Members continued the Society’s focus on diversifying the Membership by gender, race and ethnicity, age, and geography. The wise leadership of the Committee on Investment has mitigated the small loss of the Society’s endowment in 2023. Moreover, the Annual Fund continued the excellent performance of the past several years.

Creation of an APS strategic plan for 2024–2028 is a major, ongoing project. The initial steps were some 20 listening sessions around the United States in which Members, Friends, fellows, and grantees were engaged to offer their ideas for the Society’s future activities and projects. Participants in these sessions expressed enthusiasm and satisfaction with the Meetings of the Society, but also proposed greater visibility and public outreach. The planning process continued with preparation of a draft plan during Summer 2023, along with a professional study of the Society’s future space needs.

The April 2023 APS Meeting—the second in-person Meeting since the beginning of the pandemic—was well-attended and featured a transition in the Society’s leadership. Linda Greenhouse (APS 2001) completed her second, highly successful term as President of the Society and was enthusiastically celebrated during the Meeting. She has been succeeded by Roger Bagnall (APS 2001), who was elected President at the November 2022 APS Meeting. Dr. Bagnall is professor emeritus of ancient history and Leon Levy Director Emeritus of the Institute for the Study of the Ancient World at New York University. Among the leading historians of Greek and Roman antiquity, Dr. Bagnall enjoys an immense reputation for his work on Roman and Late Antique Egypt, its economy, and its documents on papyri and potsherds. Dr. Bagnall has already initiated several new projects at the APS, including development of the strategic plan for 2024–2028, the formation of a committee to plan APS activities in commemoration of the 250th anniversary of the Declaration of Independence, and an assessment of the prospects for a center on the history of science, technology, and medicine. These and other initiatives were on the agenda of a special, all-day meeting of the APS Council in October.

After a highly productive eight years as Director of the Library & Museum, Patrick Spero (APS 2019) resigned in June to lead the George Washington Presidential Library at Mount Vernon. Dr. Spero’s term saw many important and lasting innovations. We at the APS wished Dr. Spero equal success in his leadership at Mount Vernon.

This year’s Museum exhibition, which runs through December, is Pursuit & Persistence: 300 Years of Women in Science. For the first time since 2019, after which access to exhibitions was limited by the pandemic, the public can enter the exhibition through both the Fifth Street and Independence Square doorways. This will vastly increase viewership relative to the past three years. The first related conference, “Women in Science: Achievements and Barriers,” was
held in June, and the second, “Women in Science: Opportunities,” in October.

The APS publications program began a period of rapid change during 2022. After the December 2021 retirement of Mary McDonald, who had directed the department for 20 years, the Society began a search for a successor. Our experience during that search led to a reconsideration of the activities of the Publications Committee and the APS Press. We were most fortunate to engage Peter Dougherty (APS 2023) in the search process. Dougherty had directed Princeton University Press for 20 years and agreed to lead a relaunch of the APS Press. That continued in July 2023 with the creation of a five-year partnership agreement with the University of Pennsylvania Press, which will print, market, distribute, and store APS Press publications and initiate electronic and print-on-demand services of the large and valuable APS Press backlist.

Another project was an assessment of the value and feasibility of creating a center for the history of science, technology, and medicine within the Library & Museum. The Society’s scientific history collections are larger than those in the other two main areas of the collections—Native American language and culture, and early American history. The Society has established centers in each of those fields: The Center for Native American and Indigenous Research, and The David Center for the American Revolution. There is presently no corresponding center on the history of science to lead and focus the Society’s research, training, and public activities in that area. An ad hoc committee, chaired by Harriet Zuckerman (APS 1996), recommended the founding of such a center at the November 2023 APS Meeting, and it was approved by Council and Membership.

The year also saw administrative improvements. A collaboration between staff of the Library & Museum and the Executive Office created a reader-friendly onboarding document that serves both as an introduction to the APS for new employees and a resource for continuing employees. Staff of the Executive Office worked with an HR consultant to replace the obsolete Employee Handbook with a state-of-the-art, detailed Employee Manual. All APS staff completed training in anti-harassment and diversity, equity, and inclusion using interactive online modules developed by Kantola. As planned, the regular, five-year review of staff compensation was carried out by an external consultant; salary adjustments reestablished comparability with similar positions in other organizations, remedied some gender-based disparities, and largely mitigated the effects of inflation. A long-term project to move staff retirement accounts to Vanguard from TIAA has been completed, as well.

As ever, these activities and accomplishments would not have been possible without the fulsome, able, and collaborative endeavors of APS Members, Friends, and staff. One of the joys of this office is that almost all of my invitations to join in the Society’s regular activities and special projects are accepted with enthusiasm.

The 2023 election of Members continued the Society’s focus on diversifying the Membership by gender, race and ethnicity, age, and geography.

Above: Linda Greenhouse (APS 2001) and Roger Bagnall (APS 2001) at the April 2023 APS Meeting. After two successful terms as APS President, Linda Greenhouse was succeeded by APS President Roger Bagnall. Photo by Kelly & Massa.

Left: Patrick Spero (APS 2019) being honored at the April 2023 APS Meeting for his eight years as Director of the APS Library & Museum. Dr. Spero became the executive director of the George Washington Presidential Library at Mount Vernon in July 2023. Photo by Kelly & Massa.
Particular highlights of the last year have been the lively and popular scholarly conversations and educational programs. The Library & Museum held four major, international conferences that brought a remarkable 1,720 people together in conversation—both in person and online. And, thanks to new hybrid-event capabilities, the Library & Museum saw over 6,500 attendees for scholarly, educational, and public programs during that same period.

The June conference explored the history of women in science, the present state of science and society, and the opportunities to create a more inclusive and diverse practice of science. From women’s experiences doing Antarctic science, to the history of Black women physicians, to addressing the ongoing STEM gender gap, presenters grappled with the many challenges that women have faced and continue to face in the pursuit of science.

