

the  
Hertz  
FOUNDATION



2020  
Philanthropic Report

# Fellow Awards and Accomplishments

For more than 60 years, Hertz Fellows have been recognized as some of the most notable leaders in science, engineering, mathematics, and the US military.

1

RECIPIENT EACH:  
NATIONAL MEDAL  
OF SCIENCE  
NATIONAL MEDAL  
OF TECHNOLOGY

3

UNIVERSITY  
PRESIDENTS

30

FELLOWS  
AMERICAN  
ASSOCIATION  
FOR THE  
ADVANCEMENT  
OF SCIENCE

18

NIH  
DIRECTOR'S  
AWARDS

3

MACARTHUR  
FELLOWS

FELLOWS  
AMERICAN  
MATHEMATICAL  
SOCIETY

2  
NOBEL  
LAUREATES

18

MEMBERS  
AMERICAN ACADEMY  
OF ARTS & SCIENCES

9

2

BENJAMIN FRANKLIN  
AWARDS

13

PACKARD  
FELLOWSHIPS

12

FORBES 30  
UNDER 30

56

SLOAN RESEARCH  
FELLOWSHIPS

400

MORE THAN  
TENURED OR TENURE TRACK  
UNIVERSITY FACULTY

25  
CHURCHILL  
SCHOLARS

3

FELLOWS  
AMERICAN  
CHEMICAL  
SOCIETY

44

MEMBERS  
NATIONAL  
ACADEMIES OF SCIENCES,  
ENGINEERING, AND  
MEDICINE

57

FELLOWS  
AMERICAN  
PHYSICAL SOCIETY

14

MIT TECH REVIEW  
35 INNOVATORS UNDER 35

4

MILITARY  
GENERALS

8

BREAKTHROUGH  
PRIZE  
AWARDS

MORE THAN

200  
COMPANIES  
FOUNDED

8

FELLOWS NATIONAL  
ACADEMY OF INVENTORS

HOLDERS OF MORE THAN

3000  
PATENTS

FELLOWS ASSOCIATION OF  
COMPUTING MACHINERY

18

MORE THAN  
MILITARY  
OFFICERS

100

HUMBOLDT  
RESEARCH  
AWARDS

8

1

RECIPIENT EACH:  
FIELDS MEDAL  
TURING AWARD

# Letter from President and Chair

DEAR FELLOWS AND FRIENDS,

The Hertz Foundation was born of an uncertain time. Challenges of the day underscored the need for unfettered exploration and discovery in science and technology. The foundation was established to foster this freedom to innovate and protect our nation.

Today, we reap the benefits. Technological advances of the past decades—advances we often take for granted—demonstrate the value of our work in another time when scientific talent is critically important. Numerous Hertz Fellows have responded to the COVID-19 pandemic by pivoting in their research to address the country's most dire needs, even as research on other urgent issues—such as national security and climate change—continues.

Like the founders of our organization, we are resilient and optimistic. In 2020, we awarded 16 fellowships, the most in more than a decade. Despite economic fallout from the pandemic, donor confidence remained strong, with 332 donors contributing over \$4 million and new multiyear pledges totaling over \$1.5 million, exceeding last year's total. Over the past few years, donors have partnered with us to fund 58 new named and endowed fellowships. A more detailed review of our donors' investment in our mission is contained in this report.

We continue to look to the future. Today's young scientists face unprecedented pressures. Their career trajectories are much different than they would have been even a decade ago, and their needs for professional skills, mentoring, and career networking are increasing. Science itself is ever more collaborative, interdisciplinary, diverse, and entrepreneurial. And the ecosystem in which the foundation engages—higher education, the corporate sector, government, and mission-driven organizations—provides increasing opportunities for new kinds of partnerships and collaborations.

In the course of the strategic planning process we launched in March 2020, we are exploring what the changing scientific landscape means for the foundation's important work, and how we can have maximal impact going forward. We have gathered a great deal of feedback from the Hertz community. For example, in a survey conducted in fall 2020, the majority of respondents told us the Hertz Fellowship was an important part of their career success, and that being part of the Hertz community provides lifelong value. We look forward to sharing the results of our planning process in 2021.

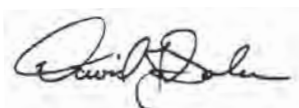
As we focus on shaping the foundation's future priorities, we continue to identify the kind of transformative scientific talent our country and world need now, and we seek to support our community members in ways that add tremendous value to their careers. Selecting and funding some of the nation's most promising young scientific minds, offering the freedom to innovate, and supporting the fellows in the course of their careers is a potent combination that drives tangible and demonstrable impact for us all.

But we cannot do this alone. Together, we can expand and accelerate our nation's pipeline of leading scientific talent, amplify our fellows' impact, and discover new opportunities for the future of science. We look forward to your continuing engagement and support.



TOP: ROBBEE BAKER KOSAK  
BOTTOM: DAVID GALAS

**“TOGETHER,  
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OUR NATION'S  
PIPELINE  
OF LEADING  
SCIENTIFIC  
TALENT, AMPLIFY  
OUR FELLOWS'  
IMPACT, AND  
DISCOVER NEW  
OPPORTUNITIES  
FOR THE FUTURE  
OF SCIENCE.”**



David Galas  
Chair, Hertz Board of Directors



Robbee Baker Kosak  
President

# Cheri Ackerman and Cameron Myhrvold

## Breaking barriers in virus detection

**WITH THE ONSET** of flu season amid a global pandemic, health care providers are confronted with an ongoing challenge: the lack of comprehensive, scalable testing for viruses.

Now, two Hertz Fellows—Cheri Ackerman, cofounder and CEO of Concerto Biosciences, and Cameron Myhrvold, assistant professor of molecular biology at Princeton University—have developed a large-scale, comprehensive diagnostic tool, called CARMEN, that could help doctors identify a virus after a patient's first visit to a clinic.

Most patients who visit the doctor for a viral infection are told to simply return home and rest, leaving the undetected pathogen to possibly spread. “The lack of comprehensive testing is a huge barrier to understanding how viruses travel through populations and for designing therapeutics,” Ackerman said.

