Tradition and Vision: Giving to Research at Penn State
We Are... Going Digital!

Raise will be a mobile app designed to connect you with Penn State philanthropy news, stories, and print publications. In its beta version, which will be available in the Apple App Store and Google Play, you’ll have access to an exclusive version of We Are, with expanded, interactive content. The app is designed to be best viewed on an iPad or other tablet device. If you would like to be notified when Raise goes live, please send an email to DevComm@ddar.psu.edu.

And Raise Penn State is aiming even higher. The app will evolve to enhance your digital experience, including push-notification updates of new, interesting content; a quick connection to giveto.psu.edu, our home on the web; and an easy, revamped way to give securely online right from the app. Raise will give you a single place to go for all things philanthropy at Penn State. We hope you’ll join us on this digital journey!

You scroll through Facebook on your phone, devour bestsellers on your Kindle, and get breaking news on your iPad. And soon you’ll be able to browse We Are on your favorite devices! We’re turning the pages of this print magazine and other inspiring content into an immersive digital experience: Raise Penn State.
In the years since I arrived at the University as an eighteen-year-old from Erie, “Penn State pride” has meant many different things to me. At first, I was just proud to have made it to the best-known school in my home state, and then I was proud to have made it through. I was proud to cheer on our teams, and I was proud to be a part of the Penn State family that stretched even out to my new life in California after graduation. During tough times, I’ve been proud of that family’s resilience, and during good times, I’ve been proud of that family’s success.

Today, my Penn State pride is defined by the difference that our students, graduates, and faculty are making in the world. In this issue of We Are, we are celebrating the University’s commitment to serving the public through groundbreaking research in countless fields—and we are celebrating the donors who make that research possible. Here you’ll find numbers that communicate the scale of Penn State’s commitment to discovery, but you’ll also find stories about how our faculty and students are changing the future we’ll all share, with help from alumni and friends who find their Penn State pride in making a difference, too.

Speaking of the future: Digital communications have the potential to keep the Penn State family even more closely connected across the miles and the generations, and we will be transitioning We Are to an electronic format available through a new app called Raise Penn State, designed for tablets and other mobile devices. Available for download later this fall, the app will include interactive features and new content, like video footage of our “Face of Philanthropy,” that we can’t offer in the print edition of We Are. The Raise Penn State app will bring the impact of philanthropy to life—and to your life. You will be able to download Raise Penn State to enjoy wherever you are. Learn more about the app on the opposite page, and email DevComm@ddar.psu.edu to be notified when it becomes available through the Apple Store or Google Play. Thank you for joining us in an exciting future, for We Are and for Penn State.

Martha Barnhart Jordan
Class of 1976, Smeal College of Business

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On the cover: Painted on the walls of Old Main in the 1940s by Henry Varnum Poor, Penn State’s Land-Grant Frescoes celebrate the University’s origins and mission to serve the public. In this image, Penn State students pursue research in a campus laboratory. (Photo by Mark Golaszewski)
Fast-Forward to the Future

Since Penn State’s first laboratory was established in 1859 by President Evan Pugh, research has been a part of the University’s mission. In the 21st century, though, that commitment to discovery has taken on a greater urgency. Dr. Neil Sharkey, Penn State’s vice president for research, says, “Across higher education, there is a growing understanding that institutions like Penn State, with their tremendous concentration of talent and creativity, must lead the way in solving urgent global problems. We must also create the next generation of problem-solvers. Our students should graduate with both the set of skills and the sense of purpose to make a difference in their fields and in the larger world.”

Penn State’s researchers, in disciplines ranging from landscape architecture to biotechnology, are among the country’s most successful in securing support from government, industry, and other sources. In fact, research expenditures are over $800 million a year, putting the University among the top twenty institutions nationwide according to the National Science Foundation. But cuts in federal budgets and foundation resources, as well as costs associated with the most advanced research, mean that the future of discovery at Penn State will depend upon private gifts. Sharkey says, “Through the years, we’ve seen how philanthropy in the form of research funds, faculty endowments, facilities and equipment, and student support can advance our progress even as support from other sources declines. That will be even truer in the future, and donors can be partners with our faculty and students in leading the way forward.”

