

Our Investment in the Future of AAAR

Under the Sea

Scott Hollenbeck, Darlene McAllister,
Kristin Bunker, & Gary Casuccio



ENDOWMENT FUND

ANNUAL REPORT

2022 AND 2023



**American Association
for Aerosol Research**

Mission

Dear Colleagues,

The mission of the American Association for Aerosol Research Endowment Fund is to assist in advancing aerosol science and technology by providing stable, long-term financial support for the Association's programs. The goal is to establish, and increase in net worth, a set of funds that will provide significant financial support to aid in achieving AAAR's strategic objectives. The Endowment Fund is intended to complement AAAR's revenue from dues and other sources. This mission is enabled by the generous contributions of colleagues, their friends and families, and aerosol instrumentation companies. It is currently being realized by funding awards, plenary lectures, and a strategic project developed by the Vice-President Elect.

AAAR endowment funds are invested in a blend of high-quality stocks and bonds following the AAAR investment policy. Similar to all investments nationally, our endowment funds did experience some loss during 2022; however, the funds have mostly recovered in 2023. Our net assets decreased from about \$789,000 to about \$757,000 over the two years. In order to support AAAR activities, a total of about \$23,000 was disbursed in 2022 and about \$25,000 was disbursed in 2023. This included support for the Friedlander Memorial Plenary Lecture, six AAAR awards, and a joint award with the International Society of Aerosols in Medicine. Further details about the current funds and how they were used can be found in this report.

2022 was an important year in AAAR's history, marking the 40th anniversary of both our Annual Conference and our journal, *Aerosol Science & Technology*. The Endowment Committee also saw two major accomplishments this year. First, with support from the AS&T Editorial Office, Early Career Committee, and Virtual, Inc., we continued the AS&T Lecture Series. Eight lectures were held in 2022 and eight more in 2023. We also hit a new record with over 150 attendees for the live presentation. A big thank you to all the presenters who have provided these wonderful lectures and the AAAR Student Chapters for the amazing job they have done serving as hosts. You can watch the recordings at <https://www.aaar.org/meetings-events/aaar-lectures-series/>.

Second, following the Endowment Committee's Meeting in October at the 2022 Annual Conference, we announced the development of 3 new funds. These include the:

1. AAAR Excellence in Teaching, Mentoring, and Training Award Fund led by Rachel O'Brien
2. Dale Lundgren and Virgil Marple Fund led by C Y Wu, Chris Hogan, and Bernard Olson
3. International Friendship Fund led by Susanne Hering

We cannot thank Rachel, C.Y., Chris, Bernard, and Susanne enough for helping to spearhead these efforts for AAAR. They are all truly passionate about the new awards and opportunities these will provide our community.

Fundraising continued for these three funds in 2023. The Lundgren-Marple Fund raised more than \$27,000, enough to request matching funds from the Board of Directors which was approved at the board meeting in October 2023. The first Lundgren-Marple plenary was presented at the 2023 conference by Vanderlei Martins (University of Maryland, Baltimore County). You can learn more about these 3 funds in this report. If you are interested in donating, please visit <https://www.aaar.org/donations/>.

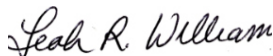
On behalf of the entire Endowment Committee, thank you for your contributions!

Sincerely,



Amy P. Sullivan
Endowment Committee Chair 2022

Jay Turner
Endowment Committee Chair 2023



Leah Williams
Endowment Committee Chair 2024

Microscopy Images from Cured-in-Place-Pipe Installation Particles

Brianna Peterson, Ana Morales & Jay Tomlin
Purdue University

Current Endowment Funds and 2022–2023 Activities

The AAAR Endowment Fund is comprised of sub-funds that are either True Endowment Funds or Quasi Endowment Funds. True Endowment Funds are established by a donor-restricted gift. The original value of gifts contributed to True Endowment Funds cannot be spent. The income and appreciation earned by True Endowment Funds provide a permanent source of expendable revenue in perpetuity for the purposes specified by the donor and agreed to by AAAR. Quasi Endowment Funds are created by donor gifts or by AAAR Board designation and are treated the same as True Endowment Funds except that the original contributions can be spent in accord with the purpose of the fund and may have a finite lifetime. The AAAR Endowment Funds currently have five True Endowment Funds and six Quasi Endowment Funds.