Advances in diagnostics with CARMEN are changing that. “We’re moving toward a world where comprehensive, routine testing will actually be possible,” she said.

CARMEN (Combinatorial Arrayed Reactions for Multiplexed Evaluation of Nucleic acids) uses a plastic chip the size of a smartphone, with 177,000 microscopic wells. When combined with CRISPR-based detection technology, it can detect up to 170 human pathogens across a few patient samples, or test a thousand patient samples for one virus, including the SARS-CoV-2 virus that causes COVID-19.

Emulsified nanodroplets self-arrange into the microwells on the chip, forming pairs of droplets. One droplet contains the CRISPR detection mix; the other contains the PCR-amplified sample. An electrical pulse merges the tiny droplets, and the color-coded sample fluoresces if positive for the virus.

CARMEN comes at a pivotal moment for disease detection. Patients who have symptoms of COVID-19 but test negative are left to wonder what virus is responsible for their illness or whether the test was inaccurate.

The detection chemistry in CARMEN uses Cas13a, an RNA-targeting CRISPR enzyme that can detect and identify small quantities of viruses in a patient sample. Because Cas13 technology is so sensitive and specific in its viral detection capabilities, it significantly lowers the possibility for a false-positive or false-negative test result. It also is more cost-effective than previous targeted diagnostic tools, producing faster, more



CHERI ACKERMAN



CAMERON MYHRVOLD

comprehensive results at potentially less than one-tenth of the cost.

CARMEN evolved out of yearslong interdisciplinary work in the Blainey and Sabeti labs at the Broad Institute of the Massachusetts Institute of Technology and Harvard University, where Ackerman and Myhrvold collaborated as postdoctoral fellows, starting in 2018. Taking on the challenge of designing a better disease detection tool, Ackerman applied her interest in high-throughput biology and microfluidics to expand the chip's microwell and color-coding capabilities. Myhrvold was responsible for sequence design, amplification, and Cas13 detection technologies.

In February 2020, as they waited to publish CARMEN's results in *Nature*, Myhrvold and Ackerman adapted the chip's detection capabilities to include the SARS-CoV-2 virus as it spread across the globe. “The fact that the virus has had such an effect on people caused us to refocus our efforts around detecting COVID-19 and other respiratory viruses,” Myhrvold said.

The duo hopes that CARMEN will improve understanding of disease outbreaks and how viruses move through populations, as well as support other public health outcomes.

“The charge from the Hertz Foundation to be willing to give back to our country and our communities very much resonates with us,” Ackerman said. “Throughout the time we’ve worked on this technology, I’ve felt that sense of blessing, of being in the right place to use my mind and our resources to build something that could make life better.”



DAVID GALAS AND DIANE ISONAKA, LEFT  
RUTH AND HAROLD NEWMAN, RIGHT

## David Galas and Diane Isonaka Harold and Ruth Newman Focused on the future

**IN MANY WAYS**, David Galas and Harold Newman, two of the longest-serving members of the Hertz Foundation Board of Directors, couldn't be more different.

Galas, a Hertz Fellow and current board chair, is an expert in molecular biology and human genetics who grew up on military bases and settled in the Pacific Northwest. Newman, the son of a vaudeville performer, is an East Coast financier with a passion for investing in Broadway musicals.

And yet, over more than 20 years together in the Hertz boardroom, a common bond has emerged and endured: Galas and Newman are focused on the future—specifically, a future fueled by the Hertz Foundation and its fellows.

"In selecting and supporting Hertz Fellows, we're nurturing the future leaders in science and technology for the United States," Galas said. "It's inspiring to be around these young people and realize they are going to grow into the leaders of tomorrow."

Newman concurs. "I always look to the future," he said. "My basis for supporting the Hertz Foundation has been to match the challenge of change."


### Looking ahead to opportunity

Newman knows something about looking ahead. A visionary investor, he joined Goldman Sachs in the late 1950s, at a time when the Depression still weighed heavily on Wall Street. Where others saw risk, Newman saw opportunity. He left the investment firm after eight years to start a hedge fund, just the fifth one in the United States.

Galas, principal scientist for the Pacific Northwest Research Institute, also has been ahead of his time. Technology that he developed 20 years ago was the backbone of the COVID-19 rapid-response tests developed by Abbott Labs and used by the White House. His breakthrough research also led to the discovery of a gene that regulates bone mineral density and an antibody to inhibit it, which Amgen developed into a remedy for osteoporosis.

Galas and Newman's focus now is on making sure others have the opportunity to shape the future of science and technology. Together with their spouses, both men have been generous with their time and their money.

Continued next page →



Galas and his wife, Diane Isonaka, support two Hertz Fellowships. Isonaka also has volunteered her time and enthusiasm as a member of the Summer Workshop committee. Galas, who received a Hertz Fellowship in 1968, has served as an interviewer on and off since 1972. Though his PhD is in physics, it was his influence more than 20 years ago that encouraged the foundation to expand its support to include the life sciences. On the board of directors since 1999, he has been chair since 2008.

Newman joined the board in 1991 at the invitation of longtime board member Peter Strauss, one of his partners at investment firm Neuberger Berman. Newman and his wife, Ruth, support four fellowships and in 2011 established the Peter Strauss Award, which recognizes early-career fellows who have made significant achievements in an entrepreneurial endeavor.

In 2012, they established an entrepreneurial initiative in Harold's name, which provides investments up to \$25,000 and professional support to Hertz Fellows who propose the most innovative entrepreneurial projects, with particular emphasis on collaboration among fellows. In 2020, the Newmans changed the name to the Harold Newman and David Galas Entrepreneurial Initiative, in honor of Galas's many contributions to the Hertz Foundation.

"I think he's done an outstanding job," Newman said. "He's a people person, and he's also dedicated to research. He has set an excellent pattern of interest and of being a human being."

## Funding inspiration

Isonaka said the Newmans have been a source of inspiration.

"I used to tease Harold and Ruth whenever I'd see them, saying, you guys are my idols," she said. "Their energy level and vitality has just been astonishing—they've accomplished so much in their lives. Watching people like them give away their personal money, and why they do it, is very inspiring."