Alumni, friends, and corporate partners are already rising to the challenge, as seen in these examples of recent and ongoing support for research at Penn State.

More than five million Americans are currently living with Alzheimer’s disease. Millions more suffer from the effects of traumatic injuries, strokes, and other events that, like Alzheimer’s, damage the human brain. Research by Dr. Gong Chen, Penn State professor of biology and the Verne M. Willaman Chair of Life Sciences in the Eberly College of Science, offers the promise of repairing such damage by regenerating neurons inside the brain with internal glial cells. And that promise may be fulfilled faster thanks to a $5 million brain repair research fund created by Charles H. “Skip” Smith ’48, the alumnus and philanthropist whose past support has included a landmark gift to launch The Arboretum at Penn State.
Traffic on the nation’s highways may move more efficiently in the future, with little infrastructure expansion and with lower fuel usage, through a research partnership between Volvo and Penn State. Dr. Sean Brennan, professor of mechanical engineering, is leading a project on “connected vehicles” that will be able to communicate with each other; for example, as a connected car slows, the one behind is automatically alerted to change its speed. Brennan and the students in his intelligent vehicles and systems group, shown above with connected trucks donated by Volvo, are developing driver simulation software to aid in testing. The project is among many joint efforts with Volvo, which has been named Penn State’s 2016 Corporate Partner of the Year.

Few qualities matter more to the human experience than empathy and kindness, but such aspects of personal development have not traditionally been a focus for researchers. That’s changing at Penn State thanks to the vision of Edna Bennett Pierce ’53, who has created both a professorship and a graduate fellowship for the study of caring and compassion. Based in the College of Health and Human Development, the positions will be complemented by a lectureship on compassion established by Mark Greenberg, who holds an endowed chair in prevention research also created by Pierce, and his wife and fellow researcher, Christa Turksma. The funds will all help to focus attention on how caring and compassion can help to improve mind-body health for children, adults, and families.

Penn State’s greatest contribution to future research? Future researchers. For more than two decades, Penn State Erie, The Behrend College, has been a leader in creating research opportunities for undergraduates, giving them hands-on experience and encouraging them to be problem-solvers and innovators. This spring, more than 200 students presented their work at the Twenty-Fifth Annual Penn State Behrend-Sigma Xi Undergraduate Research and Creative Accomplishment Conference. Each year, some of the most promising student projects receive awards from funds originally established by Mary G. Chisholm and Jane Herbert that continue to grow through gifts from donors. Mohammed Al Shibar ’16, pictured right, received support from the Herbert fund, and he is now working at the Cleveland Clinic as he prepares for medical school. Also pictured: fellow Behrend student researcher Jackie Gowen ’16, starting her doctorate in chemistry at North Carolina State University this fall.
How do you double, triple, or even quadruple the size of your Penn State gift at no additional cost to you or your family? Michael DeMarco, a 1982 graduate of the College of the Liberal Arts, knows the answer. In 2012, the global strategic alignment manager at ExxonMobil and his wife, Joanne, leveraged Exxon’s 3:1 match to significantly extend the impact of their support. The couple’s gift, bolstered by the match, created the Michael and Joanne DeMarco Director’s Fund in the McCourtney Institute for Democracy. “Joanne and I had great experiences at Penn State, and it’s wonderful to be in a position to give back,” Michael says. “Exxon’s match means that our gift will pack an even bigger punch.”

At Penn State, these matches count towards your personal giving totals, accelerating the rate at which you qualify for the University’s many recognition societies. And at some companies, like Exxon and GE, you can continue to leverage gift matching programs even into retirement. If you wish to take advantage of an employer match of your own, here are the steps to follow:

1. First, find out if your company has a matching gift program at matching.psu.edu. Each company has its own guidelines for employees, spouses, retirees, and widows or widowers. Most corporate procedures are simple.