This conference was the first in a pair. The second part, held in October 2023, was more forward-looking with an eye toward identifying and exploring opportunities for women in science.

Supporting networks of scholars is at the core of the Society’s conferences and gatherings, and evidence of such networks in the collections also served as the basis for the newest digital project of its Center for Digital Scholarship—Visualizing Women in Science (https://diglib.amphilsoc.org/womeninscience/). The project began during a Digital Humanities Fellowship in 2018 by Serenity Sutherland, an Assistant Professor in Communications at SUNY Oswego, and grew into a multi-year data project that features 251 women scientists in APS collections from the 19th and 20th centuries. The project constructs a visualization that illustrates the connections between women scientists that built networks of support. Growing out of the correspondence of five prominent women scientists—Florence Rena Sabin, Florence Barbara Seibert, Barbara McClintock (APS 1946), Mildred Cohn (APS 1972), and Rose Mooney-Slater—network data was collected to reveal relationships based on recommendations, mentoring, publications, collaborations, mentions, and more. Those networks, both formal and informal, within universities and outside them, helped these women overcome the hurdles that may have prevented their participation in the field.

Preserving the work of women in science also extended to this year’s approach to collecting, as the APS acquired a significant addition to the papers of anthropologist and paleobiologist Nina Jablonski (APS 2009). Jablonski, best known for her research into the evolution of skin color in humans, donated approximately 33 linear feet of papers including correspondence, photos, course materials, and digital media, along with a collection of about 125 books. Other notable new acquisitions came in the areas of the history of medicine and genetics, ephemera and linguistics material related
to Indigenous communities, and early American items. For example, the APS received 2,000 volumes of rare medical books related to obstetrics and pathology from the 16th to 20th centuries from James and Jenette Wheeler. Additions were also made to the papers of physician and former APS Executive Officer Alexander Bearn (APS 1972); geneticist David Hungerford; and biotech entrepreneur Martine Rothblatt (APS 2008). Two significant donations to CNAIR were a set of notebooks in the Puyallup language of the Puget Sound region from the 1930s recorded by Franz Boas’s (APS 1903) student, Ethel Aginsky, the location of which were long unknown, and donations by Ellen Lehman and Charles Kennel (APS 2003) of 20th-century Arctic and Indigenous-related printed materials, photographs, and images.

Additions to early American collections filled interesting gaps in what have long been particular strengths. Though the APS already holds roughly 70 percent of Benjamin Franklin’s correspondence, it’s exciting when new items become available that help add detail to moments in Franklin’s life. For example, in 1778, the British captured a ship carrying Franklin’s nephew, Peter Collas, on its way to Boston. Collas escaped to France, but his luggage was tied up with French authorities and he turned to his influential uncle for help.

As we prepare for the year ahead, we’re looking forward to our upcoming exhibition on *Sketching Splendor: American Natural History, 1750–1850.* which will highlight the visually stunning illustrations of leaders in the field and APS Members like William Bartram, Titian Ramsay Peale, and John James Audubon. And, as the 250th anniversary of the Declaration of Independence nears in 2026, we will continue to expand access to collections in *The Revolutionary City: A Portal to the Nation’s Founding* (www.therevolutionarycity.org). The site, which has already made over 37,000 pages of materials from the APS, Library Company of Philadelphia, and Historical Society of Pennsylvania available to anyone with an internet connection, is now looking to expand its reach to additional repositories. If you are interested in learning more about any of these initiatives, please don’t hesitate to contact us. We hope to see you at many programs in the coming year!

*Staff of the Library & Museum*
SCRAPING THE BOTTOM OF THE BARREL is a rather derisive phrase, but I was met with an unexpected treasure after digging to the bottom of a box of unprocessed material last year. As a volunteer at the APS following two retirements, I’ve had the sincere pleasure of handling every book that has entered the APS. My three degrees have served me well (now that I use my pasting, cutting, and stamping skills developed in kindergarten) in processing each book by pasting a bookplate and stamping the APS letters at appropriate places after each book has been cataloged. This I was doing with three books contained in a box—all three books containing numerous portraits of George Washington—that were transferred to the APS through our partnership with the David Library of the American Revolution.

The books were separated by tissue paper. After finishing the pasting, cutting, and stamping, I noticed there was tissue paper on the bottom of the box that I proceeded to remove before recycling the box. Upon removing the tissue paper, however, I saw a small pink envelope at the bottom of the box. Opening that envelope was one of the better moves I’ve made in a long time. Inside the envelope was a clear, plastic folder housing a lock of hair and a very old piece of yellowed, crumbling paper. Slowly opening the paper to avoid tearing, I found a handwritten note.

Following a small recovery period, and with expertise in controlling vertical flows associated with fighter aircraft, I had no idea what to do with this find, so I showed it to Renée Wolcott, Assistant Head of Conservation and Book Conservator. We could not figure out who signed the note so she looked up, “Who was George Washington’s barber?” Proving that there is no such thing as a dumb question, we learned that Martin Pierie was Washington’s hairdresser while he lived in Philadelphia. Pierie clipped locks of Washington’s hair quite often as part of his duties, and his son, John, subsequently distributed these treasures to family, friends, and others as part of his own haircutting business. The year of 1821 indicated in the note is assumed to be the year this particular sample was presented, since Washington died in 1799. It is still unclear as to all the names in the entire signature.

Looking further into the prevalence or rarity of this artifact indicated that it is not a rarity, but neither an item seen at the local antique shop or barber shop. Interestingly, pictures of, and advertisements for, this same artifact include not only the lock of hair but a similar note including the year and indication that “this is a lock of Gen. Washington’s hair” signed with a similar signature. And yes, “advertisements” is not loosely worded since you can purchase framed versions of this remembrance.