"We know what the foundation is capable of, what the people involved are capable of doing," Galas added. "We could be doing more and more and more—we are only lacking in financial resources."

Galas and Newman both would like to see an increase in the number of fellowships awarded each year.

"I'd like for us to be able to fund all the applicants who are creative and driven enough to be good fellows. That's probably on the order of 30 or so," Galas said. "That would build the community much more rapidly and allow many more interactions among Hertz Fellows. The more interactions that happen, the more creative and terrific advances will happen. We haven't gotten there yet, but we've been inching up."

In 2020, 16 fellowships were awarded, the largest number in more than a decade.

## Lasting impact

Hertz Fellows are the reason a nonscientist like Harold Newman has remained engaged for 30 years.

"What has kept me at the Hertz Foundation are the people—because they are brilliant; because I've listened to fellows tell me about things that I never knew existed before," he said.

He has been especially enthralled with the opportunity to support fellows like Po-Shen Loh, who in 2015 coached the US International Math Olympiad team to its first win in 21 years.

He's also proud to support scientists like Chris Loose, who won the inaugural Peter Strauss Entrepreneurial Award. The award provided Loose with \$5,000, which he parlayed into cofounding a successful biosciences company. Now Loose, along with Hertz Fellow Christian Wentz, have funded a fellowship in honor of Newman and his legacy of nurturing and investing in young fellows' fledgling companies.

Although the foundation has been primarily supported by Hertz Fellows, nonscientists like Newman bring a particular kind of value, Galas said.

"There are several nonscientists on the board of directors, and that's important. It brings other points of view to issues before the board, and it enriches the foundation's capability to develop the ways in which we can continue to improve our impact on the mission," he said.

The impact of Newman and Galas on the Hertz Foundation will be felt for decades to come. Thanks to their leadership and generosity, the foundation has solidified its financial footing, expanded the diversity of its fellows and their scientific fields, and energized and coalesced the Hertz community.

Newman's fervent wish is that the foundation will continue to change and grow.

"I'm hoping that the foundation evolves as the sciences are evolving," he said. "I can't tell you what's going to happen. All I know is there's going to be change, and you have to be alert for it. You can't turn your back on it. Your learning experience is from the past, but your future is what you see, what you feel, what you come to believe and hope for, and that changes all the time."

THE KCHIP CONTAINS 43,000  
MICRO-SIZED WELLS, EACH ACTING  
AS A TINY TEST TUBE.

## Newman and Galas Entrepreneurial Initiative Award

### Harnessing the microbiome for better health

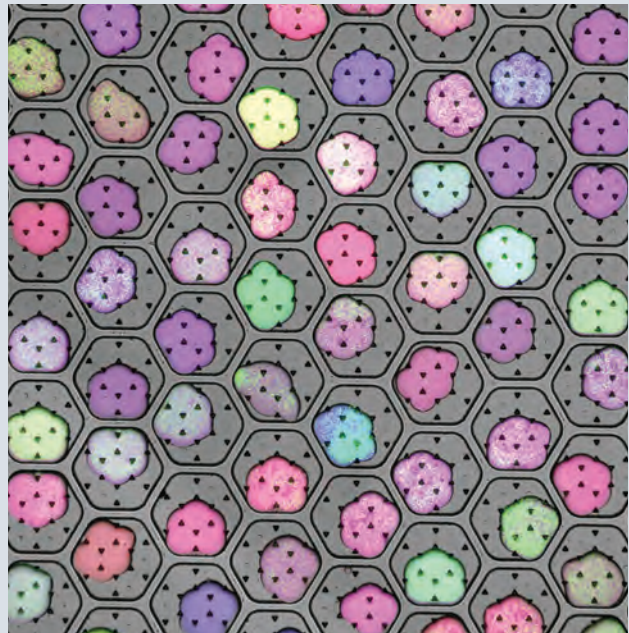
**THE DISCOVERY OF** the microbiome and its importance to human health has unleashed a frenzy of scientific activity, yet we still don't have a reliable way to control one's microbiome to improve health. Cheri Ackerman, CEO and cofounder of Concerto Biosciences, is planning to change that.

"We are coming to understand more and more just how powerful these microbes are in shaping our health and in shaping our immune systems," Ackerman said. "And the question is, well, why don't we have those products yet?"

To support her work in this area, Ackerman has received the Hertz Foundation's Harold Newman and David Galas Entrepreneurial Initiative Award. Ackerman plans to use the \$25,000 grant to help her company find solutions for human health and agriculture using unique ensembles of microbes.

### ACKERMAN IS DEVELOPING THERAPEUTIC CREAMS THAT ALTER THE SKIN'S MICROBIAL ECOLOGY TO TREAT COMMON DISORDERS, SUCH AS ECZEMA AND RASHES.

The annual prize is awarded to Hertz Fellows who propose the most innovative entrepreneurial projects, with particular emphasis on collaboration among fellows. Awardees also receive mentoring and feedback from entrepreneurs within the Hertz Fellows community.



The underpinning technology of Concerto Biosciences is the kChip: a device made from silicone polymer containing 43,000 micro-sized wells, each acting as a tiny test tube. The kChip serves as a platform for screening for useful ensembles of microbes 100 times faster than before.

Ackerman's goal is to harness combinations of microbes that work in harmony to solve ordinary health problems. Looking to the skin microbiome, for example, she is developing therapeutic creams that alter the skin's microbial ecology to treat common disorders, such as eczema and rashes, and even to heal wounds.

Ackerman began her research at the Broad Institute of the Massachusetts Institute of Technology and Harvard, where she collaborated with Hertz Fellow Cameron Myhrvold to develop the kChip into a high-throughput diagnostic tool.

Ackerman credits her time as a Hertz Fellow as critical in starting her down the path of entrepreneurship.

"I didn't know what entrepreneurship was until I started going to Hertz workshops and meeting people who had taken the science that they were working on during their PhDs and postdocs and building companies," she said. "I realized that becoming an entrepreneur is a tangible and concrete way of taking new knowledge and having it directly impact people's lives."