Sheldon K. Friedlander Memorial Fund for Promoting Aerosols as an Enabling Discipline

This fund was established in 2009 by the family of Sheldon Friedlander with a \$50,000 donation. Friends and colleagues contributed additional funds. The goal of the fund is to provide for activities related to promoting aerosols as an enabling discipline, such as supporting plenary lectures and special symposia at the annual conference.

The 2022 Friedlander Lecture titled "The Secret Lives of Filters" was presented by Jeffrey Siegel, University of Toronto.

The 2023 Friedlander Lecture titled "Particle-Resolved Modeling: A Bridge between Scales in Aerosol Science" was presented by Nicole Riemer, University of Illinois at Urbana-Champaign.

The Endowment Committee, with support from the AS&T Editorial Office and Early Career Committee, also launched in 2021 the AS&T Paper Lecture Series. This initiative, supported by the Friedlander Memorial Fund, aims to highlight the research in our community, tie our Journal to other AAAR activities, and provide an opportunity to bring us all together outside of the Annual Conference. Each month the Editors of AS&T selected a high impact journal article to be presented by its author. For each lecture one of AAAR's Student Chapters serves as host. Eight lectures were held in 2022 and eight were held in 2023. Recordings are available to view at <https://www.aaar.org/meetings-events/aaar-lectures-series/>.

Fissan-Pui-TSI Award Fund

This fund was established in 2005 with a \$75,000 donation from TSI Incorporated, which provided the award amount in 2006 and \$65,000 to support future awards. The Award is granted by the International Aerosol Research Assembly (IARA) to recognize international collaboration in the field of aerosol science and technology between researchers/engineers residing on at least two different continents. The award is presented every four years at the International Aerosol Conference (IAC).

The Fissan-Pui-TSI Award was not awarded at the IAC in 2022.

Presidents Fund

This fund was started in 2016 with a generous donation from David Ensor and additional contributions from Past AAAR Presidents. The Board of Directors then voted to contribute matching funds to bring the Presidents Fund up to the amount of a True Endowment. An official account was set up in early 2019. The donors decided that the Vice-President Elect would use the income from this fund to help support an activity they would like to help establish during their Presidency to further support the mission of AAAR. In 2022, Vice President Leah Williams used this funding to start the AAAR Mentoring Program. In 2023, Vice President V. Faye McNeill used this funding to bring Andy Revkin of Columbia University, a well-known science communicator, to the conference to teach a tutorial and participate in the Science Communication Program.



What an honor to receive the David Sinclair Award! I take this as not an award for me, but rather a wonderful recognition of the terrific group of researchers, from undergraduates to postdoctoral fellows, who I have had the pleasure to work with over many years. They are smart, incredibly hard-working, generous with helping others, and not the least... a lot of fun. They make coming to school every day a true joy. And it is such an honor to follow in the footsteps of the previous award winners where the list reads like a "who's who" of aerosol science. While the description of the award is recognition of an established scientist who is still active, the previous awardees have done some of their best work after winning this prestigious award. So, I take it not only as recognition of my group's contributions to aerosol science to date, but also as a challenge to live up to the high bar the previous awardees have set!

Barbara Finlayson-Pitts
2023 Sinclair Award



AAAR has been my scientific home since day one of my academic career and I am constantly impressed by its community of amazing researchers. The list of past recipients of the Whitby award is a who's-who of inspiring and supportive scientists and I am honored the community has chosen to add me to that list.

