

ANNUAL REPORT
2020/2021

CHANGING TIDES



The Academy of
Natural Sciences
of DREXEL UNIVERSITY



ANNUAL REPORT
2020/2021

Features

Page

Letter from Scott Cooper and David E. Griffith	4
Our Doors Are Open	5
Our Year of Climate. Our Year of Change.	11
Discoveries are Made in the Collections	17
Upstream / Downstream	25
Inquiries into Art & Science	35
Statement of Activities	43
Thank You to Our Donors	45



Dear Friends,

There can be little doubt that 2021 and the changing tides of the pandemic created another challenging year to navigate. But a smooth sea never made a skilled sailor, and throughout the year the Academy frequently went in search of new and effective ways to deliver its mission. The institution is better for the journey, and this annual report reveals some of the year's more notable milestones.

First and foremost, our doors reopened to welcome the return of our guests, safely and in person. At the same time, we connected those who could not visit with plenty of virtual programs intended to initiate conversations and encourage learning about our environment.

Throughout 2021 the Academy themed its programs around one major subject — climate change. Partnering with Drexel University, we launched Climate Year and marshalled our resources to support interdisciplinary research, student engagement and community-driven programming in ways that produced real change.

At the same time Academy science continued to create significant new knowledge about our planet and how to steward it, both across the region and around the globe. From the Amazon Basin to the Delaware River watershed, the institution partnered with diverse communities to find new ways to understand the natural world and inspire everyone to care for it.

Finally, the Academy explored innovative ways to communicate its mission, serve wider audiences and, as Hurricane Ida swept through the city, connect Philadelphia to the environmental challenges it shares with the farthest corners of our planet.

The steadfast support of the Academy's members, donors, contributors and visitors made this remarkable work possible, as did our transformative partnership with Drexel University. We could not be more grateful for the continued support of all. Thank you for being a force for nature.



Scott Cooper
President and CEO
sac454@drexel.edu



David E. Griffith
Chair, Board of Trustees
deg68@drexel.edu

A close-up photograph of a hand with pink nail polish gripping a dark, ornate door handle. The hand is wearing a dark blue, textured sleeve. The background is a blurred interior space with a window and a door frame. Overlaid on the right side of the image is the text "Our Doors Are Open" in a large, white, sans-serif font.

**Our
Doors
Are
Open**

The Academy is back in business — that is, the business of in-person visits.

Diorama lights flicker on. Gallery doors unlock with a click. Once quiet halls are filled with discussion.

Surrounded by an unparalleled maelstrom of societal shifts and uncertainty as the pandemic raged on, the Academy remained a bastion of scientific inspiration, education and research. Seeing opportunity to succeed and grow, we forged ahead with innovative virtual events and in-the-field research. When the world grew silent, we reached out to our communities, explored new ways of servicing science and cultivated our mission to create a sustainable planet for everyone.

But we know the seeds of scientific inquiry grow right here, in the halls of the Academy. From a child's first glance at the magnificence of a *T. rex*, to the art student reproducing the delicate colors of a seashell on their iPad, to the returning members and



volunteers who catalog specimens and support our mission every year — connection to science matters, and we are that forum.

As a museum — a space — we encourage conversations and engagement with the natural world through galleries that foster curiosity and learning. Our dioramas tell a unique story of exploration, habitat loss, conservation, evolution and artistry, bringing awareness of the fragility of nature to our visitors. And our dynamic exhibits and events capture stories that speak broadly to our community's interest in timely, artistic and

environmentally charged topics. So, with the utmost caution and a great deal of excitement, the Academy reopened its doors and invited the public to join us once more.

From the field, the lab, the home office and now the front desk, we have continued to advocate for environmental change, sustain innovation and promote education to the world around us.

Welcome back.

“

Our son Ian has greatly appreciated your children's programming, both in person and now online. There is clearly a lot of hard work and thoughtfulness that goes into your educational mission.

Throughout the pandemic, the Academy's virtual programming has allowed our son to stay connected to his love of science. It meant a lot to him to see familiar faces from previous Academy visits. This summer our entire family enjoyed the best zoom meeting ever, "Academy Kids Club Hopping into Summer" which featured the Academy's rabbits — or as it is known around our house, "The Hares of Easttown."

”

—

Diane and Seth McDowell
Academy Members





**Our
Year of
Climate**

**Our
Year of
Change**



2021: The Academy kicked off Climate Year — our very first thematic year to address the big issues of our time. And this year's focus was climate change.

Droughts, flooding, wildfires — around the globe we face a crisis of unprecedented proportion. Our oceans, rivers, air, land and biodiversity are all threatened by monumental shifts in our climate brought about by systematic human action. It will take a shared force for nature to solve it.

This central campaign — created in partnership with Drexel University — made our efforts to combat climate change a focus of the Academy's work. Across the year, we deepened and widened our commitment to a sustainable future with bold new initiatives, engaging community-driven programming and creative, powerful content.

Our exhibits, such as *Gideon Mendel: Drowning World* and *Wildlife Photographer of the Year* explored our often-fraught relationship with the



natural world in experimental new ways. Aimed to inspire action, we hosted the fourth Annual Philadelphia Environmental Film Festival, and created the Small Actions Spark Big Changes social media campaign that reached tens of thousands of people.

The Academy also presented yearlong environmental justice programming, virtual events and workshops. We continued to curate our popular Academy Town Square series, with a focus on discussing critical global issues, that brought together Philadelphia community members, Academy scientists, Drexel professors and city leadership.

Expanding our efforts nationally, the Academy led Philadelphia's Lights Out initiative. This far-reaching

coalition was created to protect migrating birds and reduce carbon emissions. Endorsed and supported by local nonprofit organizations, scientific partners, building operators and businesses, this work saves the lives of millions of birds as well as seriously conserved energy and minimized the city's carbon footprint.

Throughout the year during peak migrations, prominent buildings across the city will turn off their lights, transforming not only the visual nighttime skyline of Philadelphia, but also the outline of how — when the Academy leads — collective, sustainable action is the result.

Up next: Water Year.



“

BOMA Philadelphia's partnership with the Academy is one that has helped our iconic member buildings become more environmentally friendly than ever before. With Lights Out Philly, the Academy brought a simple yet innovative program to our city skyline that made perfect ethical, ecological and economic sense.

Our Association is extremely grateful for our continued collaboration with the Academy. Their unparalleled leadership in critical programming and education is key to building a better, stronger and more insightful Philadelphia for all of us.

”

—

Jamal Johnson
*Chair, Building Owners & Managers
Association (BOMA) of Philadelphia*



Discoveries are Made in the Collections



Like all scientists, Sabaj wants to understand his field of study better. But first he must travel. His destination: Amapá.

Academy ichthyologist Mark Sabaj is really enthusiastic about fish. But he also deeply cares about supporting the Academy's role in the international partnership of science.

“There are two critical parts to all research,” he says. “One part is definitely going out into the field. But the other part — doing research in museum collections — that is where many discoveries are made.”

Destination: Amapá. It's a small, diamond-shaped state in northeastern Brazil bound on three sides by the Amazon, Jari and Oyapock rivers. On the last side, it's the wide Atlantic Ocean. Amapá sits at a crossroads of four major freshwater ecoregions, with aquatic biodiversity that is exceptionally rich but poorly understood.

In other words, Amapá is the perfect place for new research, findings and collaborative beginnings.

One such relationship began with Cecile Gama, PhD, curator of fishes at the Instituto de Pesquisas Científicas e Tecnológicas do Estado do Amapá (IEPA). As the host museum of Sabaj's trip and a natural history survey that houses the entire state's biological and anthropological collections, IEPA is a big deal. Gama has been studying Amapá's freshwater and marine fishes for 20 years, building up the largest collection of fishes from the region.



Together with an intimate group of fellow scientists and photojournalists, Sabaj and Gama spent five days exploring Tumucumaque National Park, collecting and sampling the Amapari River in a pilot expedition to better plan future projects that will awaken the international scientific community's awareness to this unique and relatively unknown habitat. While everything was new to Sabaj, a few fish species collected were new to science as well.

Like snapshots, these fishes will demarcate a time and place, representing the health of this pristine ecosystem for years of research to come. The majority of collected specimens were deposited at the host museum IEPA, while a representative part was gifted to the Academy — forging a new scientific partnership that spans the globe.

Fostering the true spirit of discovery and scientific work across borders, Sabaj also assisted Gama in assembling hundreds of metal shelves and inventorying thousands of jars of fish — in short, decades of research — when IEPA received funds to construct a new building for its fish collection.

This collaboration goes beyond goodwill; it will help document the fishes of Amapá state and protect Amapá's biodiversity.

It will also inform institutions around the world, including the Academy, about the unique species found in this biodiversity hotspot — all through the power of a well-kept collection.

“

The partnership established between IEPA and ANS is incredibly valuable to our institution, and we are thankful for its ability to call attention to the remarkable fish diversity of Amapá State.

There are too few studies of Amapá fishes and too many threats to our rivers. The Araguari River, the largest watershed in the state, no longer reaches the ocean because of dams and dewatering. Mark and the Academy have a long history of studies of neotropical fishes. Our collaboration has drawn attention to Amapá fishes and facilitated new collaborations even within my own country of Brazil.