By pure happenstance, only a couple of weeks later, I received for processing a book entitled George Washington’s Hair. Although I anticipated this would fill in all the details one could ever want on this subject, the book is more involved in the lure of remembrances and mementos as keepsakes of people and things past, and the psychology behind such thoughts and practices. It also documents the extensive collections of presidential follicles. It did confirm, though, the role of Martin Pierie and his son John in providing numerous opportunities for discovery and excitement in uncovering these types of treasures, even if hiding at the bottom of a box of books.

Marvin Walters
Aerospace Engineer (retired)
APS Library Assistant
IT’S BEEN ANOTHER YEAR of producing useful knowledge in fun and engaging ways for the Museum Education Programs Department.

Fall 2022 saw the return of our big annual family event, the APS Garden Party, for the first time since 2019. We partnered with two great organizations that we have worked with in the past—Independence National Historical Park and Wyck House—to provide programming, games, and treats for visitors.

In 2023, we kicked off our in-person adult programming season with “Astronomy All-Stars,” which highlighted the astronomers and space scientists featured in the Pursuit & Persistence: 300 Years of Women in Science exhibition. Museum Education Manager Ali Rospond gave a flash talk highlighting Maria Mitchell, Nicole-Reine Lepaute, Annie Jump Cannon, Henrietta Swan Leavitt, Cecilia Payne-Gaposchkin, and Jeannine Duane. After the talk, visitors participated in constellation identification and a paper airplane contest.

In May, the department co-hosted the first “Social Studies in the National Park” program with Independence National Historical Park. The program brought Philadelphia students to the Park to enrich their state history and social studies curriculum via education providers and hands-on activities. APS staff led by Ali Rospond provided programming centered around the 1793 Philadelphia yellow fever epidemic. We adapted the yellow fever school program to center around smell. Students guessed different odors, like garlic, vinegar, and aged hard-boiled eggs. After identifying these, APS educators facilitated conversations about smell’s connection to the story of yellow fever in Philadelphia, through excerpts from Caspar Wistar Haines’ letters, found in the Wyck Association collections. Students learned about how people used things like garlic and vinegar to keep what they thought was miasma, or harmful material in the air, away. Philadelphians during the epidemic also used charcoal and brimstone to smoke rooms after people had passed away. The students learned about the Free African Society and the essential roles that Black nurses played in providing care during the epidemic.

In our programming and exhibition, we highlighted the theme that everyone can take part in science. Our “From the Laboratory to the Classroom” in-exhibition display shows cancer scientist Bea Mintz’s lab coat and ephemera from her lab, as well as her demonstrations. Bea Mintz worked at Fox Chase Cancer Center for 60 years. Her groundbreaking work on how cancer forms at a cellular level had major impacts on the field of cancer research. Jeannine Duane was one of the semifinalists for NASA’s Teacher in Space Project in 1984. Although she did not win a spot in the program, she continued teaching space science and science education throughout her life. Her lab coat and flight suit are shown side by side to show that science was a lifelong pursuit.

Science can take place in the classroom, inspiring and sharing knowledge with aspiring scientists, or it can take place in a lab, working toward a common goal.

Ali Rospond,  
Museum Education Coordinator

Science can take place in the classroom, inspiring and sharing knowledge with aspiring scientists, or it can take place in a lab, working toward a common goal. The idea that science can take place anywhere and can be done in a variety of ways is also reflected in the “Can I Be a Scientist?” wall chart. Teachers have enjoyed this chart so much that we now sell it in our gift shop. The idea behind this chart is that scientists have all different kinds of skills, personalities, and interests. There are many different pathways to become a scientist, and if you want to be a scientist, the only person you need to ask is yourself. As Jeannine Duane said to her students in one of her flashcards on display: “You’re all astronauts.”
Pursuit & Persistence: 300 Years of Women in Science

Pursuit & Persistence: 300 Years of Women in Science explores how women scientists have overcome obstacles to achieve breakthroughs, create places for themselves in science, and help others along the way.

In pursuit of knowledge, women scientists encountered many formidable roadblocks: unequal access to higher education; discrimination in hiring, pay, and promotions; lack of support for raising families; and denied or delayed recognition of their contributions. Their persistence in breaking down these barriers, from the 1700s to the present day, highlights their courage and demonstrates the importance of collaboration, mentoring, and networking in science.

Drawn from the strengths of the APS collection, the exhibition invites visitors to meet just a few women whose boundless curiosity impelled them to investigate the mysteries of the universe, from the stars glittering overhead in the night sky down to the inner workings of cells in our bodies and the structures of the atoms that make up all matter.
Biochemist **Mildred Cohn** (APS 1972) was an expert in nuclear magnetic resonance (NMR), which uses magnetic fields and radio waves to determine the molecular structures of chemical compounds. This was a rigorous and repetitive field of work in an era before the widespread use of computers. As a professor at the University of Pennsylvania, she advocated for more representation and better treatment of women and people of color in academia, serving on faculty committees, writing reports, and giving lectures on the topic. A 1970s memo from one of her committees included behavior tips for white male professors, vividly illustrating the conditions their female colleagues endured: "Do not put your arm around women faculty members, put them on the head, [or] call them 'dear'" University of Pennsylvania, University Archives Image Collection.
ENLIGHTENED WOMEN—18TH CENTURY

During the late 17th and 18th centuries, the Enlightenment spread across Europe and North America. Though women were barred from attending universities, the spread of literacy enabled some to participate in lively exchanges of ideas and in the practice of natural philosophy. Very few gained recognition for their scientific work, though they endured more restrictions than their male counterparts.

Maria Sibylla Merian’s (1647–1717) childhood fascination with insects led her to become a groundbreaking artist, naturalist, and explorer. She was ahead of her time in understanding nature holistically and viewing insects as more than just vermin. Her major illustrated work, *Metamorphosis insectorum Surinamensium* (*Metamorphosis of the Insects of Suriname*), was the culmination of years of study and a two-year research trip to Suriname (1699–1701).