Gabriel Isaccman-VanWertz
2023 Whitby Award

AS&T Outstanding Publication Award Fund

The AS&T Outstanding Publication Award was established in 2015 and is presented annually to recognize a paper published in Aerosol Science and Technology (AS&T) that has had a significant impact on the field. Part of this award is provided by Taylor and Francis, who publishes AS&T, and part by AAAR. This fund was created in late 2018 to provide AAAR's portion of the award with a generous donation from Peter McMurry and additional contributions from other previous and current AS&T Editors. The Board of Directors then voted to contribute matching funds to bring the AS&T Outstanding Publications Award Fund up to the amount of a True Endowment. An official account was set up in early 2019.

In 2022, the AS&T Outstanding Publication Award was presented to Judith Chow, John Watson, Dale Crow, Douglas Lowenthal, and Thomas Merrifield for their 2010 paper "Comparison of IMPROVE and NIOSH Carbon Measurements."

In 2023, the AS&T Outstanding Publication Award was presented to Peter DeCarlo, Jay Slowik, Douglas Worsnop, Paul Davidovits, and Jose L Jimenez for their 2004 paper "Particle Morphology and Density Characterization by Combined Mobility and Aerodynamic Diameter Measurements. Part 1: Theory."

Susanne V. Hering Award Fund

The newest True Endowment fund was established in 2021 to honor Susanne V. Hering, Founder and President of Aerosol Dynamics, Inc. as well as a previous AAAR President, Conference Chair, Board Member, Plenary Speaker, Tutorial Speaker, and Benjamin Y.H. Liu Award Winner. This new award recognizes outstanding contributions to aerosol science by a scientist whose work has had a significant impact on public health, the built environment or the global ecosystem.

Donations by colleagues, friends, and aerosol technology companies were matched by the Board to create this True Endowment. An official account was set up in June 2021.

The 2022 Susanne V. Hering Award was awarded to Lidia Morawska at the Queensland University of Technology in Brisbane, Australia.

The 2023 Susanne V. Hering Award was awarded to Ann Marie Carlton at the University of California, Irvine.

Quasi Endowment Funds

Sheldon K. Friedlander Dissertation Award Fund

Revenue from this fund supports the monetary prize for the Sheldon K. Friedlander Award which recognizes an outstanding dissertation by an individual who has recently earned a doctoral degree. The dissertation can be in any discipline in the physical, biomedical, or engineering sciences but must be in the field of aerosol science and technology. The award memorializes Sheldon Friedlander for his leadership as a researcher, teacher, and pioneer in aerosol science. One of AAAR's founders, Friedlander is a past recipient of the distinguished Fuchs Memorial Award. He directed graduate students at Columbia University, Johns Hopkins University, the California Institute of Technology, and the University of California for more than 50 years.

The 2022 Sheldon K. Friedlander Dissertation Award was presented to Mingyi Wang for their dissertation work at Carnegie Mellon University.

The 2023 Sheldon K. Friedlander Dissertation Award was presented to Haoxuan Chen for their dissertation work at Peking University.



It is a great honor to receive the Thomas T. Mercer award, one of the most distinguished recognitions in the field of pharmaceutical aerosols and inhalable materials. It is a privilege and highlight of my scientific career to add my name to the prestigious list of Mercer awardees, in particular that of Myrna Dolovich, the only other woman who has received this award since its inception 28 years ago.

Chantal Darquenne
2023 Mercer Joint Prize

Thomas T. Mercer Joint Prize Fund

Sponsored by AAAR and the International Society for Aerosols in Medicine (ISAM), the Thomas T. Mercer Joint Prize recognizes excellence in the areas of pharmaceutical aerosols and inhalable materials. The award honors the legacy of Thomas T. Mercer, an outstanding researcher and author whose work encompassed aerosol physics and chemistry as well as inhalation toxicology, industrial hygiene, and health physics. The award is funded by contributions from the Mercer Family Foundation, as well as contributions from ISAM and revenue from this fund.

The 2022 Thomas T. Mercer Joint Prize was presented to David Cipolla at Insmmed, Inc. (Bridgewater, New Jersey).