”

—

Cecile Gama

PhD, curator of fishes at the Instituto de Pesquisas Científicas e Tecnológicas do Estado do Amapá (IEPA) and ANS Research Associate





FACTS BY THE NUMBERS

5

new fish species found on this year's Brazil trip will be formally described by Mark Sabaj and the team

65

countries, on every continent in the world, have seen Academy scientists at work

150

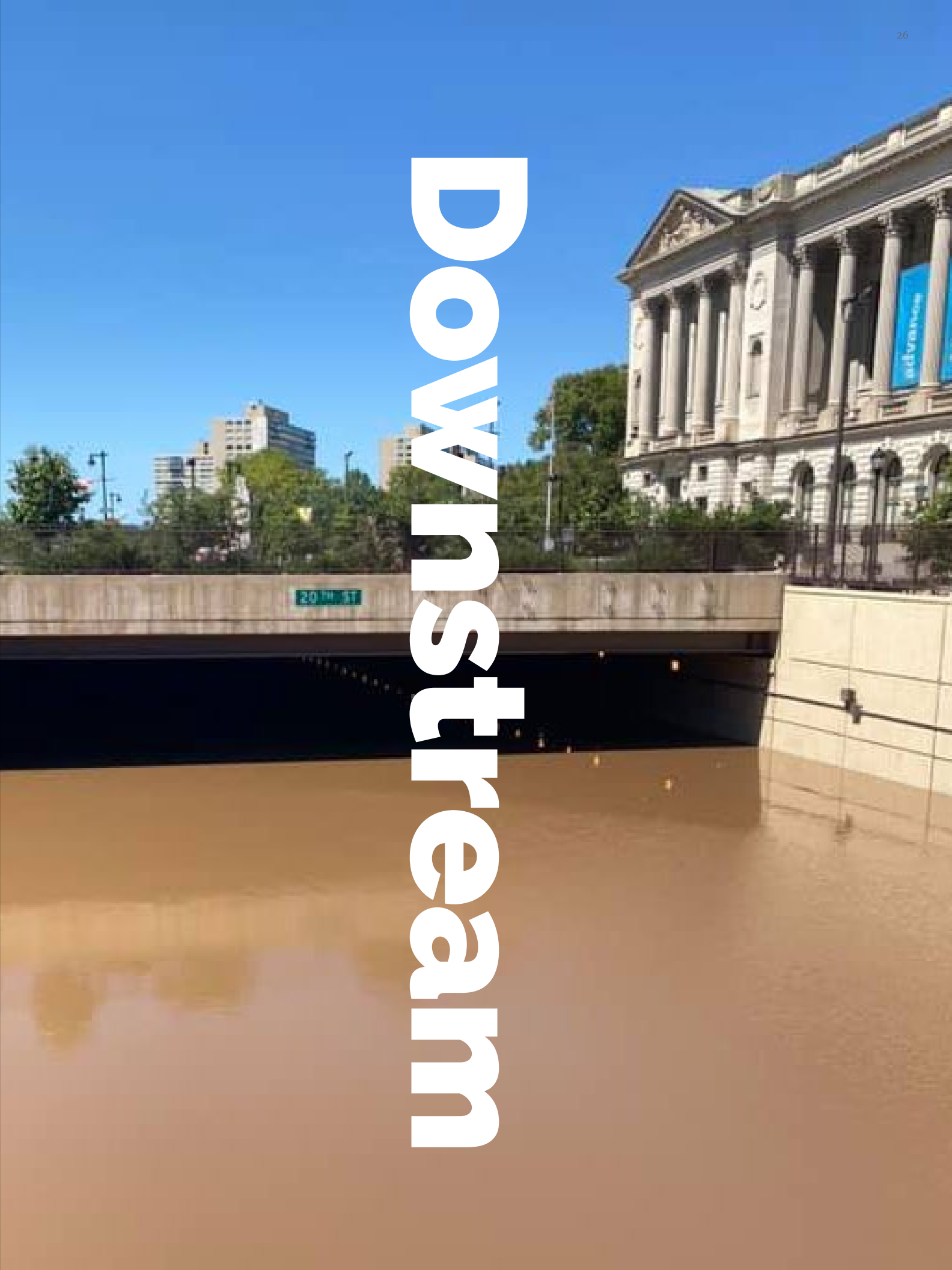
years of exploration bolsters one of the world's largest and most important collections of South American fishes here in the Academy

1,360,000

digital records of fish specimens have been released so far by Academy ichthyology scientists



Upstream



Downstream



Lisa Woodford had just purchased and renovated her home when Hurricane Isaias hit her Southwest Philadelphia community of Eastwick. Knee-deep flooding and downed trees left her and fellow residents displaced, without power and searching for answers.

Just walking through my community, I saw people's memories on the street ... you could even feel the sadness," Woodward describes the scene in an Academy Town Square.

The storm landed with a suddenness beyond expert forecasting. Eight inches of rainfall dropped on the city and surrounding areas. The Schuylkill River saw a seven-fold rise in its flow. The

floodwaters of Chester Creek crested at 16 feet — double the normal height.

In short: the water systems were overwhelmed and the impact on the surrounding communities was devastating. And because of climate change, it's only just the beginning for communities like Eastwick that are located all along our rivers and creeks.

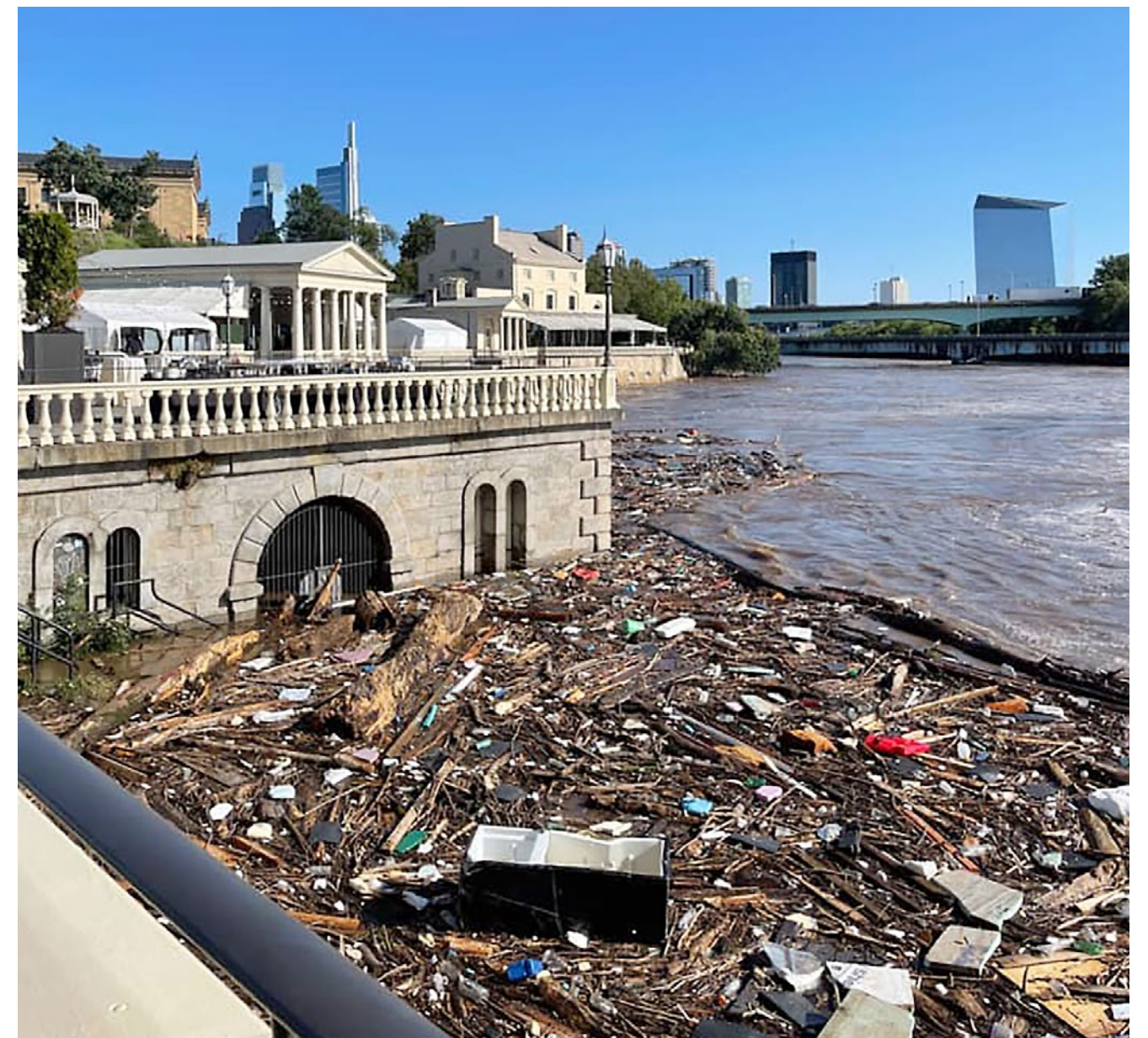
So how do we find a solution — one that not only measures the impact of such events and understands the risks and needs involved, but also accomplishes the goal of maintaining a healthy and safe water system for all? The answer: cutting-edge, science-based, data collection technology now being created by the Academy, as part of our Delaware River Watershed Initiative (DRWI).

This past year, in collaboration with Drexel's College of Computing and Informatics, DRWI rolled out its high-resolution mapping, modeling and monitoring tools that operate with remarkable accuracy. These digital tools, or applications, collect data on rivers and streams throughout the Delaware River watershed and then use it to create geospatial maps and information on water flows, sources of pollution and changes in land use. What makes these tools so powerful is that they automate in real time and are publicly accessible, allowing everyone — scientists, partners and communities — to be a part of the effort.

"The scale, the funding, the impact, it is unprecedented," says Lin Perez, DRWI program director and Environmental Data Science lead at the Academy.

"We're generating information that practitioners didn't have before, with a high degree of confidence never seen before." Perez leads the data synthesis and development work of these mapping applications.

What do these new tools accomplish for on-the-ground practitioners, stakeholders, landowners and communities? Now with crucial data, accurate mapping and constant monitoring, DRWI hopes to see improved stream management and investments in stormwater infrastructure — safeguarding our communities from pollution and future flooding.