Gabrielle Émilie Le Tonnelier de Breteuil, Marquise du Châtelet (1706–1749) contributed to the most consequential intellectual debates of the Enlightenment. Her tumultuous personal life (notably a relationship with Voltaire), cut short by her early death, has often overshadowed her brilliant mind and original contributions to natural philosophy. On display are her principal publications, *Institutions de physique* (*Institutions of Physics*), originally written as a textbook for her son, and *Principes mathématiques de la philosophie naturelle* (*Mathematical Principles of Natural Philosophy*), her annotated translation of Isaac Newton’s *Principia*, as well as two letters written by Châtelet that shed light on her participation in the scholarly community and her struggle for full inclusion in that community.

The reach of Châtelet’s work was extensive. Also on view is Châtelet’s translation of *Institutions de physique* in Italian. Italian physicist Laura Bassi (1711–1778) would have used a version of this translation. Bassi, who excelled at physics and mathematics as a child and young woman, became the first European woman to earn a doctoral degree in the sciences. She was also the first to be appointed a university professor in the sciences, although the authorities restricted her ability to lecture. Bassi and her husband set up a private school and laboratory, where they performed advanced experiments in physics and electricity. She published just a few articles; one on classical mechanics is on display, along with a letter written to her about the electrical phenomenon of the aurora borealis.

Abigail Hermann, Guide, 1st year: “The Passmore apple illustration is a good example of how women were able to contribute to science from within the confines of the rigid gender roles of the time.”
**THE DOORS CRACK OPEN—19TH CENTURY**

As the exhibition continues, the focus shifts to women in the United States. In the 19th century, women’s colleges began to provide access to higher education for some women of the middle and upper classes. As the wide-ranging “natural philosophy” of the 18th century gradually split into specialized fields of science, the options for women, even educated ones, remained limited. At the same time, science was not yet fully professionalized, so some doors did crack open, allowing women to make spaces for themselves. On the other side, they often found low pay—or no pay at all—few pathways for career advancement, and only a few gained much, if any, official recognition of their contributions.

Astronomer Maria Mitchell (1818–1889; APS 1869) gained early fame as the discoverer of a new comet. Winning recognition for this achievement, however, was difficult. Although Mitchell never attended college herself, she became the first professor of astronomy at Vassar College, a newly established women’s college. Here, she directed the observatory and taught and mentored many students. Her legacy as a renowned astronomer and instructor was cemented by publications during her life and after her death. Mitchell is also notable as one of three women elected to the American Philosophical Society in 1869, along with Mary Somerville, and naturalist and educator Elizabeth Cabot Cary Agassiz— the first female APS Members since Ekaterina Romanova Dashkova in 1789.

Emma Seiler (1821–1886; APS 1870), born in Germany, began her career as a singer and teacher of voice and elocution, traditional jobs for women at the time. Without any prior medical training, she became a self-taught physiologist who focused on the structure of the mouth and throat and on how the lips, tongue, and vocal cords produce sounds. The laryngoscope she used in her work and one of her two principal books, The Voice in Singing, are on display. In 1866, she moved to Philadelphia, became an esteemed community member, and was elected to the APS the year after Maria Mitchell.

**NATURAL ILLUSTRATORS**

The role of women as illustrators for natural history publications is also examined. Lucy Say (1800–1886) and Deborah Griscom Passmore (1840–1911) were significant contributors to this field, though their illustrations were often considered auxiliary to the text they accompany. Illustrations were an integral part of documenting and disseminating knowledge about the natural world before photography was common. Lucy Say fully illustrated a book written by her husband Thomas: American Conchology, or, Descriptions of the Shells of North America. The stages of drawing, printer’s proof, and final printing for the shell illustrations display her eye for detail and the need for accuracy. Deborah Griscom Passmore worked for the U.S. Department of Agriculture, illustrating agricultural samples sent in from across the country. She drew and painted over 1,500 fruits throughout her 19-year tenure.

**FIGHTING FOR EQUITY—20TH CENTURY**

This section explores how women in the physical and biological sciences navigated a new landscape of institutions, specialties, and projects in the United States during the 20th century. Even though more women were attending colleges and studying science, they were still not admitted to graduate programs at the same rate as men. Skilled and qualified women faced significant hiring, pay, and advancement discrimination. Official recognition—including tenured faculty positions, publication credits, professional memberships, and awards—often came late, after many years of labor, or not at all.

Florence Rena Sabin (1871–1953) was a physician and anatomist. She began her career at Johns Hopkins University School of Medicine in 1900. From there, she moved to the Rockefeller Institute for Medical Research in 1925 to work on tuberculosis, a major cause of death at the time. In addition to Sabin’s research, she was a leader in the scientific community and a public figure. Sabin created networks to support women in science. Her network lists are on view in the exhibition and also the foundation for the APS Center for Digital Scholarship’s project “Visualizing Women in Science.” In 1931, she was chosen as one of “America’s Twelve Greatest Women” by Good Housekeeping and received dozens of letters after her magazine profile appeared.
Renowned geneticist Barbara McClintock (1902–1992; APS 1946) began her explorations of maize (corn) during graduate school at Cornell University. In 1931, she and a colleague showed that chromosomes form the basis of genetics. At the time, the broader scientific community rejected and ignored her findings, and she struggled to find a job in academia. At the Cold Spring Harbor Laboratory, funded by the Carnegie Institution, she continued to work on maize. Her photographs, lantern slides, and notes on paper bags she used for collecting ears of corn display her meticulousness in recording the results of her breeding experiments over decades. Her research was eventually proven correct and she received acclaim late in life, including the Nobel Prize, awarded in 1983 when she was 81 years old.