The 2023 Thomas T. Mercer Joint Prize was presented to Chantal Darquenne at the University of California, San Diego.

David Sinclair Award Fund

Revenue from this fund supports the David Sinclair Award which recognizes sustained excellence in aerosol research and technology by an established scientist still active in their career. The individual's research must have a lasting impact in aerosol science. The award memorializes David Sinclair, one of aerosol science's great innovators, known for his knowledge, ingenuity and energy.

The 2022 David Sinclair Award was presented to Neil Donahue at Carnegie Mellon University.

The 2023 David Sinclair Award was presented to Barbara Finlayson-Pitts at the University of California, Irvine.

Kenneth T. Whitby Award Fund

This fund supports the Kenneth T. Whitby Award which recognizes outstanding technical contributions to aerosol science and technology by a young scientist. The purpose of the award is to encourage continued work in the field. The award memorializes Kenneth T. Whitby, known for his contributions to aerosol measurement, the study of aerosol properties and behavior, and the nature of atmospheric aerosols.

The 2022 Kenneth T. Whitby Award was presented to Tran Nguyen at the University of California, Davis.

The 2023 Kenneth T. Whitby Award was presented to Gabriel Isaacman-VanWertz at Virginia Tech.

Benjamin Y. H. Liu Award Fund

This fund supports the Benjamin Y. H. Liu Award which recognizes outstanding contributions to aerosol instrumentation and experimental techniques that have significantly advanced the science and technology of aerosols. The award honors Benjamin Liu for his leadership in the aerosol community and his own seminal contributions to aerosol science through instrumentation and experimental research.

The Benjamin Y. H. Liu Award was not presented in 2022.

The 2023 Benjamin Y. H. Liu Award was presented to Jason Olfert at the University of Alberta.

Fuchs Memorial Award Fund

The Fuchs Memorial Award is the premier international prize in aerosol science and is sponsored by AAAR, the Gesellschaft für Aerosolforschung (GAeF) and the Japan Association of Aerosol Science and Technology (JAAS). This fund supports AAAR's contribution to the award. Presented every four years at the International Aerosol Conference, the award memorializes Nikolai Albertovich Fuchs, the great Russian scientist who is regarded by many as the "father of aerosol science." The award recognizes outstanding worldwide contributions to the field of aerosol research.

The 2022 Fuchs Memorial Award was awarded at the International Aerosol Conference to Juan Fernandez de la Mora at Yale University.



It is an honor to receive the Susanne V. Hering Award from AAAR. This recognition is especially meaningful as Dr. Hering is a role model and AAAR is where I gave my very first academic presentation. The presentation was about impactor samples, cited Dr. Hering and was printed on overhead transparencies. My aerosol career first focused on instrument design and as a master's student, my Web of Science searches were often some form of: Hering AND impactor OR multi-stage impactor OR virtual impactor. When my focus shifted to cloud chemistry, Susanne's papers were again seminal and taught me about the droplet mode! Susanne's work is sufficiently fundamental that she touches on all aspects of aerosol science and continues to break new ground. She is a marvel to me. I hope AAAR's Hering Award continues to inspire aerosol scientists to use their special technical talents to safeguard health and the environment.

Ann Marie Carlton
2023 Hering Award

Endowment Committee

The Endowment Committee oversees the management of the AAAR Endowment Funds and provides leadership for AAAR's philanthropy-based, long-term fundraising activities. The Committee is responsible for developing, reviewing, revising and implementing policies for fundraising, and making recommendations to the Board for the use of the funds to support AAAR's programs. The Committee develops fundraising goals, spearheads fundraising activities and educates AAAR members as to the value of philanthropic giving to AAAR's Endowment Funds.