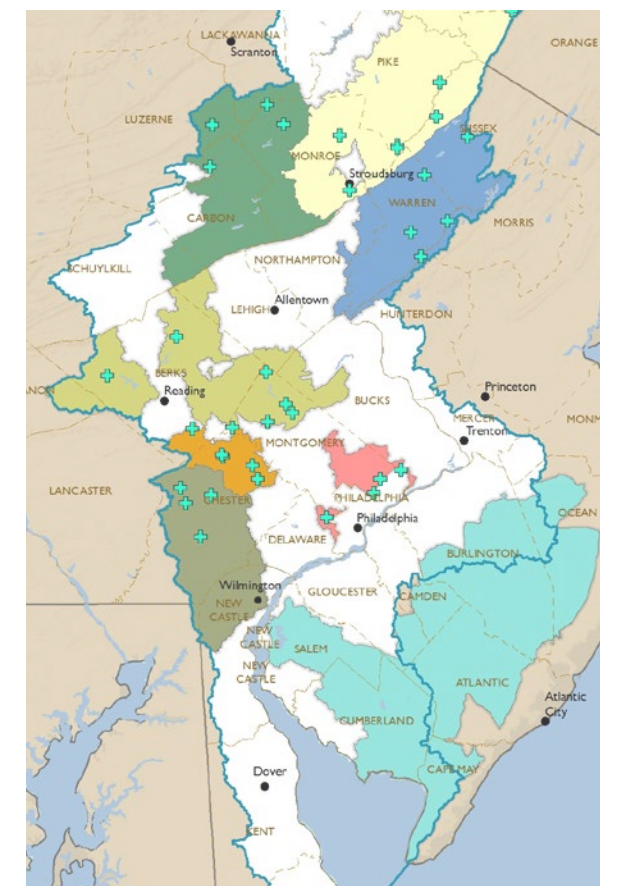




“Our long-term goal is to make this data accessible to more people,” says Perez. “Information sitting in databases is useless. We need to leverage this information into understanding and translate it into informed practices.”

That’s the real brilliance of scientific innovation: when we begin to see things differently and gain more perspectives, not only can we better predict changes, but also, we can find and create real-world solutions.

Whether through clean-ups, investments or state-of-the-art data collection and mapping tools, the Academy and DRWI believe that with everyone working together we can ensure a clean, safe and livable relationship with our rivers for generations to come.





“

Everyone lives in a watershed. Some of us may live upstream and some may live downstream, but we share a geographic community defined by water. Understanding that we share a common landscape is the first step toward understanding the challenges and opportunities, as is working together to build a constituency to effect solutions to impairment. The health of our creeks translates into healthier green spaces and communities, as well as cleaner drinking water.

The Tookany/Tacony-Frankford Watershed Partnership has been a Delaware River Watershed Initiative partner since this milestone program began. Working with the Academy enables us to develop leaders and implement projects, provides us with additional credibility in our communities, especially with schools, that will result in more informed people and healthier creeks.

”

—
Julie Slavet
Executive Director of Tookany/Tacony-Frankford Watershed Partnership



FACTS BY THE NUMBERS

4

states impacted
by the DRWI's stream
management efforts

60

partner organizations
provided scientific guidance
by Academy scientists

200

stream health sampling
sites monitored by
the Academy

\$125,000,000

already invested to support the work of DRWI



Inquiries into Art & Science



Like science, art has the power to communicate big ideas.

With our original, engaging exhibits that amplify our scientific connection to global issues, the Academy is exploring new territory.

As the first institution on the East Coast to display this award-winning exhibit from the Natural History Museum, London, the Academy presented *Wildlife Photographer of the Year* in our brand-new Dietrich Gallery. Featuring 100 a captivating images from all over the globe, this exhibit not only sparked conversation, but also awakened a renewed concern about our precarious relationship with the environment.

Then to highlight Climate Year, the Academy exhibited *Gideon Mendel: Drowning World*. Spanning 10 years and over 13 countries, Gideon Mendel's internationally recognized, thought-provoking photography has appeared in newspapers, magazines, art exhibits and even climate change activism.

Highlighting the wreckage of our human homes from floods all over the world, these photographs produced a deep sense of shared vulnerability among our visitors.



“I wanted to make a body of work that was immediate, where you are looking in the eyes of the people who are directly affected,” Mendel describes his motivation.

As these haunting photographs hung on the walls of the Academy, rain from Hurricane Ida lashed at the windows and its flooding devastated communities within our very own city.

The goal of our new gallery is to offer ambitious, relevant exhibits that exist at the critical intersection of art and science. “Art is as much a part of our culture as Science,” explains Marina McDougall, vice president of experience and engagement. In 2021, the Academy was awarded a major grant from The Pew Center for Arts & Heritage to develop an innovative, experimental program that will fuse these two fields together in a personal and meditative way.

WATERSHED MOMENT

Reflections on Water's Movement

Watershed Moment will feature investigative walking tours, iconic art installations and engaging exhibits.



Big in scope and intimate in nature, this upcoming project from a creative team led by Whit McLaughlin will highlight our Water Year.

It will bring together local Philadelphian history and watershed science in the spirit of socially engaged art. Featuring an investigative walking tour with iconic art installations within and outside the Academy, *Watershed Moment* will reveal the hidden relationships of water to our lives and our city.

“This project is science from the heart, spoken in the language of art.”

“We hope that a participant will walk away with a feeling of enduring connection to Philadelphia and the Schuylkill River,” says McLaughlin on a chilly winter morning, as he envisions the sights and sounds of this program, which is set to open this summer.



“

About a month after my home was flooded from Hurricane Ida, I stumbled into the *Drowning World* exhibit at the Academy of Natural Sciences in Philadelphia, and it hit me like a gut punch. The photos and videos had such a visceral effect on not only me, but also on my children (ages 5 and 4).

By the time we walked into *Drowning World*, the flood had taken over our life, so it's understandable that my kids were interested in the exhibit. Still, I couldn't believe how long they sat transfixed by the images Gideon Mendel had captured.

”

—
Jared Bilski

Father and visitor at the Academy



CLIMATE CHANGE HAPPENING HERE

Gideon Mendel: Drowning World focuses on human stories of communities around the world experiencing climate change — communities like our own.

Increased flooding is the most immediate effect of climate change here in the Northeastern United States. Over time storms have become significantly more intense because the amount of water the atmosphere can hold increases with temperature. These intense storms pose a danger for the parts of Philadelphia that are in the floodplains of urban rivers and creeks such as the Cobbs Creek and the Schuylkill River.

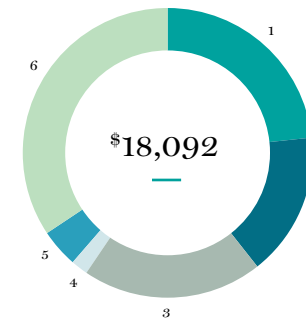


Statement of Activities

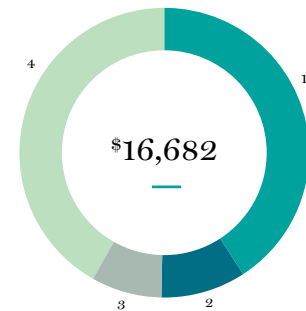
for the Year Ended June 30, 2021

(in thousands)

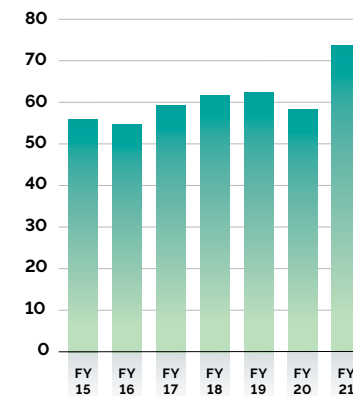
Operating Revenues and Releases



Operating Expenses



Year-End Endowment Market Value (MM)



Operating Revenues and Releases	Without Donor Restrictions	With Donor Restrictions	Total
1. Grants and Contracts	\$2,050	\$2,165	\$4,215
2. Contributions	1,295	1,604	2,899
3. Allocations of Endowment Spending from Financial Capital	679	2,962	3,641
4. Investment Income, Net	332	19	351
5. Auxiliary Enterprises	772	-	772
6. Other Income	6,211	3	6,214
Total Revenues	\$11,339	\$6,753	\$18,092
Net Assets Released from Restriction	5,397	(5,397)	-
Total Revenues and Releases	\$16,736	\$1,356	\$18,092

Operating Expenses

1. Salaries and Wages	\$6,831	-	\$6,831
2. Employee Benefits	1,566	-	1,566
3. Depreciation and Amortization	1,323	-	1,323
4. Other Operating Expenses	6,962	-	6,962
Total Expenses	\$16,682	-	\$16,682
Increase in Net Assets from Operating Activities	54	1,356	1,410

Non-operating

Contributions - Endowment and Other Gifts	-	\$172	\$172
Realized/Unrealized Net Gain on Investments, Net of Endowment Payout and Expenses	216	16,275	16,491
Change in Funded Status of Defined Benefit Plan	2,736	-	2,736
Increase in Net Assets from Non-operating Activities	2,952	16,447	19,399
Total Increase in Net Assets	3,006	17,803	20,809
Net Assets, Beginning of Year	\$2,721	\$72,358	\$75,079
Net Assets, End of Year	\$5,727	\$90,161	\$95,888

Endowment Growth (in millions)

2021	Jun 30	73.266
2020	Jun 30	58.758
2019	Jun 30	61.880
2018	Jun 30	62.198
2017	Jun 30	59.741
2016	Jun 30	55.032
2015	Jun 30	56.380

The groundbreaking academic department, **Biodiversity, Earth & Environmental Science (BEES)**, formed upon the affiliation of the Academy and Drexel University, had a full-time equivalent enrollment of 181 students in 2021.

Thank You

On behalf of the Academy's Board of Trustees, we wish to recognize and thank those supporters who contributed to the Academy between July 1, 2020 and June 30, 2021. Your generosity helps to fund the Academy's many research and education programs, and we are tremendously grateful for your support. Because of our supporters' investments in the Academy, science never stops.