# Carol Burns

## The opportunity to engage

**EVERY YEAR**, while much of America looks forward to Halloween traditions, Hertz Fellow Carol Burns anticipates the end of October for another reason: the annual screening of Hertz Fellowship applicants. For the past 10 years, Burns has spent Halloween weekend immersed in about 70 folios from a pool of more than 800 applicants, a volunteer task she regards as a special sort of treat.

As one of 15 screeners, her job is to help identify the 100 or so young scientists who will be invited to the first round of interviewing. The activity is more of a treasure hunt than a process of elimination.

“You’re not looking for the thing that knocks a candidate out of the running. You’re looking for something that makes a candidate special—that spark of creativity and intellect that comes through in their essays, letters of recommendation, or role in a research project,” she said.

The opportunity to engage with Hertz Fellows has prompted Burns to volunteer with the foundation in multiple ways over the past decade.

“I just love talking to bright young scientists and engineers. It’s so uplifting to listen to these people who are going to solve some big problems and save the world. They are not fazed by the magnitude of challenges. They’re just driven by science,” she said.

In addition to serving as a screener, Burns is a member of both the board of directors and the Fellowship and Programs Council and was named council chair in 2020. She has hosted events in Los Alamos, where she is executive officer to the deputy director for science, technology, and engineering at Los Alamos National Laboratory; led the Hertz Thesis Prize committee for the past five years; and served as a first-round interviewer for the fellowship.

“I don’t sweat anything as much as I sweat interviewing Hertz Fellow candidates. I study to interview,” she said. “It’s a lot of work, but the fellows are worth it. It’s like a smorgasbord of cutting-edge work being explained by these terribly bright, excited individuals. How could you not love that?”

Her goal in every role is to keep the foundation moving forward, evolving and innovating to make what is good even better. As head of the Thesis Prize committee, Burns restructured the process to incorporate subject-matter reviewers rather than have only selection



committee members read each thesis, when they may or may not have expertise in any given field. The change has created a more robust and fair review process and provides a low-commitment, high-impact volunteer opportunity.

“Being a thesis reviewer is a really fun way to stick your toe in the water of volunteering for the foundation,” Burns said. “You get to review a thesis in an area that is relevant to you, by a Hertz Fellow you may have not yet met, who is doing some really exciting work.”

As chair of the Fellowship and Programs Council, Burns is hoping to engender fresh perspectives by rotating leadership of subcommittees. In 2021, she and President Robbee Kosak will create an ad hoc task force to address issues of diversity and engagement in the fellows population, with a focus on the range of schools and disciplines represented, gender and ethnic diversity, and support of fellows as leaders in an evermore diverse scientific environment.

The power of the Hertz Foundation is in its community, Burns said. “The way we’re going to solve big problems now and into the future is by smart people working together across multiple disciplines.”

The power of the community is also invigorating and gratifying, exposing fellows to a breadth of thinking, she said. “I encourage fellows to become involved, whether it’s participating in an Innovation Hour, agreeing to review a thesis, or mentoring a young fellow. By volunteering, fellows can find out how exciting it is to have access to a community of thinking and get an inkling of how powerful it can be.”

# Fundraising Overview

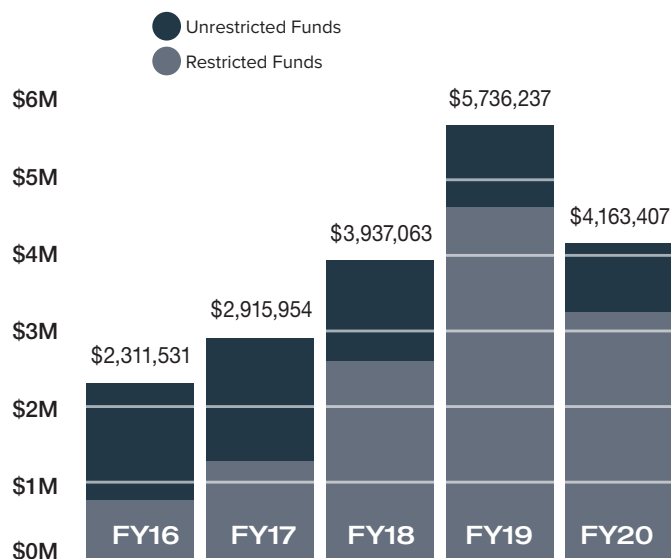
The twin challenges of the COVID-19 pandemic and the resulting economic fallout impacted the final months of the foundation's fiscal year, though certainly not with nearly the same force as they hit other public charities. In fiscal year 2020, new gifts and pledge payments totaled \$4.16 million from 332 fellows, organizations, and other friends of the foundation, 23 of whom were new donors this year. Donor confidence remained high, as supporters pledged another \$1.56 million in commitments to be fulfilled in the coming years.

One special highlight of the 2020 fiscal year was continued progress on completing the "60 Fellowships Initiative," which has supported dozens of fellowships and inspired new giving opportunities since its launch in 2015. As of December 2020, only two more fellowships are needed to reach that target. For information on how to establish a named or endowed fellowship, please see page 10.

This continuing growth in philanthropic support is due to you, our visionary donors, who share our commitment to advancing breakthroughs and discoveries in science and technology. Your support helps us fund our in-school fellows; our mentoring, networking, science briefings, and other Hertz community programs; and our capacity to strengthen the foundation. With your continued and expanded support, we share in the goal of funding all of the worthy fellowship candidates we identify each year.