Physicist and crystallographer Rose Mooney-Slater (1902–1981) earned a Ph.D. in physics from the University of Chicago in 1932. She was initially accepted to a Ph.D. program at the California Institute of Technology as R.C.L. Mooney, but was turned away when the school realized she was a woman. Mooney-Slater devoted her professional life to X-ray crystallography, a technique of determining the structure of chemical compounds using X-rays. Sample research data—an X-ray photograph and her tracing analyzing it, selected from hundreds of similar items—convey the painstaking nature of her work. She was also part of the Manhattan Project, studying uranium and plutonium.

WOMEN AND WARTIME SCIENCE

During World War II, wartime science efforts allowed women like Mooney-Slater to take part in science at previously unheard-of levels. One of the few women who served as a high-level scientist on the Manhattan Project was nuclear physicist Chien-Shiung Wu (1912–1997; APS 1981). Born and raised in China, she immigrated to the United States for her graduate studies in physics. Based on her graduate research and early career accomplishments, she was recruited to work on methods of producing uranium for the atomic bomb at Columbia University. A leading expert in electromagnetic radiation, Wu was the first to prove a disputed theory by Enrico Fermi on the process of beta decay. She also designed the experiment to prove that parity, a type of symmetry, is not preserved in beta decay, called “Wu’s Experiment.”

Wartime projects also included the ENIAC, the first general-purpose digital computer that was programmable and electronic. Six women were hired to program and operate the ENIAC in the 1940s. They are now known as the “ENIAC Six,” but their contributions were not acknowledged when the computer was unveiled in 1946. Their names are Kathleen McNulty Mauchly Antonelli, Jean Jennings Bartik, Frances (Betty) Snyder Holberton, Marlyn Wescoff Meltzer, Frances Bilas Spence, and Ruth Lichterman Teitelbaum. Additionally, Adele Goldstine, wife of one of the project managers and an accomplished mathematician in her own right, helped during the development of the ENIAC and wrote the operations manual.

VISUALIZING SCIENTIFIC CONCEPTS

For this exhibition, the American Philosophical Society engaged with a local artist, Rebecca Kamen, to provide visual responses to scientific concepts on view. Kamen is a sculptor and lecturer on the intersections of art and science who seeks “the truth” through observation. Her artwork is informed by wide-ranging research into cosmology, history, philosophy, and by connecting common threads that flow across various scientific fields to capture and reimagine what the scientists see. In addition to Wu’s Exception, six works of art are on display with the women who inspired them.

Brennan Keehan, Guide, 1st year: “My favorite pieces in the exhibit are Barbara McClintock’s paper bag notes and Mildred Cohn’s notebook with the mistake jotted down. They really show how messy research can be and make the women feel less like these abstract titanic figures, and more like real people (. . . who, maybe, little girls visiting the exhibit can see themselves growing up to be like!)*

Kyle Hiller, Visitor Services Lead, 1st year: “Chien-Shiung Wu carried her family and culture with her at heart to the U.S. in 1936, where she broke ground in physics. However, she wasn’t able to return to her family and culture for 36 years, never seeing her parents again. Still, she worked and educated tirelessly despite her yearnings for ‘home,’ and that resonates with me personally.*

Pursuit & Persistence: 300 Years of Women in Science does not fully capture the history of women in science; our space and collections are limited, but these stories serve as examples of the barriers and achievements women in science have experienced in the past 300 years. As the visitor exits the exhibition, a wall of quotes from past and living female scientists serves to advise, encourage, and inspire the next generation to continue to persist in the pursuit of science.