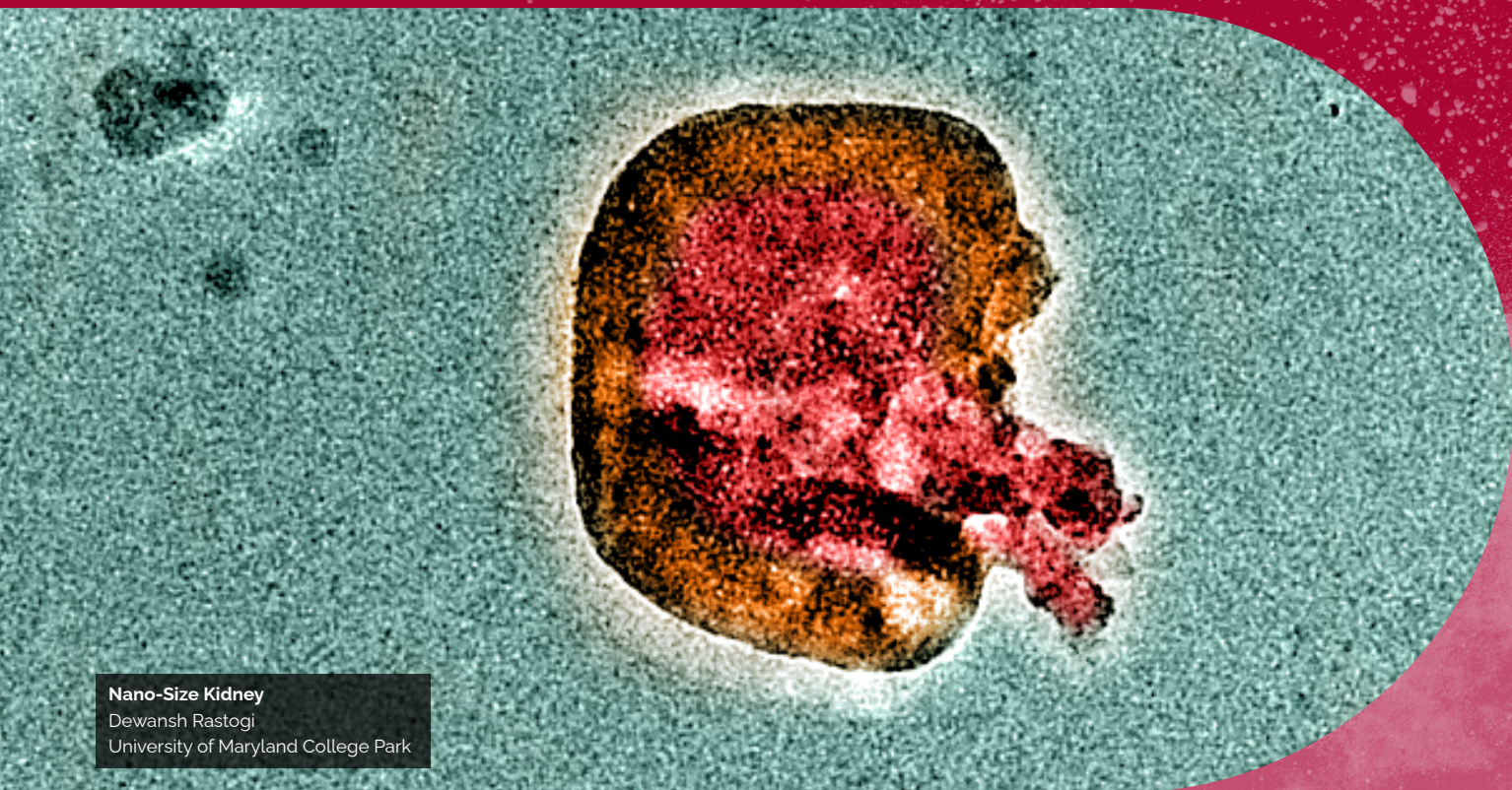
Members of the Endowment Committee

Amy Sullivan (2022 Chair)	2018–2022
Anthony Wexler	2019–2022
Sergey Nizkorodov	2021–2022
Jay Turner (2023 Chair)	2020–2023
Sonia Kreidenweis	2021–2024
Suzanne Paulson	2021–2024
Akua Asa-Awuku	2022–2023
Allison Aiken	2022–2024
Benjamin Nault	2022–2025
C.Y. Wu	2022–2025
Leah Williams (2024 Chair)	2023–2024
Murray Johnston	2023–2026