2. Access your company’s online gift matching portal or request a gift matching form from your company’s human resources department.

3. Complete the gift matching form and send it to Penn State along with your personal gift. Hard copy forms should be mailed to:

   The Pennsylvania State University
   One Old Main
   University Park, PA 16802

4. You will receive notification from Penn State when your completed form and personal gift have arrived at the University, as well as when your company has made its matching gift.

With an employer match, your gift to Penn State can pack a bigger punch, too. To learn more about employer matching programs, please visit matching.psu.edu.
Xavier Candela came to Penn State five years ago with plans to become a doctor. With help from the John C. Eby Alumni Memorial Scholarship, the Eberly College of Science Cooperative Education Student Enhancement Fund, and funds for international study and research provided through the Schreyer Honors College, Xavier graduated this May one big step closer to achieving his dream. Below, he talks about his research, the future of medicine, and his unlikely first job.

What sparked your interest in science? I can still remember my first fetal pig dissection in high school. I liked knowing concrete things, not having ambiguity about how things work.

What does your research focus on? Cardiovascular disease, and more specifically, a blood protein—called von Willebrand factor—that gets damaged after left ventricular assistance devices are implanted in patients suffering from heart failure. Damage to this protein affects the recruitment of platelets to the injury site, and that can cause dangerous bleeding events in recovering patients.

Tell us about one of your most exciting research moments. Traveling to Seoul, Korea to communicate my research at a conference. It hit me for the first time, talking to respected professionals, that what I’m doing is actually original. Usually as a student you’re reading research and learning from other people, but it’s really exciting to bring something else to the table.

What has philanthropy helped you to accomplish that you wouldn’t have been able to otherwise? Needless to say, traveling across the world, but also being able to spend summers on campus and continue my research. Because during the semester you have fifteen to eighteen credits, summers have been for research in our lab. Support from donors helped me to pay for my summer living expenses so I could focus on my work.

Tell us something we wouldn’t know about you from your resume. My family has owned a ’50s-style restaurant in Erie, Pennsylvania—Sara’s—for thirty-six years. I can remember wiping tables when I was six years old.

What do you think researchers in your field will be studying twenty years from now? 3-D printed organs, specifically the heart and kidneys. These breakthroughs could open the door for completely getting rid of the need for human donors and organ transplants. I think that’s going to be right around the corner.

Why do you believe philanthropy at Penn State is important? Traveling to Seoul is something that I will remember for the rest of my life, something that’s changed my outlook on research and medicine. When people who have had experiences like this help students who haven’t, they’re really creating a profound effect on our futures.

Fill in the blank. We are Penn State! And Penn State is _______. Home away from home. I have to remind myself of how many people have come through this University to make an impact in the U.S. and around the world. It’s a huge community—but it’s always just felt like home.
Penn State has long been a powerful economic engine in our region, generating more than $16 billion in annual impact just within the Commonwealth. In 2015, the University began a new era of economic leadership with a groundbreaking initiative funded by $30 million from its own budget: Invent Penn State. That initial investment has put economic development and entrepreneurship at the heart of our mission, connecting the University’s research, knowledge, and entrepreneurial spirit with Penn Staters and members of the public who want to get their discoveries and technologies to the marketplace, address important societal problems, and ultimately improve the lives of people here in Pennsylvania and around the world. You can learn more at invent.psu.edu.

Invent Penn State is inspiring start-ups and fueling partnerships that represent opportunities for philanthropic investment, but private gifts are already making Penn State a destination for aspiring entrepreneurs at every level.