## TOTAL CONTRIBUTIONS

Cash, including new gifts and pledge payments as of June 30, 2020

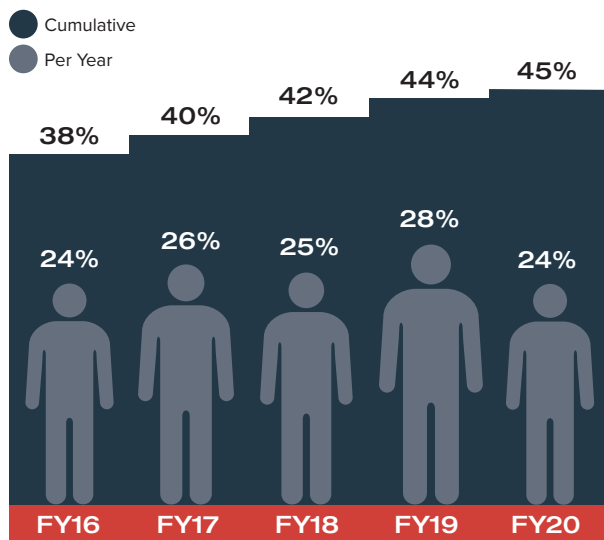


# Donor Participation

Nearly half—45 percent—of all Hertz Fellows have made at least one gift to the foundation, and many have given every year. In fiscal year 2020, gifts were received from 332 fellows and friends. Once again, the annual percentage of fellows who supported the foundation (24 percent) topped graduate alumni giving to every major US research university except for one Ivy League university. Especially in this challenging year, we are incredibly grateful for the loyal support from our fellows, friends, and partnership organizations.

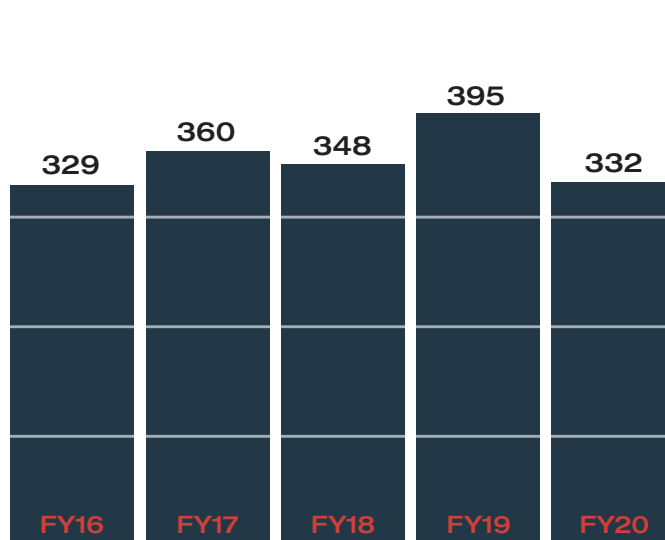
## FELLOW PARTICIPATION

% of Total Fellows Who Donate



## NUMBER OF CONTRIBUTORS

Hertz Fellows & Friends Per Year



Totals include Gifts-in-Kind as of June 30, 2020



IN 2020,  
THE HERTZ  
FOUNDATION  
AWARDED 16  
FELLOWSHIPS—  
THE MOST  
IN OVER A  
DECADE.

## Investment Strategy

THE HERTZ FOUNDATION has now been a public charity for over 10 years and, thanks to our generous donors, we continue to execute on the purposes of John and Fannie Hertz, who established the foundation to strengthen the United States of America and the world. While our endowment is not the strength that in old days moved earth and heaven (my apologies to the poet), for three years now we have not even drawn down 5 percent on it—meeting the standard for prudently run organizations that wish to operate in perpetuity.

Our fellowship selection team, led by Philip Welkhoff, assures me that they can identify roughly two dozen individuals each year who meet a standard equal to or greater than that observed these last many decades. While in 2019 we awarded 11 fellowships, we were able to award 16 in 2020—the largest number in over a decade. The commitment of individual members of the board—upon seeing the inspiring talent of our applicants—was the reason for the expansion. When individual donors see the quality and energy of the applicants, they are moved—and appropriately so. (I am sure glad I don't have to compete with these people today!)

Unusual among graduate fellowships, the Hertz Foundation provides fellows with a full five years of funding. Those of us who have PhDs (such as yours truly) can tell you that a three-year fellowship—such as the NSF fellowship—does not provide the security that a student needs to properly enjoy the freedom to innovate. I feel some measure of shame that our stipend is not higher, but I suppose that is why I accepted the role as your treasurer—in hopes of changing that (and, of course, building up to two dozen fellows each year).

As of June 30, 2020, the foundation's assets totaled \$24.9 million, composed of \$17.7 million in investments, \$2.3 million in cash and equivalents, and \$4.8 million in pledges receivable. This represents the highest point in assets since 2008. Over the last four years, our net assets have grown at an average rate of 4 percent—which is good, but probably not where we want to be in a (relatively) positive investment environment. Our investments are roughly deployed at 70 percent equity and 30 percent fixed income, and our investment results are in line with that strategy—which seeks to produce growth and income while maintaining a cushion for the security of our in-school fellows and the foundation.

While we are very dependent on our year-to-year donations, our donors have been very supportive. In 2016 the board set a fundraising goal of \$17.4 million by 2021, and President Robbee Kosak and her team are 35 percent ahead of our projected pace. This is good news indeed. We raised \$4.2 million in this year, despite the COVID-19 pandemic, and \$5.7 million in the previous year.

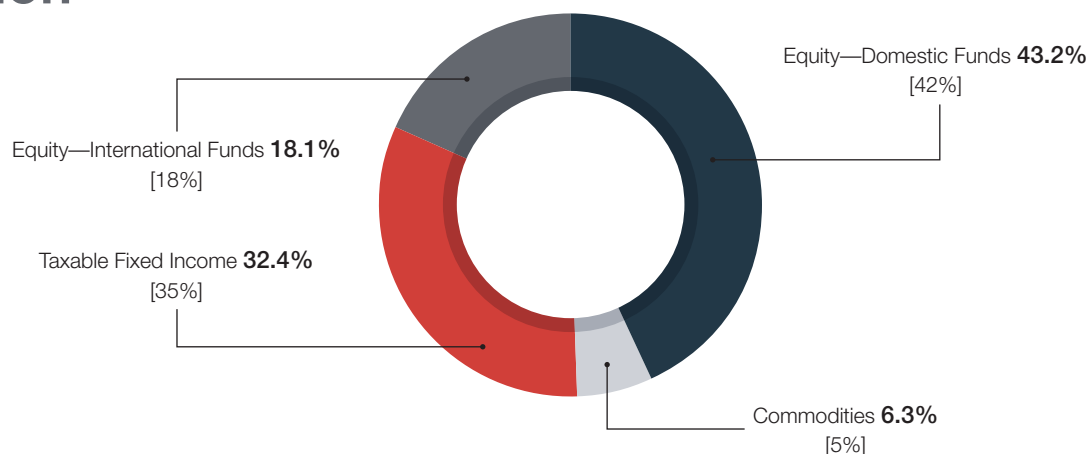
The major problem I see for our foundation is that it is under-leveraged. We have all the infrastructure in place to award 25 fellowships a year and maintain 125 fellows in the field. And did I mention we also maintain and support a vibrant community of Hertz Fellows? While our expenses for fellowships scale with the number of fellows, our infrastructure does not. As a result, our endowment is currently too small for the way we ought to be conducting our mission. So, I shall work with all of you in order to achieve our shared goals—and grow that endowment.