My research career has been focused on developing aerosol instrumentation. It is an immense honour that my work in this field is recognized by my peers, colleagues, and collaborators. This work would not have been possible without the knowledge exchange made possible by the AAAR annual conference. Aerosol instrumentation has found a natural home at AAAR and the Benjamin Y. H. Liu Award is a special way the AAAR highlights the importance of this work to the broader aerosol research community. I'm grateful for AAAR's support.

Jason Olfert
2023 Liu Award



Nano-Size Kidney
Dewansh Rastogi
University of Maryland College Park

Building the Future

The Endowment Committee seeks to engage AAAR members, and their families and friends, in establishing and directing the future of the endowment. The following funds are currently under development. Help us support aerosol science and its application to important societal issues with a contribution. An on-line donation portal along with a description of all our funds can be found on the AAAR website at <https://www.aaar.org/donations/>. We also welcome donations from donor advised funds or individual retirement accounts. Please let us know if you have included AAAR in your estate plans.

Funds Under Development

AAAR Excellence in Teaching, Mentoring, and Training Award Fund: This award recognizes the importance of supporting students and early career scientists in our field. It will honor both mid-career and senior scientists who have demonstrated outstanding contributions to teaching, mentoring, and training the next generation of aerosol scientists.

Dale Lundgren and Virgil Marple Fund. This fund honors the contributions of Dale Lundgren and Virgil Marple in their long-term collaborative efforts to advance aerosol measurement science and education. The fund will support a plenary lecture at AAAR annual meetings. The fundraising goal has been reached and this true endowment fund will be established in 2024.

International Friendship Fund. This fund will support international participation in AAAR annual meetings through travel grants to aerosol scientists who work outside the US and Canada.

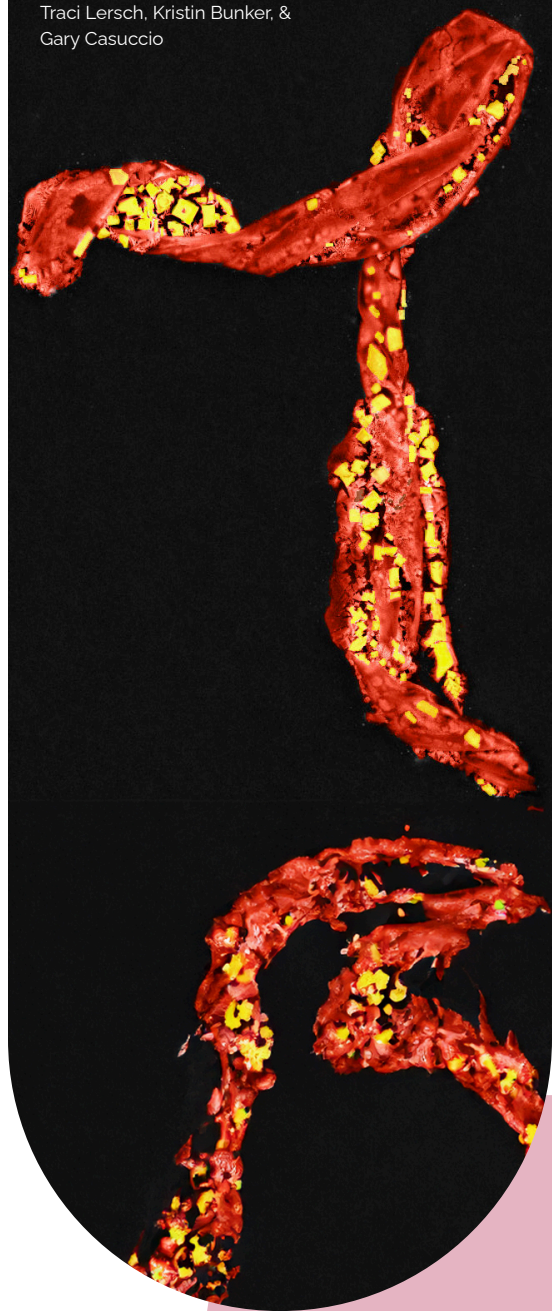
We welcome members' thoughts regarding other activities that could make AAAR more effective in fostering and supporting aerosol science. Some possible concepts for endowment funds are included in the table below. Named funds to memorialize the legacy of prominent members of the aerosol community are a possibility as well. Please send your ideas to Committee Chair Leah Williams at williams@aerodyne.com. Also note that the Board of Directors has set a policy to provide up to \$25,000 in matching funds for groups that raise at least \$25,000 in order to establish true endowment funds.