APS Museum Staff
David Adjaye was elected an International Honorary Member of the American Academy of Arts and Sciences. • Joanna Aizenberg delivered the 2023 Wallace H. Coulter Lecture at Pittcon. • Anita Allen received the Hastings Center’s 2022 Bioethics Founders Award. • Elizabeth Anderson won the 2023 Sage-CASBS Award. • Frances Arnold delivered the 2022 Ullyot Public Affairs Lecture and was presented with the Liberty Bowl. • Jacqueline K. Barton was awarded the Robert A. Welch Award in Chemistry. • Bonnie Bassler won the 2023 Canada Gairdner International Award. • Kamaljit S. Bawa received the Galapara Foundation’s Global Lifetime Service Award. • Stanislas Dehaene was elected a Foreign Member of the Royal Society. • Philip J. Deloria was appointed the Samuel W. Morris University Professor at Harvard University. • Catherine Dulac was named the 2023 recipient of the Hans Christian Frazier. Gordon-Reed was named a 2022 Vincent J. Dooley Distinguished Teaching Fellow by the Georgia Historical Society. • Hanna Holborn Gray received the Legend in Leadership Award from the Yale Chief Executive Leadership Institute. • Carol Greider won the Association for Molecular Pathology’s Award for Excellence in Molecular Diagnostics. • Freeman A. Hrabowski, III received the 2023 Public Welfare Medal from the National Academy of Sciences. • Walter Isaacson was awarded a National Humanities Medal by President Biden. • Kathleen Hall Jamieson received the 2022 Warren J. Mitofsky Award for Excellence in Public Opinion Research. • Carl June was awarded a 2024 Breakthrough Prize in Life Sciences. • Laura Kiessling joined the Advisory Board of RSC Chemical Biology. • Larry D. Kramer was appointed President and Vice Chancellor of the London School of Economics and Political Science. • Vijay Kumar was named a National Academy of Inventors Fellow. • Jianguo (Jack) Liu was elected to the Royal Norwegian Society of Sciences and Letters. • Richard A. Meserve received the American Physical Society’s Joseph A. Burton Forum Award. • Edward Moser was elected a Foreign Member of the Royal Society. • May-Britt Moser was elected a Foreign Member of the Royal Society. • Salikoko S. Mufwene was elected a Member of the American Academy of Arts and Sciences. • Gulru Necipoğlu received the 2023 Freer Medal from the National Museum of Asian Art. • Debra Niemeier won the 2023 Bower Award and Prize for Achievement in Science. • Alondra Nelson won the 2023 Sage-CASBS Award. • William Thomas Newsome, III was awarded Villanova University’s Menden Medal. • Stuart Orkin won the 2024 Elaine Redding Brinster Prize in Science or Medicine. • Richard Ovenden was elected an International Honorary Member of the American Academy of Arts and Sciences. • Gregory Petsko received the National Medal of Science. • Venki Ramakrishnan was appointed to the Order of Merit by King Charles III. • Arnold Rampersad was appointed to the President’s Committee on the Arts and the Humanities. • Cecilia Rouse was named president of the Brookings Institution. • Robert J. Sampson was named the Woodford L. and Ann A. Flowers University Professor at Harvard University. • Robert J. Sampson gave the 3rd Annual Ray Paternoster Memorial Lecture at the University of Maryland. • Ruth J. Simmons was named 2023 Jefferson Lecturer in the Humanities by the National Endowment for the Humanities. • Ruth J. Simmons was elected to the John D. and Catherine T. MacArthur Foundation Board of Directors. • Patrick Spero was named executive director of the George Washington Presidential Library at Mount Vernon. • Éva Tardos was awarded the 2023 Donald E. Knuth Prize. • David Tatel gave the Edward Levi Distinguished Visiting Jurist lecture at the University of Chicago. • Shelley Taylor received the National Medal of Science. • Mark Thompson was awarded the title of Knight Bachelor at King Charles III’s Birthday Honours. • Mark Thompson was named the next chief executive and chairman of CNN. • Karen Uhlenbeck was elected a Foreign Member of the Royal Society. • Frank Wilczek won the 2022 Templeton Prize. • Patricia Wright won the inaugural Conservation Warrior Award from Seneca Park Zoo. • Pauline Yu was appointed to the President’s Committee on the Arts and the Humanities. • Richard N. Zare won the 2023 Benjamin Franklin Medal in Chemistry. • Viviana Zelizer received the W.E.B. Du Bois Career of Distinguished Scholarship Award and the Distinguished Career Award for the Practice of Sociology from the American Sociological Association.
IN 2023, APS MEMBERS, FRIENDS, FELLOWS, STAFF, AND GUESTS ENJOYED A HOST OF EVENTS, MANY OF WHICH WERE INSPIRED by the themes of the exhibition, Pursuit & Persistence: 300 Years of Women in Science. Two conferences focused on the history and future opportunities for women in science. The 2023 Susan O. Montgomery Program was a three night series of performances of the play “Emilie: La Marquise du Châtelet Defends Her Life Tonight” by Lauren Gunderson. The play exploring the life and mind of 18th century mathematician Emilie du Châtelet was staged for the APS by Tina Packer. Other events included a symposium celebrating the career of Barbara Oberg (APS 1998) and gatherings of APS grant and fellowship alumni.

We hope to see you at next year’s events!


Art conservator Emily MacDonald-Korth and art historian Carol Soltis discuss their research into a portrait of George Washington painted by Charles Willson Peale at a public lecture in July 2023. Photo by Todd Schoenrock.

Clyde and Elizabeth Barker are presented with advance copies of their book Surgeons and Something More (The APS Press) at the November 2023 APS Meeting. L-R: Robert M. Hauser (APS 2005, APS Executive Officer), Elizabeth Barker, Clyde Barker (APS 1997, past APS President). Photo by Kelly & Massa.


Sofía Torallas Tovar and Roger Bagnall (APS 2001, APS President) at the April 2023 APS Meeting. Photo by Kelly & Massa.


2023 Rhoads Medal winners Drew Weissman and Katalin Karikó at the April 2023 APS Meeting. Photo by Kelly & Massa.
Class 1: Mathematical and Physical Sciences

Lene Vestergaard Hau, Mallinckrodt Professor of Physics and of Applied Physics, Area Chair for Applied Physics, Harvard University

John Cromwell Mather, Senior Project Scientist, James Webb Space Telescope, NASA Goddard Space Flight Center; Adjunct Professor of Physics, College of Computer, Mathematical, and Natural Sciences, University of Maryland

Curtis T. McMullen, Maria Moors Cabot Professor, Harvard University

Marilyn Raphael, Professor of Geography, Director of the UCLA Institute of the Environment and Sustainability, University of California, Los Angeles

David R. Walt, Hansjörg Wyss Professor of Biologically Inspired Engineering, Harvard Medical School; Professor of Pathology, Brigham and Women’s Hospital; Core Faculty, Wyss Institute for Bioinspired Engineering at Harvard University; Professor, Howard Hughes Medical Institute

Class 2: Biological Sciences

Rosina M. Bierbaum, Professor of Natural Resources and Environment Policy, School for Environment and Sustainability, University of Michigan; Roy F. Weston Chair in Natural Economics, University of Maryland

Emery N. Brown, Edward Hood Taplin Professor of Medical Engineering and of Computational Neuroscience, Professor of Health Sciences and Technology, Investigator, Picower Center for Learning and Memory, Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology; Warren M. Zapol Professor of Anaesthesia, Harvard Medical School, Massachusetts General Hospital

Paul A. Offit, Attending Physician, Division of Infectious Diseases, Children's Hospital of Philadelphia; Maurice R. Hilleman Professor of Vaccinology and Professor of Pediatrics, Perelman School of Medicine, University of Pennsylvania

Ardem Patapoutian, Professor of Neuroscience, Dorris Neuroscience Center, Presidential Endowed Chair in Neurobiology, Scripps Research Institute; Investigator, Howard Hughes Medical Institute

Barbara Anna Schaal, Mary Dell Chilton Distinguished Professor, Department of Biology, Washington University in St. Louis

Class 3: Social Sciences

Carol Anderson, Charles Howard Candler Professor, Department of African American Studies, Emory University