\$200,000 and Up

Commonwealth of Pennsylvania
The Cotswold Foundation
The Horace W. Goldsmith Foundation
Kline & Specter, P.C.
Thomas R. Kline Esq.
Martha H. and I. Wistar Morris III*
Pew Center for Arts and Heritage

\$100,000 to \$199,999

Anonymous
E. Rhodes and Leona B. Carpenter Foundation
RJM Foundation

\$50,000 to \$99,999

Anonymous*
Jenny Rose and Gus Carey*
The Charles E. Ellis Grant and
Scholarship Fund
Jacqui and Dave Griffith
Jenny Rose and Gus Carey Family
Charitable Fund
Leo Model Foundation, Inc.
Marshall-Reynolds Foundation
The McEwen Family Scholarship Fund
at Modern Group LTD.
Mr. Allen J. Model and Dr. Roberta E. Gausas*
National Philanthropic Trust
Pennsylvania Historical and
Museum Commission
Mrs. Jean Preston*
Minturn T. Wright III*

* Deceased

◇ Sustainers Society

Sustainers Society members have supported with 10 or more years of consecutive giving.

\$25,000 to \$49,999

Anonymous
Amy Branch and Jeff Benoliel*
The Brodsky Foundation
Lois and Julian Brodsky*
COVID-19 Arts Aid PHL
Patty and Rob Delany
Thomas Dolan IV*
Hamilton Family Charitable Trust
Ellen Harvey and Tad G. Sperry*
The Hess Foundation, Inc.
Jane C. MacElree Family Foundation
Song Li, Ph.D.
Mrs. Jane C. MacElree*
Ms. Alexandra U. Moede*
The PFM Group
The Rorer Foundation, Inc.
Mr. and Mrs. Gerald B. Rorer*
The Sparvey Fund
Mrs. Corinne J. Stahl
Elaine W. Camarda and A. Morris Williams, Jr.*

\$10,000 to \$24,999

Anonymous
2004 Carita Foundation, Inc.
Mary and Peter Austen*
Joseph F. Baker and William Shaw Mulherin*
Jane and John Bales*
Jeffrey A. Beachell
Blue Sky Family Foundation
Dr. Erica Carpenter and Mr. Robert Carpenter*
Christian R. & Mary F. Lindback Foundation
Amy and R. Putnam Coes III*
Dana and Neil Cohen*
Comcast Corporation
The Connelly Foundation
Maureen Craig and Glenn Goldberg
Ms. Maude de Schauensee*
Abbie and Patrick Dean
Ralph C. Eagle Jr., M.D.*
Suzanne and Mark Eveland

Marilyn Fishman and James MacElderry*
Katy and Jason Friedland*
Sharon and Marc Gold
Green Mountain Energy
Cynthia and Martin Heckscher*
Horner Foundation
Hoxie Harrison Smith Foundation*
Jun Huangpu and Xia Li
The Jacqueline M. Griffith Fund
Mr. and Mrs. William Landman
Karen and Wayne Lattuca
The Legnini Family*
The Lenfest Foundation*
Marc Gold and Sharon Stumacher Gold
Charitable Fund
The Gordon Charter Foundation
Linda and Tom McCarthy*
The McLean Contributionship
Ms. Sandra Lee McLean*
Katie and Bill McNabb*
Edward A. Montgomery Jr.*
Theresa and Ranney Moran*
OOS Charitable Corporation
Mr. and Mrs. Robert M. Peck*
The Philadelphia Foundation
Post Brothers
Putnam and Amy Coes Family
Charitable Fund
Mr. Herbert T. Rorer*
Carol and Art Silverman*
Susan Jane Brown and John Smith
Mr. and Mrs. John Jeming Soroko*
Oona Sperr
Mrs. Joly W. Stewart*
Mr. and Mrs. Michael Tucker
Bob Victor and Alexandra Edsall*
The Wayne and Karen Lattuca
Charitable Fund
West Pharmaceutical Services, Inc.
William Penn Foundation
Chen W. Young

\$5,000 to \$9,999

Sheila and Myron Bassman*
Jean G. Bodine*
The Charles Wentz Carter
Memorial Foundation
The Christopher Ludwick Foundation*
The Claneil Foundation
Dolfinger-McMahon Foundation
E. Walker Mulherin, Jr. Fund of the Community
Foundation of Greater Memphis
Barbara Edelstein*
Fiduciary Trust International
Gretchen and Jay Riley Gift Fund
Mrs. Nancy G. Harris*
Mrs. Penelope P. Harris*
Mr. and Mrs. Peter H. Havens*
The James W. & Deborah C. Zug Fund
Diane and Seth McDowell
Morgan Lewis
Morgan Stanley Global Impact Funding Trust
Neubauer Family Foundation
Jeanette Lerman-Neubauer and Joe Neubauer
Barbara Oldenhoff*
PECO
Pfizer, Inc.
Republic Bank
Gretchen and Jay Riley*
John & Dorothy Schmidt Family Foundation

Dr. John P. Schmidt*
Joseph Shapiro*
Judith Soltz and Richard Belas*
Vandy Charitable Foundation
Veritable, LP
Nancy and Kenneth Warren*
Suzanne and Robert Welsh
Mr. and Mrs. James W. Zug

\$2,500 to \$4,999

Affleck Family Charitable Trust
Mr. and Mrs. John A. Affleck*
Dr. and Ms. Leigh J. Altadonna
Mr. and Mrs. Pierce Archer*
Peter A. Benoliel and Willo Carey*
Bloomingdale Management Advisors, LLC
Susan and R. Kent Cadwalader*
Clean Tech Services Inc.
The Daeschler Family Fund
Emily and Ted Daeschler*
Mrs. Nancy B. Davis*
Rodney D. Day III*
Delaware Valley Ornithological Club
Dr. Janice T. Gordon*
Drs. Robert and Marie Benz
Charitable Foundation
Latasha Harling
Jane and Paul Heintz*

Hufty Foundation
Joan Nathan and Jim King
Mr. John T. Lehman*
Courtney and Page Leidy
Ms. Frances H. Leidy
Maxine S. Lewis
Justin Lu
The McCausland Foundation
Bonnie and Peter McCausland
Lisa and Jeff Miller
The Nathan-King Charitable Fund
Timothy Nugent and Rebecca Calder-Nugent*
Pennoni Family Foundation
C. R. "Chuck" Pennoni
Miguel Perez and Melissa Morris
Barbara and Michael Perilstein
Cynthia and Robert Pizziketti
Michael Reed and Yalta Gilmore-Reed*
Remer Green Family Fund
Rosalind Remer and James Green
Renewal by Andersen of Greater Philadelphia
Saint-Gobain
Joanne and Bruce Shanzer
Soltz/Belas Fund
Vertex, Inc.
Mr. and Mrs. Jeff R. Westphal*



\$1,000 to \$2,499

Franny and Franny Abbott*
 The Albert Trust
 Dr. Samuel Albert and Mrs. Rithy Khieu
 Ms. Sarah S. Alfadl*
 Ms. Ellen Anderson and Mr. Brantly Rudisill*
 Thomas and Evelyn Anderson
 Dr. Valerie A. Arkoosh and
 Mr. Jeffrey T. Harbison*
 Christopher B. Asplundh Jr.
 Mrs. Ellen Asplundh
 Meredith Asplundh
 Austelle Foundation
 Amy and David Badler
 Drs. Gudrun and T. Peter Bennett*
 Kathleen and John Berkowitz
 Bluestone Foundation
 The Buck Family Fund
 Elinor Hosterman Buck and James M. Buck III
 Sheryl and Bill Bullitt*
 Catherwood Family Fund
 Susan and Cummins Catherwood*
 Cheryl and Radcliffe Cheston*
 Christopher B. Asplundh Family Fund of
 the Philadelphia Foundation
 L. Elizabeth Cohen
 Maria and Barry Craze
 Gene and Charles Dilks*
 Mrs. Edward V. Dillon*
 Margaret Chew Dolan
 The Cliffe and Cheryl Cheston Charitable Fund
 Sandra Drayer and
 The Honorable Calvin S. Drayer*
 Dr. Gudrun Dauner and Mr. Derick Dreher
 Mr. and Mrs. V. Richard Eales*
 Tom and Ellie Elkinton*
 Elliott Rosenberg Donor Advised Fund of
 the Jewish Community Foundation, Inc.
 Robert W. Ellis*
 Peter A. Evans*
 Ms. Helen H. Ford*
 Forney Family Foundation
 Mrs. Marilyn Forney*
 Frank Gill and Sally Conyne
 Gilroy & Lillian Roberts
 Charitable Foundation
 Scott Goldman and Maryalice Cheney*
 Matt and Anna Greenawalt
 Mr. and Mrs. Richard Greenawalt
 Drs. Vivian and Mark Greenberg
 Dr. Gail W. Hearn*

David Hellen and Margaret Godbey
 Mary R. "Nina" Henderson
 Homelight
 Mr. Dennis Hummel*
 Independence Foundation
 Integral Consulting
 J.P. Morgan Charitable Giving Fund
 Mr. and Mrs. Scott M. Jenkins
 The Jewish Community Foundation
 Mr. and Mrs. Craig N. Johnson*
 John G. Johnson Jr.
 Katzenbach Family Charitable Fund
 Brooke and Tom Katzenbach
 Kent-Van Alen Fund at Schwab Charitable
 Janet S. Klein*
 Kenneth Kulak and Katherine Hovde*
 Lacawac Sanctuary Foundation, Inc.
 The Lapham Family*
 Leslie Miller and Richard Worley Foundation
 Mr. and Mrs. William G. Lyons
 Susan and Samuel Madeira*
 Malfer Foundation
 Elizabeth R. McLean*
 Karen and William Mestichelli
 Alicia and Michael Miller
 Anne and Jeffrey Moore*
 Jim and Joan Moore*
 Ms. Diane L. Myer
 Arthur E. Newbold IV*
 Mr. and Mrs. Edward W. O'Connor*
 Joseph A. O'Connor Jr.*
 Joseph O'Hare and Wallace Beard*
 Kathy and Ned* Putnam
 Mr. and Mrs. George Putnam III*
 Laura Raab and Donald Krapf
 Margaret and Tom Ralph*
 Ann and Frank Reed*
 Sarah and David Reiner
 Sean Rhoads and Keri Fisher*
 Jennifer Merves Robbins and Brian Robbins*
 Andrea Rowe and Benjamin Stahl*
 Julie Stone and Michael Rueter*
 Rufe Family Fund
 The Honorable and Mrs. W. Hart Rufe III*
 Drs. Karen and Robert Sharrar*
 Stephen Smith and Ellen Kurtz*
 Sidney and Stewart Spahr*
 Jamie Stewart
 Patricia Tyson Stroud*
 Subaru of America Foundation
 Jane and Scott Satterfield
 Mr. and Mrs. L. Pierre Teillon Jr.*
 John A. Terrill and Mary Jane Barrett*
 Thomas D. & Evelyn G. Anderson
 Charitable Fund
 Mr. and Mrs. James L. Van Alen*
 Sandra Weingarten
 Signe Wilkinson and Jon Landau*
 Jean and John Witmer
 Richard B. Worley and Leslie Anne Miller
 Catherine A. Worrall*