Paul Young, Treasurer

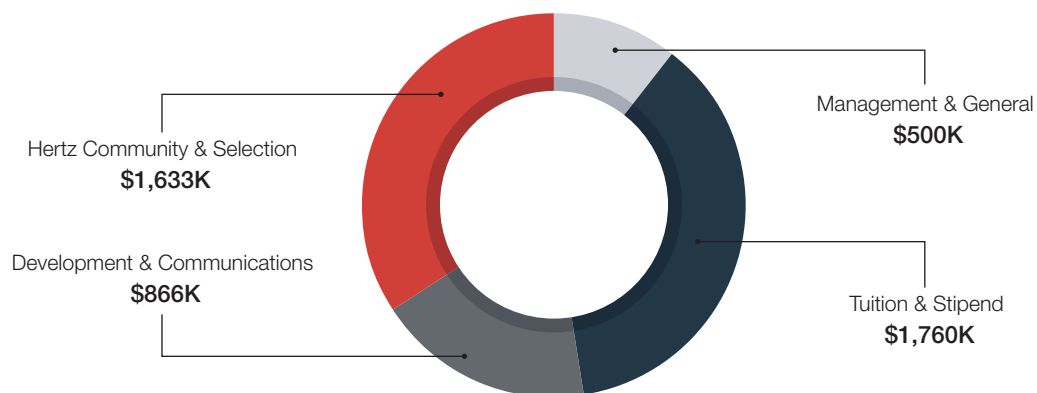
# Asset Allocation

As of June 30, 2020

[ ] Indicates Target Allocation

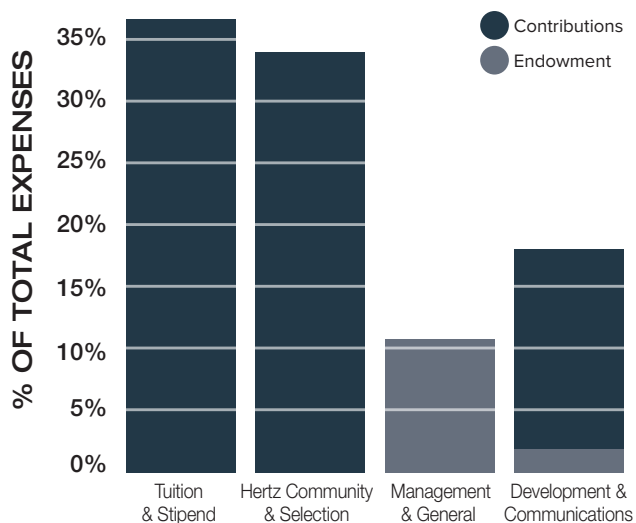


# Expenses



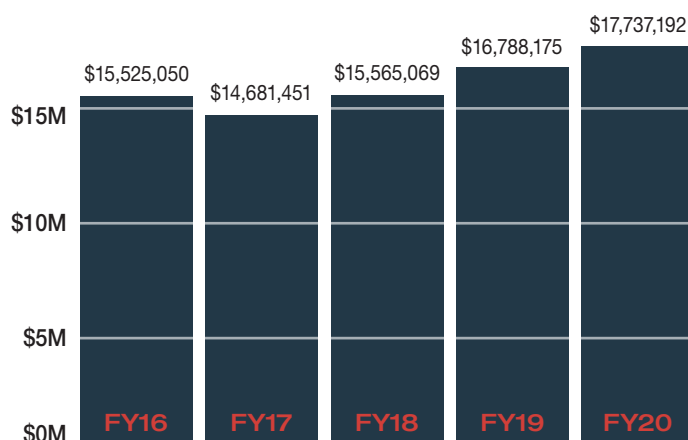
# Funding Sources

In fiscal year 2020, both endowment assets and contributions were used for expenses.



# Investment Portfolio Value

As of June 30, 2020: \$17,737,192





## Investing in Hertz

Hertz Fellows have had an outsized impact on company creation, science, technology, and national security since 1963. Fellows are now 1,200+ strong, and a significant number are recognized to be among the most notable leaders in their fields. Prestigious third-party recognition and productivity indicate that the Hertz Foundation has an unusually strong track record in selecting promising scientific and technical leadership from the applicant pool and making investments in them at seminal points in their education and research endeavors.

Now is a critical time in our nation's history for the Hertz Foundation to step up and not only protect but expand its impact. Funding from federal sources, traditionally the largest source of funding for university research and graduate support, is declining and not keeping pace with similar investments being made by other countries. If the United States is going to sustain and continue to build its global leadership position in science and technology, funding must come from the private sector.

Although we can't all assist our brilliant in-school Hertz Fellows with their research directly, we can still participate in their advances, discoveries, and successes by serving as their support team. Join us in supporting our fellows by making a contribution to the foundation. There are three primary ways you can partner with us.