Ellen R. Cohn, Editor-in-Chief, Papers of Benjamin Franklin, Senior Research Scholar, Department of History, Yale University

Jennifer Lynn Eberhardt, Morris M. Doyle Centennial Professor of Public Policy, William R. Kimball Professor at the Graduate School of Business, Professor of Psychology and by courtesy, of Law, Co-Director, SPARQ (Social Psychological Answers to Real-World Questions) Stanford University

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Kathryn Edin, William Church Osborn Professor of Sociology and Public Affairs, School of Public and International Affairs, Princeton University

James Forman, Jr., Professor, Yale Law School

Catharine A. MacKinnon, Elizabeth A. Long Professor of Law, University of Michigan Law School; James Barr Ames Visiting Professor of Law, Harvard Law School

Bruce Western, Bryce Professor of Sociology and Social Justice, Director, Justice Lab, Columbia University

Class 4: Humanities

Angelos Chaniotis, Professor, Institute for Advanced Study

Kellie Jones, Professor in Art History and Archaeology and African American Studies, Chair, Department African American and African Diaspora Studies, Hans Hofmann Professor of Modern Art, Department of Art History and Archaeology, Columbia University

Wai-ye Li, 1879 Professor of Chinese Literature, Harvard University

Geoffrey Parker, Distinguished University Professor and Andreas Dorpalen Professor of European History, The Ohio State University

Susan Stewart, Poet; Avalon Foundation University Professor in the Humanities, Professor of English, Associate member Department of Art and Archaeology, Princeton University

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

Peter J. Dougherty, Director, APS Press, American Philosophical Society

Johanna Ruth Drucker, Martin and Bernard Breslauer Professor of Bibliographical Studies, Distinguished Professor, Department of Information Studies, University of California, Los Angeles
**Louise Erdrich**, Novelist, Poet

**Dorothy E. Roberts**, George A. Weiss University Professor of Law & Sociology, Raymond Pace & Sadie Tanner Mossell Alexander Professor of Civil Rights, Professor of Africana Studies, Director, Penn Program on Race, Science & Society, University of Pennsylvania

**Tracy K. Smith**, Poet; Susan S. and Kenneth L. Wallach Professor, Harvard Radcliffe Institute; Professor of English and of African and African American Studies, Faculty of Arts and Sciences, Harvard University

**International Members**

**John Dupré**, Professor of Philosophy of Science, Consulting Director (formerly Director), The Centre for the Study of Life Sciences (Egenis), University of Exeter

**Naomi Ellemers**, Distinguished University Professor, Utrecht University, the Netherlands

**Monika Fludernik**, Chair of English Literature, English Department, Albert-Ludwigs-Universität of Freiburg im Breisgau

**Vladimir Kučera**, Vice Director, Professor, Distinguished Researcher, Czech Institute of Informatics, Robotics and Cybernetics at the Czech Technical University in Prague; Scientist Emeritus, Academy of Sciences of the Czech Republic

**Michael G. Marmot**, Professor in Epidemiology & Public Health, Director, UCL Institute of Health Equity, University College London

**Carol Vivien Robinson**, Dr. Lee's Professor of Physical Science and Theoretical Chemistry, Professional Fellow, Exeter College, Founder Director, OMass Therapeutics, Founder Director, Kavli Institute for Nanoscience Discovery, University of Oxford

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**November 2022**


2021 Judson Daland Prize in Clinical Investigation: **Sergiu P. Pașca** in recognition of his work pioneering novel approaches to investigate neuropsychiatric disorders by creating self-organizing, stem-based models of the human brain, including functional human circuits in a preparation he named assembloids.

2021 Magellanic Premium Medal: **Sara Seager**, for theoretical work that led to the first detection of exoplanet atmospheres.


2022 Karl Spencer Lashley Award: **Nicholas Spitzer**, in recognition of his discovery of neurotransmitter switching in single neurons of adult mammals, and his demonstration of causal links between neurotransmitter switching and behavioral state.

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2022 Patrick Suppes Prize in the Philosophy of Science: **Craig Callender**, in recognition of his book *What Makes Time Special?*

2022 Patrick Suppes Prize in the Philosophy of Science: **Sabina Leonelli**, in recognition of her book *Data-Centric Biology*.

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**April 2023**

2022 Henry M. Phillips Prize in Jurisprudence: **Catharine A. MacKinnon**, in recognition of her intellectual and political leadership in international law, constitutional law, political and legal theory, and jurisprudence, and in particular her pioneering work on gender equality, sexual abuse, and sexual exploitation, including sexual harassment, rape, prostitution, sex trafficking, and pornography, and her effective framing of such harms as civil rights violations in the United States, in other countries, and in international law, bringing recognition and transformation in theory and in practice.

2023 Benjamin Franklin Medal for Distinguished Achievement in Science: **Martine A. Rothblatt**, in recognition of her many transformative, diverse, singular scientific and public service contributions, including but not limited to: creating and patenting a system for providing global portable internet access using low earth orbit satellite and satellite direct radio broadcast system resulting in the successful commercialization of the first global satellite radio network; founding a biotechnology company that seeks to repair donated organs previously considered too damaged for transplant and thereby provide an unlimited supply of transplantable organs; advancing xenotransplantation through genetic engineering and digital modeling creating organs that are directly transplantable into humans; revolutionizing the timely delivery of transplant organs through the development of a battery powered helicopter setting world records for electric flight while culminating in the drone delivery of donor organs for transplant; becoming a leading advocate for transgender rights; and investigating the future of artificial intelligence as a cognitive enabler with her work on digital consciousness and immortality.

2023 Patrick Suppes Prize for Experimental or Mathematical Psychology: **Elke Weber**, in recognition of her research showing how people make decisions important for society, using creative experiments and mathematically precise models and theory.
Relaunching
The APS Press

As of July 1, 2023, the APS partnered with the University of Pennsylvania Press to distribute and market the books and journals published by the APS.