\$500 to \$999

W. Graham Arader III
 Archway Community Properties, LLC
 Nancy and Frederick Bissinger
 The Blynn DA Fund of Vanguard Charitable
 Barbara and Clarke Blynn
 Mrs. Eve S. Bogle
 Julia and John Buonagurio
 The Cleveland Family Charitable Fund
 Nancy and Robert Cleveland
 Barbara Cobb
 Carol and Richard Collier*
 Tessa and Daniel Connelly
 Susan Dando and Alexandre Costabile*
 Rhoda and Michael Danziger*
 Eileen and Lee Mathias Charitable Fund
 Ms. Linda V. Ellsworth*
 F. L. Bissinger, Inc.
 Marian and Harvey Forman*
 Mr. and Mrs. Frank B. Foster III*
 Frank and Terry Foster Family Fund
 Drs. Barbara* and Len Frank*
 Drs. Pamela and Peter Freyd*
 William J. Frezel*
 Mr. and Mrs. W. Roderick Gagne*
 Dr. Robin Gallagher and Mrs. Karen Gallagher
 Tamar and Marshal Granor*
 Mrs. Carole Chew Williams Green
 Lisa K. Hastings
 Alice and Peter Hausmann*
 Lois V. Hill*
 Holt Weil Fund
 Joy Horwitz and Steven Fram
 The Horwitz-Fram Family Fund
 Dr. Lesley Ann Hughes
 Mr. Pemberton Hutchinson*
 Rosie Hymerling*
 Virginia and James Kennedy
 L. K. Hastings Charitable Fund
 Dr. Egbert G. Leigh Jr.
 Mr. Thomas Lloyd
 Dr. Thomas E. Lovejoy**
 John Makara and Kathy Patterson
 Ms. Robin L. Mann
 Eileen and Lee Mathias*
 Mr. Steven G. Maurer*
 Lori and James Murphy
 Paul Nemeth and Jean Flood*
 Mr. and Mrs. John* Arthur Nyheim*
 Marlene and Joseph Ramsay*
 Raymond James Charitable Endowment Fund
 Mrs. Shirley Reiner
 Mr. and Mrs. David A. Rusenko
 Mr. and Mrs. Corey R. Smith
 Joan and William Thomas*
 Upsalquitch Fund
 Ms. Mary J. Vaux
 Deborah Weil
 David Wilmerding
 Wong Giving Fund
 Stephen and Catherine Wong
 Karen and David Wright*

\$175 to \$499

Anonymous (2)
 Erin Aakhus and Ashesh Shah
 George Ahern and Marge McEntee
 Jazmine Alvarez and Joseph Crowe
 Jo and Dennis Ambrose*
 Evelyn and James Ankers
 Dr. Nadia Awad and Mr. Jonathan Ketzner
 Mrs. Sylva Baker
 Dr. Elizabeth Bales and
 Mr. Michael Dell'Angelo
 Nathan Balsham
 Katherine M. Barnash
 Roberta Batorsky and Carl Hemmingsen
 Gerald and Erica Batt
 Ms. Jane N. Beatty
 Dr. Neha Dixit and Dr. Kent Berg
 Mr. and Mrs. Lawrence H. Berger
 Tameka and Kenan Bess
 Dr. Richard Bierregaard
 Deborah and Gary Bingham
 Therese Bittermann and Eliot Peyster
 Linda Zaleski and Andrew Blittman*
 Kristen and Bryan Bradshaw
 Eric Breniman and Allison Aggon
 Kathleen and William Brennan
 Justin Brown and Lauren Hersh
 James Brozina and Kristen Angelucci
 Ashley Bryant and Kahlil Williams
 Nancie and Theodore Burkett*
 Tracie Burns and Joseph Galbraith
 Julia and Timothy Burton
 Drs. Jessica and Kevin Byrne
 Dr. John S. Carson*
 Shoshanna and Christopher Caster
 Nancy and Charles Cerino
 Rachel and Alexander Chalier
 Mrs. Angel Wong and Mr. Albert Chan
 Gordon Chaplin and Sarah Teale*
 Joan and Joel Chinitz*
 Gordon Clark and Veronica Tsang*
 Mr. Arthur M. Cohn*
 Michael Conway and Laura Vanderkam
 David W. Cooper
 Cynthia and David Covino
 Mr. and Mrs. John C. Crosby
 Dr. Warren Crown and Mrs. Kaye Crown
 Dr. and Mrs. James L. Dannenberg*
 Drs. Arun and Breanne Das
 Brendan Davis and Nicole De Hoyos
 Mr. and Mrs. Charles H. Davis*
 Dr. Joshua Davis and Mrs. Hayley Davis
 Margaux and William Del Collo
 Molly and Sean Devine
 Nina and David Diefenbach
 Harry J. DiGiacomo Jr. and
 Kristen DiGiacomo
 Sophie B. Donaghy*
 Barbara and William Dowdall
 Dr. Laura B. Frank and
 Mr. Robert J. Dromboski



Mr. Ned DuBeck
 Gregory Duffy and Catherine Lachance-Duffy
 Amanda and Christopher Durham
 Earl and Helen Poole Memorial Fund
 Mr. Jeffrey E. Edelman*
 Melissa Egbertson
 Drs. Howard J. Eisen and Judith E. Wolf*
 Elizabeth and Robert Lukens Charitable Fund
 Mr. and Mrs. Arthur E. England
 Roberta and Saul Epstein
 Mrs. Alexandra Estey*
 Lee Faden and Sharon Marcus
 Lillian and Sean Falese
 Dr. Jay L. Federman and Ms. Sylvia R. Beck*
 Lindsay Fiesthumel and Tristan Michaleski*
 Dr. Elaine B. Fitt and Mr. Robert J. Fitt
 Drs. Susan and Kenneth Frank*
 Nancy Frederick*
 Marie and Arthur Fritzinger
 Charles A. Gaglia, Jr. and Sheila Dyan
 Cara and Christopher Garofalo
 Mr. and Mrs. A. Cope Garrett*
 John Garrity*
 Mr. Gregory Garvin*
 Dr. Stephen J. Garza and Mrs. Susan J. Garza*

Nicholas and Theresa Gasperi
 Dr. and Mrs. Jon K. Gelhaus
 Julie and Mitch Gerstein
 Grace and John Ginty
 Lisa Givner and Will Givner*
 Latoya Glover and Anjelique Johnson
 Howard Goldfine and
 Norah Johnston-Goldfine*
 Kara and John Goodchild
 Tom Goodwin and Margaret Landi
 Bernard and Marie Granor
 Tucker C. Gresh*
 Alex Grieco
 Mr. Joseph Gruber*
 Eric Grugel
 Rekha and Jonathan Hagen
 Pete Hamby and Ruchira Ranaweera
 Mr. and Mrs. Andrew Hamilton
 Mary Alice Hartsock and Nathaniel Bordy*
 Stephen Harvey and Marie Weaver
 Ellen and Jay Hass
 William Hawk and Daniel Kemery
 Elisa Heinz and Joseph Connolly
 Herbert and Gayl Henze*
 Katherine and Fredrik Hiebert

* Deceased

* Sustainers Society

Edward Hill and Stacey Young
 Christopher Hoffman and Amy Jo Knaper
 Walt Homan and Elizabeth Lewis*
 Lynda Hubbell and Paul Hummer
 Mr. and Mrs. J. D. Hucker
 William Hummel and Megan Roe
 Jayme and Todd Hummell
 Joshua Jacobs
 Kate and Julian Jiggins
 Drs. Andrea and Craig Kesack
 Colleen Kestner and Nompumemelo Ndlovu
 Mary Catherine and James Kirk
 Kelly Kleinhandler and Madeline Curren
 Kristen and Matthew Kobielnik
 Dr. and Mrs. Richard C. Kovach
 Heather and Dennis Kuczynski
 Aparna Kumar and Jonathan Vogan
 Peshe and Peter Kuriloff
 Joy Kurtz
 Ms. Lois Kuter*
 Drs. Lauren and Tim Lambie-Hanson
 Robert Lawler and Thomas Lawler*
 Sarah Lawrence and Linda Frangos
 Jay Leaning and Jack Baroudi
 Norma and Robert LeClair
 Gordon Leggett and Madeline Miller
 Suzanne and Curtis Lehman
 Dr. Robert Locke and
 Mrs. Sarah Thorne-Locke
 Mr. William A. Loeb*
 Holly Logan and Michael Holland
 Theresa Longshore
 Bob and Betsy Lukens
 John Lundberg and Lucinda McDade*
 Paula and James MacCombie
 William and Linda Madway
 Jennifer Maida Chateau and
 Nickesha Alexander
 Brinden Mansley and Stephanie Moore
 Mrs. Rose M. Marinaro*
 Mary Ellen Markovec
 Irene and Bruce Marks
 Jacqlene and Shawn Martin
 Mason Family Charitable Account
 Dr. Bernard Mason and Mrs. Jane Mason
 Charles E. Mason
 Mr. and Mrs. William Matulewicz