Ideas for Potential New Endowment Funds to Support AAAR's Mission

Concept	Annual spending	Endowed amount*
Student Poster Prizes (To award 10 at \$200 each)	\$ 2,000	\$ 50,000
Early Career Travel Grant (To cover registration, lodging and some travel)	\$ 2,000	\$ 50,000
Plenary lecture (To cover honorarium, lodging and some travel)	\$ 2,000	\$ 50,000
Early Career Event at Conference	\$ 4,000	\$ 100,000
Student Travel Grants (To award 10 at \$500 each)	\$ 5,000	\$ 125,000

*Endowed amount is based on assuming a 4% average rate of return on investments to support annual spending.

Cubic Cobra
Marit Meyer, Justine Richardson,
Traci Lersch, Kristin Bunker, &
Gary Casuccio



Lettuce See
 Dewansh Rastogi
 University of Maryland College Park

Status of the Funds in 2022

AAAR Endowment Funds Financial Summary for 2022					
Name of Endowment Fund	Net Assets Beginning of Year 1/1/2022	Contributions + Matching Funds	Total Disbursed in 2022	Net Return (Gain/Loss + Interest - Fees)	Net Assets End of Year 12/31/2022 (Audited)
True Endowment Funds (Permanently Restricted Corpus, Remainder Temporarily Restricted)					
Friedlander Memorial Fund (\$50,000 Corpus)	\$ 138,752			-\$ 22,194	\$ 116,558
Fissan-Pui-TSI Award Fund (\$65,000 Corpus)	\$ 142,753			-\$ 23,262	\$ 119,491
Presidents Fund (\$51,300 Corpus)	\$ 68,740		-\$ 2,081	-\$ 10,141	\$ 56,518
AS&T Outstanding Publication Award Fund (\$54,100 Corpus)	\$ 64,901		-\$ 2,000	-\$ 10,130	\$ 52,771
Susanne V. Hering Award Fund (\$74,073 Corpus)	\$ 74,536	\$ 300	-\$ 1,500	-\$ 9,316	\$ 64,020
Quasi Endowment Funds (Board Designated)					
Friedlander Dissertation Award Fund	\$ 50,499		-\$ 1,500	-\$ 7,644	\$ 41,355
Thomas T. Mercer Joint Prize Fund	\$ 49,388	\$ 9,000	-\$ 10,000	-\$ 8,961	\$ 39,427
David Sinclair Award Fund	\$ 48,071		-\$ 1,500	-\$ 7,437	\$ 39,134
Kenneth T. Whitby Award Fund	\$ 46,331		-\$ 1,500	-\$ 7,130	\$ 37,701
Benjamin Y. H. Liu Award Fund	\$ 50,301			-\$ 8,439	\$ 41,862
Fuchs Memorial Award Fund	\$ 54,851		-\$ 3,333	-\$ 10,005	\$ 41,512
Funds Under Development					
Excellence in Teaching, Mentoring and Training Fund		\$ 2,700			\$ 2,700
International Friendship Fund		\$ 14,000			\$ 14,000



I am deeply honored to receive the 2023 Sheldon K. Friedlander Award. It recognizes my Ph.D. work that focuses on the application of aerosol science and technology in protecting public health. It is not merely accolades but affirmations and encouragement of my dedication to the interdisciplinary field of aerosol science and public health. I am excited and look forward to contributing meaningfully to the field.