Both the APS and Penn Press’s home university are products of Benjamin Franklin’s fertile imagination, and this new partnership brings together the distinctive strengths of two pillars of Philadelphia’s intellectual landscape. The inaugural APS/Penn Press list will commence in 2024.

In this new partnership, Penn Press will provide the APS with distribution, publicity, marketing, sales, and rights representation that will give APS Press books and journals—and their authors—unprecedented access to readers via online merchants and bookstores, through exhibits at academic meetings, domestic and international sales representation, and subsidiary rights agency for translation in languages around the world. In keeping with the recent practice among the major university presses, the APS Press books backlist will be digitized and made available to libraries, suppliers, and booksellers in print-on-demand and e-book format all over the world, gaining greater exposure for our publications everywhere.

The two next big items on our agenda with Penn Press include the publication of an APS Press Launch Catalog, which will be our calling card for scholars, the media, and the international publishing community as we approach 2024. Second, the introduction of a new universal book and journal cover design will strengthen the APS Press brand through a powerful and attractive graphic identity.

Further developments include the strengthening of our digital presence through enhanced social media promotion, an APS Press page on the Penn Press website, and the redevelopment of the Penn Press page of the APS website, which will feature author interviews, programming, and will connect visitors to the Penn Press site for book and journal e-commerce purchases.

This partnership will give APS Press books and journals—and their authors—unprecedented access to readers via online merchants and bookstores, through exhibits at academic meetings, domestic and international sales representation, and subsidiary rights agency for translation in languages around the world.

Now appearing under the new APS Books imprint, our books will include a combination of new titles and classic reprints drawn from the APS backlist. The APS Press is also planning a series of short, essayistic books by leading scholars on the dynamic developments that have shaped today’s disciplines and their evolving research agendas: Disciplines & Discontinuities; newly edited critical editions of celebrated works by past APS Members; and new books by a wide range of authors on the history and scholarly dimensions of useful knowledge today. In addition, we are working with our colleagues to publish more APS-generated content, including catalogs from our Museum exhibitions and APS-sponsored symposia and workshops. Inaugural books to be published under the APS Books name are The Diplomacy of Independence: Benjamin Franklin Documents in the Archives of Spain, edited by Thomas E. Chávez, and A Male Hysteria: Diabetes and the Victorian Mind, by Edward Beasley.

The relaunched APS journals programs will update the Society’s two venerable and highly regarded journals, Proceedings of the American Philosophical Society and Transactions of the American Philosophical Society. This winter will see the publication of a double issue of Proceedings with a return to quarterly issues in 2024. The fall double issue will include an article on “Chief Manuel’s 1651 Timucua Letter: The Oldest Letter in a Native Language of the United States” co-authored by anthropologist George Aaron Broadwell and historian Alejandra Dubcovsky; David W. Maxey’s piece on “An Unsolved Mystery: Angelica Kaufmann’s Elusive Self-Portrait”; Ron Fairman’s (APS 2016) essay on “Lincoln
and Marfan Syndrome” based on his presentation at the APS Annual Meeting in April 2019; and several other works, including six biographical memoirs of deceased APS Members.

Transactions, which had been publishing a combination of edited issues and monographs, will be moving to a quarterly, all-edited issue format beginning in 2024. The journal will draw its content from papers given at APS conferences and workshops, as well as a new annual issue selected from the APS blog, “Useful Knowledge,” with plans for possible issues drawn from thematically organized grantees’ field reports, similar to those scheduled to appear in Proceedings. The theme of the first issue of Transactions that will appear in 2024 is “Indigenous Studies in Archives and Beyond: Relationships, Reciprocities, and Responsibilities,” edited by Jennifer O’Neal of the University of Oregon. Articles reflect important changes in various fields as institutions and researchers engage in innovative community-engaged projects that center and celebrate Indigenous history, culture, and ways of knowing. Most importantly, these essays show the importance of honoring the cultural, intellectual, and political sovereignty of Indigenous peoples by reconnecting, restoring, and returning collections to Native Nations and Indigenous communities. In addition, the Press will continue to publish the APS Yearbook, which will appear this winter for the first time following the pandemic hiatus.

This ambitious relaunch would not be possible without the APS Press staff. Peter J. Dougherty (APS 2023), Director of the APS Press, is formerly the director of Princeton University Press. Kate Tyler Wall, who joins us from the Society for Historians of the Early American Republic (SHEAR), is the Managing Editor of Transactions and APS Books. Kate brings deep editorial experience to the job, and has worked extensively with the Penn Press production department, further abetting the communications between the APS Press and our new partner. Dr. Laura Spero has joined the APS Press as the Managing Editor of Proceedings. Laura brings extensive journals publishing experience from her role at the McNeil Center for Early American Studies at Penn and, like Kate, has worked with the Penn Press team in the past, further deepening the relationship between our two organizations.

Our goal in relaunching the APS Press is to serve this mission by promoting useful knowledge for today, by publishing significant and imaginative scholarly works drawn from across all disciplines. The program will take the form of books and journals alike.

“...”

Peter Dougherty, Director, The APS Press
A Word about the Penrose Association

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@amphilso.org.

Upcoming Meetings of the American Philosophical Society

Thursday–Saturday
April 25–27, 2024
Thursday–Saturday
November 14–16, 2024

Institutions de physique (Foundations of Physics), by Émilie du Châtelet (Paris, 1740). APS. Du Châtelet’s 1740 work was not just a physics textbook. She also discussed philosophy, religion, and the nature of knowledge itself. The frontispiece shows the Enlightenment quest for truth.

“Love of learning is the most necessary passion... in it lies our happiness. It’s a sure remedy for what ails us, an unending source of pleasure.” — Émilie du Châtelet