Celenia Mays and Brandi Schell
 Jane McCaully and Rachel Morgan
 Elizabeth and Alexander McClearn
 Kathleen McGinn and Caitlin McGinn
 Sarah McIntyre and Stephen Hudec
 Gemma Mears and Jon Mears
 Daryl Mecklem and Kathy Howard*
 Ms. Elizabeth Mednick
 Kate Mellinger and Erich Falke
 Ashley Merritt
 Michael Hartung and Ana Eiras
 Charitable Fund
 Chanda Miller and Todd Franzen
 Tara Mohr and Michael Goldfine
 Barbara B. and Bruce F. Morgan
 Holly and William Mullin
 Heather and John Murphy
 Frances and Lawrence Naughton
 Paul Nestor and Kathy Jones-Nestor*
 Sylvia Nisenbaum Esq.*
 Joanne and Joseph Noreika
 Emily Northington
 Maureen and Patrick O'Hara
 Paula and Ivan Ong
 Nancy Osgood
 Nicolle Peoples and Damean Chiles
 Joseph Perez and Kwana Walker
 Lorri and Don Perkins
 Matthew Peters and Sarah Campagno
 Danthu Thi Phan and David Luttrell
 William and Timothy Pine
 Dr. Neha Plataras and Dr. John Plataras
 Heather and Rich Poidomani
 Dr. Taylor Pomeranz and Mr. Daniel Arnold
 Charles Poole
 Joseph Poole
 Ms. Katherine E. Preston*
 Rackowski Family
 Radian Group, Inc.
 Hans Rauch and Karen Miller Rauch
 Cicely and Kalik Reece
 Melissa Richards and Crystal Horning
 Dr. John M. Roberts
 Dr. Sarah Robertson and
 Dr. Robert DeAngelis
 Kristin and Matthew Roth
 Elyse and Eric Rugart
 Doris Rule
 Tracy Russo and Mitchell Kelly
 Erich Sachse and Sung-Hae Cho
 Sandy and Honor Sage*
 Mr. Steven E. Saunders*
 Susan and Dennis Schaeffer
 Jonathan Schoenfeld and Amy Concannon
 Regina and Benjamin Schofield
 Christina and Adam Schoon

Karen Schroeder and Krystal Hutton
 Anne and Fritz Schumann
 Kathleen and Frank Seidman*
 Sewn for Good, L.L.C.
 Susan and Paul Shaman*
 Julia and Robert Shaw
 Shraddha and Peter Shrier
 Cathy and Bill Siegl*
 Nancy and Erik Silldorff
 Mrs. Matthew Slap*
 Kristan and Jeffery Slotterback
 Ellen Smith and Ellen L. Smith
 Mr. Robert G. Smith
 Dr. Sandra W. Smith and Mr. Samuel C. Smith
 Dr. Evan Smoak and Mr. Zach Smoak
 Andrew Smyth
 Katie Solomone and Mary O'Neill
 Mr. and Mrs. Marc J. Sonnenfeld
 Marlene and Gary Sontchi
 Kristyn and Timothy Souder
 Natalia and Matthew Spiewak
 Mr. Nicholas J. Staffieri Esq.
 Debbie and Richard Stamm
 Mr. and Mrs. Charles R. Stauffer, Jr.
 Eric Stecker
 Annette and James Stein
 Mr. and Mrs. James Craig Stretch Jr.
 Therese Sturmer and Laelah Reino
 Kristin Swanton-Millili and George Millili
 Kathy and Frederick Taht
 Kirk J. Thieroff*
 Roger L. Thomas
 Edward Tompsett and Jordana Greenwald
 Vanessa and Bob Tracy
 Mr. David Tristano and Dr. Janine Remillard
 Karen Tulis and Avery Goldstein
 Jane and Jack Turner
 Marnie and David Unruh
 Trina Vaux and Hugh McCauley*
 Kathleen and John Walsh
 Alexandra and Donald Walther
 Joanna and James Watko
 Paula and John Wehmiller
 Carol and Daniel Weil
 Mark Weiss and Scott Broer*
 Chantal and George Westby
 Dr. Paul Wileyto and Ms. Carol Krawczyk
 Theresa Willer-Grinkewicz and Donna Widmaier
 Carol and John Winkler*
 George Wisser
 Erika Witherspoon and Jeff Shindell
 Loretta and Tom Witt*
 Allaire Wohlgemuth and Vijey Jenkal
 Dr. Sridhara Yaddanapudi and Dr. Anju Yadav
 Judith and Christopher Yoppi
 Colleen and Joseph Yurkanin

* Deceased

* Sustainers Society





Women In Natural Sciences Matching Gift Challenge

The Academy would like to especially thank our Anonymous Donor who issued a \$50,000 matching gift challenge in support of our Women In Natural Sciences (WINS) program and all our supporters who helped exceed our goal. The Academy looks forward to celebrating the 40th anniversary of this life-changing program in 2022!

Anonymous (3)

Lloyd Ackert
 Rebecca Aker
 Dr. Samuel Albert and Mrs. Rithy Khieu
 Dr. Nadia Awad and Mr. Jonathan Ketzner
 Joseph F. Baker and William Shaw Mulherin*
 Jane and John Bales*
 Nathan Balsham
 Sheila and Myron Bassman*
 Lisa Batt
 Elana Benamy and Ray Scheinfeld
 Saieda Bethea and Kim Turner-Bethea
 Jean G. Bodine*
 Amy Branch and Jeff Benoliel*
 Meghan Buccì
 Mrs. Susie Buonfiglio
 Jenny Rose and Gus Carey*
 Dr. Erica Carpenter and Mr. Robert Carpenter*
 Kathryn Christopher
 Amy and R. Putnam Coes III*
 Carol and Richard Collier
 Virginia and Donald Crawford
 David and Eileen Eskin Family Fund
 Kalyn DeHaven
 Ryan Devito
 Jill Duink
 Jane I. Earle*
 Kaylyn Edelman
 Asha El-Shabazz
 David and Eileen Eskin
 Cakky Evans
 Peter A. Evans*
 Suzanne and Mark Eveland
 Marilyn Fishman and James MacElderry*
 Ann Fortescue
 Elinor Fortescue
 Franklin Templeton
 Katie Frassinelli
 Sylvie Gallier-Howard and Diana Aguilar
 Jacqui and Dave Griffith
 Mr. Samuel P. Guyton
 Latasha Harling
 Mary Alice Hartsock and Nathaniel Bordy*
 Ellen Harvey and Tad G. Sperry*
 Janna Harvey
 Cynthia and Martin Heckscher*

David Hellen and Margaret Godbey
 Ms. Mary "Nina" Henderson
 Kate and John Hutelmyer
 The Jacqueline M. Griffith Fund
 Sarah Kang and Eric Seo
 Mermie Karger
 Mr. and Mrs. Daniel Kenney
 Dr. Stefanie Kroll
 Aparna Kumar and Jonathan Vogan
 Suzanne and Curtis Lehman
 Leo Model Foundation, Inc.
 Katie and Joey Marquardt
 Erica and DaiJzanaée Martinez
 Eileen and Lee Mathias*
 Mr. and Ms. William Matulewicz
 Marina McDougall and Zane Vella
 Elizabeth R. McLean*
 Ms. Sandra Lee McLean*
 Daryl Mecklem and Kathy Howard
 Ms. Elizabeth Mednick
 Lindsay Fiesthumel and Tristan Michaleski*
 Lisa and Jeff Miller
 Dr. Susan Miller
 Michael Minko
 Mr. Allen J. Model and Dr. Roberta E. Gausas*
 Edward A. Montgomery Jr.*
 Kate Moreau
 Elizabeth Morris
 Ivy and Jacquelyne Ng
 Jackie Ng
 Jean Nixon
 Caitlin O'Brien
 Barbara Oldenhoff*
 Richard Olsen
 Nancy Osgood
 Declan O'Sullivan
 Mary and Paul Overbeck
 Betsy Payne and William McGinnis
 Lorri and Don Perkins
 Cynthia and Robert Pizziketti
 Claire Pratt
 Priya Ratneshwar
 Ann and Frank Reed*
 Michael Reed and Yalta Gilmore-Reed*
 Susan Ridgely

Camryn Robins
 Bekah Rosenberg
 Jessica Rotenberger
 Andrea Rowe and Benjamin Stahl*
 Brian Rudnick and Andrea Shumsky
 Doris Rule
 Bill Sanders
 Alexis Schulman and Alfie Hanssen
 Sidney Schwartz
 Cathy and Bill Siegl*
 Susan Jane Brown and John Smith
 Catherine Sohn
 Regina Sontag
 The Sparvey Fund
 Kathy and Frederick Taht
 Jane and Scott Satterfield
 Pauline Thomas
 Roger L. Thomas
 Marnie and David Unruh
 Mr. and Mrs. James L. Van Alen*
 David Velinsky and Susan Johtz
 Drisanna and Elizabeth Watson
 Paula and John Wehmiller
 Ms. Amy Whisenhunt
 Elaine W. Camarda and
 A. Morris Williams, Jr.*
 Mrs. Carole Chew Williams Green
 Lisa and Charles Willis
 Tanya and Stacey Wright