### **Make a Gift to the Annual Fund or Endowment**

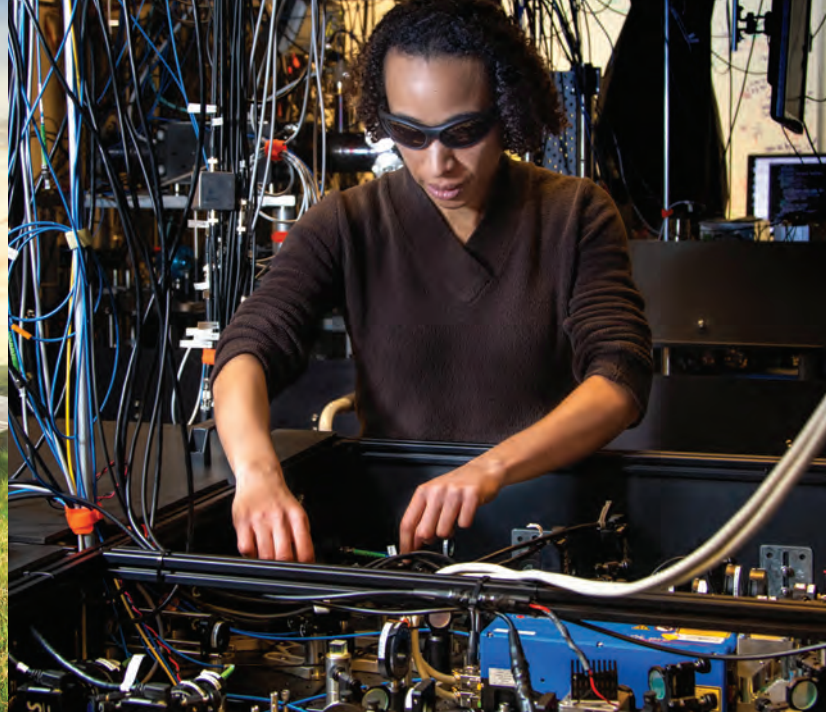
All gifts of any size go directly to support Hertz Fellows through funding their tuition, stipend, and activities in the Hertz community. Restricted gifts can be made to support the Fellowship Fund, the Hertz community, general operations of the foundation, or the Hertz endowment.

### **Establish a Fellowship**

A gift of \$1 million or more can establish an endowed fellowship in perpetuity, or a one-time gift of \$250,000 (which can be paid as a five-year pledge of \$50,000 per year and established among multiple donors) can establish a named fellowship. Either fellowship can be named in honor of the donor or another individual of choice. Many Hertz Fellows have partnered with other fellows, friends, or organizations to combine their gifts to establish named and endowed fellowships. Holders of named and endowed fellowships will include these distinctions in all publications and citations during their doctoral studies. Each recipient will also provide the fellowship supporter with annual reports regarding their ongoing research progress.

### **Include Hertz in Your Estate**

There are many creative ways to support the Hertz Foundation that cost donors nothing right now. Whether you are interested in a simple gift through your retirement or life insurance plan, a traditional bequest through your will or trust, or perhaps a gift that pays you back, there are many ways to support our fellows. All donors who give through estate plans enjoy the benefits of membership in The Order of Magnitude, our planned giving society.