Haoxuan Chen

2023 Friedlander Dissertation Award

Status of the Funds in 2023

AAAR Endowment Funds Financial Summary for 2023					
Name of Endowment Fund	Net Assets Beginning of Year 1/1/2023	Contributions + Matching Funds	Total Disbursed in 2023	Net Return (Gain/Loss + Interest - Fees)	Net Assets End of Year 12/31/2023
True Endowment Funds (Permanently Restricted Corpus, Remainder Temporarily Restricted)					
Friedlander Memorial Fund (\$50,000 Corpus)	\$ 116,558		-\$ 3,300*	\$ 20,732	\$ 133,990
Fissan-Pui-TSI Award Fund (\$65,000 Corpus)	\$ 119,491			\$ 21,433	\$ 140,924
Presidents Fund (\$51,300 Corpus)	\$ 56,518	\$ 500	-\$ 1,750	\$ 10,208	\$ 65,476
AS&T Outstanding Publication Award Fund (\$54,100 Corpus)	\$ 52,771	\$ 2,000*	-\$ 2,000	\$ 9,668	\$ 62,439
Susanne V. Hering Award Fund (\$73,773 Corpus)	\$ 64,020	\$ 300	-\$ 1,561	\$ 10,482	\$ 72,941
Quasi Endowment Funds (Board Designated)					
Friedlander Dissertation Award Fund	\$ 41,355		-\$ 1,561	\$ 7,397	\$ 47,191
Thomas T. Mercer Joint Prize Fund	\$ 39,427	\$ 9,000	-\$ 10,153	\$ 8,551	\$ 46,825
David Sinclair Award Fund	\$ 39,134		-\$ 1,561	\$ 7,032	\$ 44,605
Kenneth T. Whitby Award Fund	\$ 37,701		-\$ 1,561	\$ 6,725	\$ 42,865
Benjamin Y. H. Liu Award Fund	\$ 41,862		-\$ 1,561	\$ 7,963	\$ 48,264
Fuchs Memorial Award Fund	\$ 41,512			\$ 9,432	\$ 50,944
Funds Under Development					
Excellence in Teaching, Mentoring and Training Fund	\$ 2,700	\$ 4,250			\$ 6,950
International Friendship Fund	\$ 14,000	\$ 1,300			\$ 15,300
Lundgren-Marple Fund		\$ 27,550	-\$ 500		\$ 27,050

* Contribution or disbursement for 2022 and 2023.

Donor Acknowledgements

2022 and 2023

We would like to formally recognize these donors for their generous contributions to our new and existing Endowment Funds.

Roya Bahreini

Manjula Canagaratna

Christopher Cappa

Paul Chadik (in honor of Dale Lundgren)

Hung-Min Chein

Chih-Hsiang Chien

Neil Donahue

Andrea Ferro

Allen Goldstein

Susanne Hering

Daniel Hlaing (in honor of Dale Lundgren)

Chris Hogan

Myoseon Jang

Sonia Kreidenweis (in honor of John Seinfeld and Richard Flagan)

Dale Lundgren

Linsey Marr

Christine McCool

V. Faye McNeill (in honor of Richard Flagan)

Nga Lee (Sally) Ng

Sergey Nizkorodov (in memory of Dr. James N. Pitts Jr. (1921-2014))

Rachel O'Brien

Bernard Olson

David Pui

Shanna Ratnesar-Shumate

Peter Raynor

Gilmore Sem (in memory of Virginia Swedeen Sem)

James Smith (in honor of Peter McMurry)

R. Subramanian

Amy Sullivan

Xiaoliang Wang

Tony Wexler

Leah Williams

C Y Wu

Paul Ziemann

Me and My Dog

Shalinee Kavadiya, Yiming Xi, & Pratim Biswas
University of Miami