♦ Deceased

* Sustainers Society

Honorary Gifts

Thomas and Evelyn Anderson, *in honor of Vincent Mair*
 Jane and John Bales*, *in honor of Kimberley Godfrey*
 Gerald and Erica Batt, *in honor of Lisa Batt*
 Perry Benson Jr., *in honor of Robert M. Peck*
 Drs. Robert and Marie Benz Charitable Foundation, *in honor of Jack Benz' Birthday*
 Curnel L. Bridges, *in honor of Hendrix, Avery, and Leah*
 Justin Brown and Lauren Hersh, *in honor of Jessica Lember, Zach's Kindergarten Teacher*
 Justin Brown and Lauren Hersh, *in honor of Eleonore Moser, Zoe's 2nd Grade Teacher*
 Cynthia and David Covino, *in honor of Randall and Mary Hack*
 Mr. and Mrs. A. Cope Garrett, *in honor of Nathan Rice, PhD*
 Ellen Harvey and Tad G. Sperry*, *in honor of Pierce Archer*
 Ellen Harvey and Tad G. Sperry*, *in honor of George W. Gephart Jr.*
 Ellen and Jay Hass, *in honor of Robert M. Peck*
 Joy Horwitz and Steven Fram, *in honor of Stefanie Kroll*
 William Shaw Mulherin*, *in honor of Joseph F. Baker, my husband, on his Birthday*
 Joseph F. Baker and William Shaw Mulherin*, *in honor of Dr. Douglass Dalton*
 Sally and Michael Newbold, *in honor of Clement B. Newbold*
 Miguel Perez and Melissa Morris, *in honor of Jason Weckstein, PhD*
 Natalie Petyk, *in honor of Andrew Petyk*
 Dr. Howard Sherman, *in honor of Jason Downs, PhD*
 Carol and Art Silverman*, *in honor of Natalie Korn*
 Mrs. Joseph Skalak, *in honor of Nathan Rice PhD*
 Marlene and Gary Sontchi, *in honor of Jennifer, Michael, and Owen Sontchi*
 Mr. and Mrs. Eugene A. Spector, *in honor of Joseph Resnick*
 Maddie and Ben Rowe, *in honor of Andrea Rowe's Birthday*
 Joan and William Thomas, *in honor of William Stone Post*
 Wissahickon Garden Club, *in honor of Jason Weintraub, PhD*

Memorial Gifts

Robert W. Ellis, *in memory of Frances S. Ellis and Albert J. Visco*
 Mr. and Mrs. A. Cope Garrett, *in memory of Julie Reich*
 Connie and Brook McCann, *in memory of John Bodine*
 Norma and Joshua Meyer, *in memory of Mrs. Gabriele Simons*
 Alicia and Michael Miller, *in memory of Moe Preston, my Dad, on his Birthday*
 William Shaw Mulherin*, *in memory of E. Walker Mulherin*
 Sylvia Nisenbaum Esq.*, *in memory of Harvey L. Nisenbaum, M.D.*
 Sarah and David Reiner, *in loving memory of Van Reiner*

In Memory of Seymour S. Preston III*

In 2020 we mourned the passing of Seymour S. Preston III (1933-2020). Moe served as an Academy Trustee for nearly 40 years, having joined the board in 1981 and becoming an Emeritus Trustee in 2014. During this time, he also served as Academy President and CEO (2000-2002) and Chair of the Board (1995-2000). Thank you to all who made gifts in his memory.

Mrs. Eve S. Bogle
 Mary Brewster
 Barbara Clothier
 Mr. and Mrs. John C. Crosby
 Ann DeCou
 Ms. Linda V. Ellsworth*
 Alicia and Michael Miller
 Mrs. Jean Preston*
 Ms. Katherine E. Preston*
 Shelley Preston and John Kelly
 William and Elizabeth Ziegenfus



Leadership Circles

Leadership gifts play a critical role in sustaining the Academy's scientific research programs, which explore today's most significant questions in environmental science, biodiversity and evolution. To learn more about giving at the Leadership Circles level, please contact our Office of Institutional Advancement at 215-299-3790 or leadershipcircles@ansp.org.

Jefferson Circle

Amy Branch and Jeff Benoliel*
 Lois and Julian Brodsky*
 Jacqui and Dave Griffith
 Ellen Harvey and Tad G. Sperry*
 Mrs. Jane C. MacElree*
 Mr. Allen J. Model and Dr. Roberta E. Gausas*
 Ms. Alexandra U. Moede*
 Mrs. Jean Preston*
 Mr. and Mrs. Gerald B. Rorer*
 Mrs. Corinne J. Stahl
 Constance and Sankey Williams

Darwin Circle

Mary and Peter Austen*
 Jane and John Bales*
 Jeffrey A. Beachell
 Dr. Erica Carpenter and Mr. Robert Carpenter*
 Amy and R. Putnam Coes III*
 Maureen Craig and Glenn Goldberg
 Abbie and Patrick Dean
 Patty and Rob Delany
 Ralph C. Eagle Jr., M.D.*
 Suzanne and Mark Eveland
 Marilyn Fishman and James MacElderry*
 Katy and Jason Friedland*
 Sharon and Marc Gold
 Jun Huangpu and Xia Li
 Mr. and Mrs. William Landman
 Karen and Wayne Lattuca
 Linda and Tom McCarthy*
 Katie and Bill McNabb*
 Edward A. Montgomery Jr.*
 Theresa and Ranney Moran*
 Mr. and Mrs. Robert M. Peck*
 Mr. and Mrs. Matthew Pestronk
 Mr. Herbert T. Rorer*
 Susan Jane Brown and John Smith
 Mr. and Mrs. John Jeming Soroko*
 Oona Sperr
 Mrs. Joly W. Stewart*
 Mr. and Mrs. Michael Tucker
 Bob Victor and Alexandra Edsall*

Leidy Circle

Joseph F. Baker and
 William Shaw Mulherin*
 Sheila and Myron Bassman*
 Jean G. Bodine*
 Mrs. Penelope P. Harris*
 The Legnini Family*
 Diane and Seth McDowell
 Jeanette Lerman-Neubauer and
 Joe Neubauer
 Barbara Oldenhoff*
 Gretchen and Jay Riley*
 Dr. John P. Schmidt*
 Judith Soltz and Richard Belas*
 Nancy and Kenneth Warren*
 Suzanne and Robert Welsh

Lewis and Clark Circle

Mr. and Mrs. John A. Affleck
 Dr. and Ms. Leigh J. Altadonna
 Mr. and Mrs. Pierce Archer*
 Peter A. Benoliel and Willo Carey*
 Drs. Robert and Marie Benz
 Susan and R. Kent Cadwalader*
 Jenny Rose and Gus Carey*
 Emily and Ted Daeschler*
 Mrs. Nancy B. Davis*
 Rodney D. Day III*
 Barbara Edelstein
 Dr. Janice T. Gordon*
 Latasha Harling
 Joan Nathan and Jim King
 Mr. John T. Lehman*
 Courtney and Page Leidy
 Joanna McNeil Lewis
 Maxine S. Lewis
 Justin Lu
 Mrs. Elizabeth P. McLean*
 Ms. Sandra Lee McLean*
 Lisa and Jeff Miller
 Timothy Nugent and Rebecca Calder-Nugent*
 C. R. "Chuck" Pennoni
 Barbara and Michael Perilstein
 Michael Reed and Yalta Gilmore-Reed*
 Rosalind Remer and James Green
 Sean Rhoads and Keri Fisher*
 Joanne and Bruce Shanzer
 Minturn T. Wright III*

* Deceased
 * Sustainers Society



President's Circle

Franny and Franny Abbott
 Dr. Samuel Albert and Mrs. Rithy Khieu
 Ms. Ellen Anderson and Mr. Brantly Rudisill*
 Thomas and Evelyn Anderson
 Dr. Valerie A. Arkoosh and Mr. Jeffrey T. Harbison*
 Mrs. Ellen Asplundh
 Amy and David Badler
 Drs. Gudrun and T. Peter Bennett*
 Kathleen and John Berkowitz
 Susan and Cummins Catherwood*
 Cheryl and Radcliffe Cheston*
 L. Elizabeth Cohen
 Maria and Barry Craze
 Gene and Charles Dilks*
 Mrs. Edward V. Dillon*
 Thomas Dolan IV*
 Sandra Drayer and The Honorable Calvin S. Drayer*
 Dr. Gudrun Dauner and Mr. Derick Dreher
 Tom and Ellie Elkinton*
 Peter A. Evans*
 Ms. Helen H. Ford*
 Mrs. Marilyn Forney*
 Frank Gill and Sally Conyne
 Scott Goldman and Maryalice Cheney*
 Matt and Anna Greenawalt
 Mr. and Mrs. Richard Greenawalt
 Drs. Vivian and Mark Greenberg
 Anne and Matt Hamilton
 Dr. Gail W. Hearn*
 Mr. Dennis Hummel*
 Mr. and Mrs. Scott M. Jenkins
 Mr. and Mrs. Craig N. Johnson*
 John G. Johnson Jr.
 Janet S. Klein*
 Kenneth Kulak and Katherine Hovde*

The Lapham Family*
 Susan and Samuel Madeira*
 Bonnie and Peter McCausland
 Kate Mellinger and Erich Falke
 Karen and William Mestichelli
 Alicia and Michael Miller
 Anne and Jeffrey Moore*
 Jim and Joan Moore*
 Ms. Diane L. Myer
 Arthur E. Newbold IV*
 Mr. and Mrs. Edward W. O'Connor*
 Joseph A. O'Connor Jr.*
 Joseph O'Hare and Wallace Beard*
 Cynthia and Robert Pizziketti
 Kathy and Ned* Putnam
 Mr. and Mrs. George Putnam III*
 Laura Raab and Donald Krapf
 Margaret and Tom Ralph*
 Sarah and David Reiner
 Jennifer Merves Robbins and Brian Robbins*
 Mrs. Harriet H. Robertson
 Mrs. Bonnie Rosenberg
 Andrea Rowe and Benjamin Stahl*
 Julie Stone and Michael Rueter*
 Drs. Karen and Robert Sharrar*
 Carol and Art Silverman*
 Stephen Smith and Ellen Kurtz*
 Sidney and Stewart Spahr*
 Jamie Stewart
 Patricia Tyson Stroud*
 Jane and Scott Satterfield
 John A. Terrill and Mary Jane Barrett*
 Mr. and Mrs. James L. Van Alen*
 Sandra Weingarten
 Signe Wilkinson and Jon Landau*
 Jean and John Witmer
 Richard B. Worley and Leslie Anne Miller
 Catherine A. Worrall*

Estate Gifts

Anonymous
 Estate of Seymour S. Preston III

1812 Society Members

For many years, the Academy's most dedicated supporters have invested in our future by including the Academy in their estate plans. The Academy's Board of Trustees established the 1812 Society in honor of our most forward-thinking supporters whose contributions have sustained the Academy's growth for the past two centuries. To learn more planned giving, please contact our Office of Institutional Advancement at 215-299-1122 or plannedgiving@ansp.org.