## Endowed Fellowships

Established through November 2020

**Professor Yaser S. Abu-Mostafa Fellowship**

*Established by Ray Sidney and John Wakerly*

**Big George Ventures Fellowship**

*Established by Ray Sidney*

**Guzik Foundation Fellowship**

*Established by John Wakerly and The Guzik Foundation*

**Hertz Fellowship**

*Endowed anonymously*

**John and Jane Mather Fellowship**

*Established by Ray Sidney and John and Jane Mather*

**Professor Silvio Micali Fellowship**

*Established by Ray Sidney*

**Peter Strauss Fellowship**

*Established by Hertz Board of Directors*

**Professor Daniel Stroock Fellowship**

*Established by Ray Sidney and John Wakerly*

**Lee A. Swanger Fellowship in Engineering and Applied Science**

*Established by Lee A. Swanger*

**Wepsic Fellowship**

*Established anonymously*

## Named Fellowships

Established through November 2020

**Barbara Ann Canavan Fellowship**

*Established by Greg Canavan*

**Chan-Velasquez Fellowship**

*Established by Sherman Chan and Irma Velasquez*

**Cohan-Jacobs & Stein Families Fellowship**

*Established by David Cohan, Sharon Jacobs, and Seth and Carol Stein*

**Elizabeth and Stephen Fantone Fellowship**

*Established by Stephen and Betsy Fantone*

**Professor Mauro Ferrari Fellowship**

*Established anonymously*

**Forbes Family Fellowship**

*Established by Bert E. and Candace M. Forbes*

**Frank-Nashat Fellowship**

*Established by Ed Frank and Amir Nashat*

**Galas Isonaka Family Fellowships (2)**

*Established by David Galas and Diane Isonaka*

**Google Fellowship**

*Established by Google*

**Hertz Corporation Fellowship**

*Established by The Hertz Corporation*

**Hertz-Draper Fellowship**

*Established by Draper*

**Hertz Fellowships (8)**

*Established anonymously*

**Hertz Fellowship in Global Health and Development (up to 20)**

*Established by the Bill & Melinda Gates Foundation*

**Hans Mark Fellowship**

*Established by Hertz Board of Directors*

**Susan and Richard Miles Fellowship**

*Established by Susan and Richard Miles*

**The Myhrvold and Havranek Family Charitable Fund Fellowships (4)**

*Established by Nathan Myhrvold and Rosemarie Havranek*

**Harold and Ruth Newman Family Fellowships (4)**

*Established by Harold and Ruth Newman*

**Harold Newman Innovation Fellowship**

*Established by Chris Loose, Christian Wentz, and Lee Swanger*

**John Soehrens Fellowship**

*Established anonymously*

**Alfred Spector and Rhonda Kost Family Fellowship**

*Established by Alfred Spector and Rhonda Kost*

**Wilson Talley Fellowship**

*Established by Hertz Board of Directors*

**Tom Weaver Fellowship**

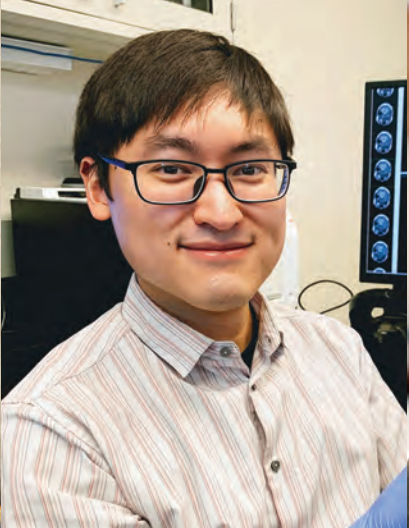
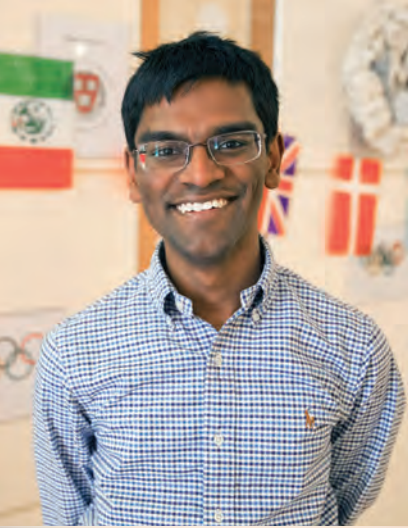
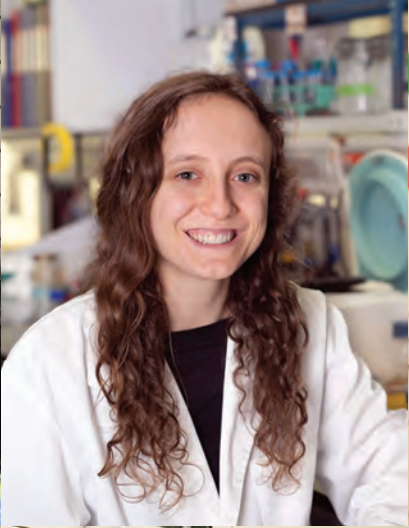
*Established by Ray Sidney*

**Lowell Wood Fellowship**

*Established by Paul M. Young*

**Paul Young Fellowship**

*Established by Paul M. Young*



# Hertz Leadership

In October 2014, the Hertz Foundation completed the transition from a single board into two leadership groups: the Board of Directors and the Fellowship and Programs Council.

Our board oversees foundation governance and compliance, fundraising, financial management, and all other fiduciary responsibilities. Our council focuses on the annual selection of fellows, support and mentoring of in-school fellows, development of the Hertz community, and selection of thesis and other award winners.

We are deeply grateful for the service of these distinguished men and women. You can read their biographies on the leadership section of our website, [hertzfoundation.org](http://hertzfoundation.org).

## BOARD OF DIRECTORS

<b>David Galas •</b> <b>Board Chair</b> Pacific Northwest Research Institute	<b>Rosemarie B. Havranek</b> Philanthropist
<b>M. Michael Ansour •</b> March Partners, LLC	<b>Richard Miles •</b> Texas A & M University
<b>Kimberly Budil •</b> Principal Associate Director for Weapons and Complex Integration Lawrence Livermore National Laboratory	<b>Amir Nashat •</b> Polaris Partners
<b>Carol Burns •</b> Los Alamos National Laboratory	<b>Carla Newman</b> Three Thought, LLC
<b>Elise Cawley •</b> Mathematician	<b>Harold Newman</b> HJ Newman Capital, LLC
<b>Roger Falcone</b> Lawrence Berkeley National Laboratory University of California, Berkeley	<b>C. Cooper Rinzler •</b> Breakthrough Energy Ventures
<b>Stephen Fantone •</b> Optikos Corporation	<b>Monika Schleier-Smith •</b> Assistant Professor Stanford University
<b>Samuel H. Fuller •</b> CTO Emeritus, Analog Devices, Inc.	<b>Ray Sidney •</b> Ritz-Carlton Residences, Dove Mountain
<b>Daniel Goodman •</b> ASM-NEXX	<b>Lee A. Swanger •</b> Exponent
	<b>Philip Welkhoff •</b> Bill & Melinda Gates Foundation
	<b>Paul Young •</b> Goldman, Sachs & Co. (retired)

## FELLOWSHIP AND PROGRAMS COUNCIL

<b>Carol Burns •</b> <b>Council Chair</b> Los Alamos National Laboratory	Modern Electron
<b>Anna Bershteyn •</b> NYU Grossman School of Medicine	<b>Thomas McCann •</b> McTech, LLC
<b>Megan Blewitt •</b> Venrock	<b>Neil McCasland •</b> Applied Technology Associates
<b>Gregory Canavan •</b> Los Alamos National Laboratory	<b>Richard Miles •</b> Texas A&M University
<b>Lydia Finney •</b> Argonne National Laboratory	<b>Amir Nashat •</b> Polaris Partners
<b>David Galas •</b> Pacific Northwest Research Institute	<b>Harold Newman</b> HJ Newman Capital, LLC
<b>Cameron Geddes •</b> Lawrence Berkeley National Laboratory	<b>Paul Nielsen •</b> Carnegie Mellon University
<b>Daniel Goodman •</b> ASM-NEXX	<b>Jessica Seeliger •</b> Stony Brook University
<b>David Henry •</b> Sandia National Laboratories	<b>Neal Tanner •</b> tntAnalysis
<b>Lily Kim •</b> OS Fund	<b>Philip Welkhoff •</b> Senior Fellowship Interviewer Bill & Melinda Gates Foundation
<b>Derek Lidow •</b> Princeton University	<b>Shannon Yee •</b> Georgia Institute of Technology
<b>Max Mankin •</b>	

The background is a dark, deep blue or black. It is filled with a complex network of thin, branching, red lines that radiate from a central point, resembling a neural network or a microscopic view of a biological structure. Scattered throughout the image are numerous out-of-focus circles of light in various colors, including white, yellow, orange, red, blue, and purple. These circles vary in size and brightness, creating a bokeh effect. The overall composition is dynamic and visually rich, suggesting themes of science, technology, and growth.

“IN SELECTING AND SUPPORTING HERTZ FELLOWS,  
WE’RE NURTURING THE FUTURE LEADERS IN SCIENCE  
AND TECHNOLOGY FOR THE UNITED STATES.”

— DAVID GALAS,  
CHAIR, HERTZ BOARD OF DIRECTORS



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