Anonymous*
 Anonymous
 Joseph F. Baker*
 Sheila and Myron Bassman
 Vivian K. Blank*
 Jean G. Bodine*
 Dr. John S. Carson*
 Joan and Joel Chinitz*
 Donald Cleaver*
 Mr. Luther A. Clement*
 Walter Coley*
 Amy and George Dick
 Lenora and Brooke Dolan
 Margaret Chew Dolan
 Thomas Dolan V
 Thomas Dolan IV*
 Jane I. Earle*
 Robert W. Ellis
 Lin Floyd
 Drs. Barbara* and Len Frank*
 Julia W. Frick*
 Mr. and Mrs. George W. Gephart Jr.
 Frank Gill and Sally Conyne
 Mrs. S. Page Hartley*
 Cynthia and Martin Heckscher*
 Lois V. Hill*
 Mrs. Joanne C. Letwinch*
 Mr. Edward A. Markart Jr.
 Ms. Jacqueline Markart
 Mrs. Elizabeth P. McLean*
 Daniel Moerman and Claudine Farrand
 Mrs. Elizabeth P. Petit
 Jean and Seymour* S. Preston III*
 Sarah and Philip Price Jr.
 Mr. Francis Rasmus
 Ann and Frank Reed*
 Sean Rhoads and Keri Fisher
 Peg and Bob Ridgely
 Dr. Robert* and Mrs. Harriet H. Robertson
 Phyllis and Gary Rosenberg
 Mr. and Mrs. Nicholas Ruggeri
 Dr. John P. Schmidt*
 Pamela and Philippe Serra
 Ivy Silver and Steven Leshner
 Carol and Art Silverman*
 Patricia Tyson Stroud*
 Minturn T. Wright III*

* Deceased
 * Sustainers Society

Named Endowment Funds

Endowment funds provide a source of sustainable support for a variety of Academy initiatives, from postdoctoral research to our annual lecture series. If you are interested in making a gift to a named endowment or establishing one in your name, please contact the Office of Institutional Advancement at 215-299-1182 or email friends@ansp.org.

2012 Gallagher Fellow
 Academy-General Endowment
 Academy-General Endow-Temp Rest
 Albert Earl Gilbert Endowment
 Annual Fund Endowment
 Anonymous Discretionary Fund
 Anonymous Strategic Initiatives Endowment
 Archives-Trogon Collection
 Board Reserves
 Böhlke Memorial Endowment
 Botany Curator Endowment
 Botany General Endowment
 Botany Schuyler Internship Endowment Fund
 Brooke Dolan Archivist Endowment
 Carol Spawn Endowment Fund
 Center for Systematic Biology and Evolution Endowment
 Chair of Environmental Initiatives Endowment
 Chaplin Chair of Ichthyology
 Charlotte C. Stokes Art Collection Endowment
 Cheryl Beth Silverman Memorial Fund
 Dr. Charles Hodge IV Memorial Endowment
 Education Endowment
 Elizabeth and James Abraham Garfield Rehn Endowment Fund
 Entomology Endowment
 Estuarian Research Center Endowment
 Exhibits Endowment
 Fellow of the Academy Chair Endowment
 Florence R. Foerderer Endowment Fund
 Frank and Ruth Patrick Endowment Fund
 Grace Tees Herbarium Maintenance Fund
 Hattersley Family Foundation Collections Care Upgrade Fund
 Hayden Memorial Geological Fund
 Hazel and H. Radclyffe Roberts Fund
 Henry A. Pilsbry Chair of Malacology
 Horace and Marie Richards Fund
 Ichthyology Endowment

Invertebrate Paleontology Endowment
 Jane and John Bales Endowed Fund
 Jessup-McHenry Fund
 Joe Cadbury Scholarships Fund
 John and Marjorie Foster Fund for Ornithology
 John J. and Anna H. Gallagher Fellowship
 Johnson Water Research Endowment
 Joseph Leidy Memorial Fund
 Leidy Sculpture Preservation Fund
 Library Acquisition
 Library Technology Fund
 Macaleer Ornithology Expedition Fund
 Malacology Endowment
 Maurice Heckscher Endowment Fund for Ornithology
 McLean Acquisition Fund
 Meyer de Schauensee Endowment Fund
 Mildred Eckert Book Fund
 Mineral Sale Fund Endowment
 Mineralogy Endowment
 Morgan Hebard Fund
 Nolan Binding Fund
 Ornithology Endowment
 Ornithology-Operating Endowment
 Patrick Center for Environmental Research Endowment
 Richard Hopper Day Memorial Fund
 Ruth Patrick Chair in Environmental Science
 Schuyler Herbarium Internship Endowment Fund
 Science Publications Endowment
 The Albert M. Greenfield Technology Upgrade Endowment
 The Dolan Initiative for Innovative Water Research
 The Don and Virginia Eckleberry Endowment for Wildlife Art
 The McLean Library and Archives Directorship Endowed Fund
 The Robert and Happy Robertson Endowed Fund
 The Seymour S. Preston III Endowed Fund
 The Sherry E. Weiss Fund for Outside In
 The William L. McLean III Endowment Fellowship Fund
 Theodore J. Cohn Endowment
 Vertebrate Paleontology Special Fund
 Vertebrate Zoology Fund
 VIREO Endowment
 M. Patrica Mans WINS Internship Endowment
 Young People's Explorer Series



Matching Gift Organizations

America's Charities
Benevity
The Blackbaud Giving Fund
Bristol-Myers Squibb Company
Charities Aid Foundation of America
Johnson & Johnson CyberGrants
Merck Partnership for Giving
Radian Group, Inc.
Regeneron
Schwab Charitable
Veritable, LP
William Penn Foundation

Government and Research Grants

Barnegat Bay National Estuary Program
The Barnes Foundation
Bishop Museum
Boeing
Carnegie Mellon University
Chesapeake Conservancy Inc.
Darby Creek Valley Association
Delaware River Basin Commission
Delaware Riverkeeper Network
Elkhorn Slough Foundation
GrowingGreat Veggies & Fruit:
a National STEM Education Program
Henry Francis du Pont Winterthur Museum Inc.
Lacawac Sanctuary
National Fish and Wildlife Foundation
National Institute of General Medical Sciences
at the National Institute of Health
National Park Service
National Science Foundation
Natural Lands Trust
New Jersey Sea Grant Consortium

Open Space Institute Land Trust
Pennsylvania Department of Environmental Protection
Partnership for the Delaware Estuary
Rutgers University
Strategic Environmental Research and Development
Program (Department of Defense)
Stroud Water Research Center
The Commons
The Nature Conservancy
The New York Botanical Garden
United States Department of Environmental
Protection Agency
University of Maryland
University of Montana
University of Pennsylvania
University of Utah
University of Vermont
Washington University in St. Louis
William Penn Foundation

Gifts to the Library and Collections

Ann and Martin Avery Snyder

Gifts in Kind

Subaru of America Foundation

The Academy would especially like to thank our essential workers, including those who contributed behind the scenes and on the museum floor, for your tireless, in-person support during the pandemic.

Board of Trustees

As of March 15, 2022

Peter A. Austen
Jeffrey A. Beachell
Amy L. Branch
Erica L. Carpenter, MBA, PhD
Scott A. Cooper, PhD
Maureen Craig
Abbie Dean
Robert J. Delany
Suzanne Eveland
Jason Friedland
John A. Fry
Marc E. Gold
David E. Griffith (*Chair*)
Latasha D. Harling, CCP, SHRM-SCP
Ellen D. Harvey
Jun Huangpu, MBA, PhD
Kevin Kowalick
Rashaad S. Lambert
Sandra L. McLean
Allen J. Model
Ron M. Philip
Michael H. Reed, Esq.
Gerald B. Rorer
David Rusenko
John F. Smith III, Esq.
Michael K. Tucker, Esq.
Robert S. Victor (*Secretary*)
Sharon L. Walker, PhD, F. AEESP, F. AAAS

Emeritus Trustees

Cynthia P. Heckscher
Edward A. Montgomery, Jr.
I. Wistar Morris III
Minturn T. Wright III

Photo Credits

Academy photography by Ramon Torres unless noted below.
Cover: Giga Khurtsilava/Unsplash, Pg. 3: Bryan Johnson/First Class Visuals, Pg. 11: ActionVance/Unsplash, Pg. 13: Scott Serhat Duygun/Unsplash, Pg. 14: Chris Henry/Unsplash, Pg. 15: Liberty Property Trust, Pgs. 17–24: Mark Sabaj/ANS, Pg. 26: Andrea Rowe/ANS, Pg. 27: Alex Posmontier/ANS, Pg. 28: Emily Jeanette/ANS, Pg. 29, 30, 33: PCER/ANS, Pg. 31: Tookany/Tacony-Frankford Watershed Partnership, Pg. 38: GM9. © Gideon Mendel, Francisca Chagas dos Santos, Taquari District, Rio Branco, Brazil, 2015. C-print. 48 x 48 inches. Image courtesy of the artist. Pg. 42: Jared Bilski, Pg. 43, 46, 48, 51, 53, 55, 56: Paul Callomon/ANS

DESIGN: AGILECAT | EDITOR: BRIGETTE BROWN



♦ Deceased

♠ Sustainers Society



The Academy of
Natural Sciences
of DREXEL UNIVERSITY

Founded in 1812, the Academy of Natural Sciences of Drexel University is a leading natural history museum dedicated to understanding the natural world and inspiring everyone to care for it.

BE A FORCE FOR NATURE

A proud affiliate of

Drexel
UNIVERSITY