In 2006, College of Information Sciences and Technology (IST) alumnus David Rusenko launched the new college’s first big success story when he and two fellow Penn Staters turned their IST class project into the wildly popular website creator Weebly.com. In hopes of inspiring other students, Rusenko later created the David Rusenko Entrepreneur-in-Residence Scholarship and the David Rusenko Emerging Entrepreneur Scholarship, both of which support IST students who want to turn their own big ideas into successful business ventures. He also participates in IST’s annual Startup Week and brings fellow entrepreneurs back with him to share their expertise with Penn State students.

The Farrell Center for Corporate Innovation and Entrepreneurship in the Smeal College of Business was formed in 1992 through an endowment gift from Michael J. Farrell. The Garber Center for Venture Capital and the Garber Venture Capital Fund, created through a gift from Dr. John Garber and his wife, Bette, are co-located within the Farrell Center and provide crucial real-world investing experience. The Farrell Center helped to develop Smeal’s new corporate innovation and entrepreneurship major, and its faculty members are conducting research into innovation across corporate boundaries.

Through a broad range of resources, including educational and networking opportunities, the College of Agricultural Sciences’ Entrepreneurship & Innovation (E&I) Program works to develop entrepreneurs and innovators in the food and agriculture sectors. Among the E&I Program’s many supporters is Dr. Dan Azzara, currently the program’s director: In 2013, he and his wife, Wendy, established the Entrepreneurship and Innovation Program Support Fund, and several other donors have contributed to the fund since then.

Two centers at the University’s Commonwealth campuses suggest the breadth of Penn State’s entrepreneurial culture. The Sheetz Center for Entrepreneurial Excellence at Penn State Altoona, created by Steve and Nancy Sheetz, provides educational and internship opportunities, as well as mentoring, legal, and financial support, for budding entrepreneurs. The Graham Center for Entrepreneurial Leadership Studies at Penn State York, created by Donald Graham, prepares students to become tomorrow’s leaders through a range of programs that cultivate “entrepreneurial thinking.” Both centers represent the exciting possibilities of philanthropy from Penn State alumni and friends with a passion for entrepreneurship.
As one of the country’s leading research universities, Penn State offers students and faculty an environment where they’re challenged not just to learn, but also to lead. We stand out in fields ranging from materials science to American literature, boast a top 10 research library system, and produce innovative start-up businesses, intellectual property, and outreach programs with impact. Here we measure some of the ways that Penn State stacks up against its peer institutions and national trends.

**Penn State’s total research expenditure in FY15**

$801,348,000


Fulbright

Penn State ranks as a “top-producer” for Fulbright Scholars in the U.S. We are tied for 6th in 2015–2016 school year, with 6 grant recipients.

Penn State research had a direct and indirect economic impact of $2 billion on the Commonwealth, according to a 2009 study.

Sources of Research Funding

- Federal: $510,057,000
- University: $148,323,000
- Industry and Other: $79,128,000
- Commonwealth of PA: $63,840,000

Total: $801,348,000

The number of new start-ups formed at Penn State in FY15

10

To learn more about Penn State philanthropy, please visit [giveto.psu.edu](http://giveto.psu.edu).
Penn State’s Office of University Development (OUD) helps alumni and friends to achieve their philanthropic goals. In every issue, we’ll feature a different leader from OUD and ask your questions. Please email DevComm@ddar.psu.edu and tell us what you want to know about giving to Penn State.

The Office of Corporate and Foundation Relations (CFR) bridges the corporate and academic worlds, developing partnerships that align business objectives with Penn State’s strategic initiatives. These mutually beneficial relationships strengthen the University by enabling cutting-edge research in a wide range of fields, creating hands-on learning opportunities for students, building scholarship support, and helping to position students for career success by forging connections with potential employers.

How does CFR work with corporations to fuel discovery at the University and support industry success and student achievement?

One of the main reasons corporations work with Penn State is to gain access to the expertise of our faculty members and their students. Many of these companies are working to address large-scale societal issues such as the growing demand for water, food, and energy, and they need our assistance in solving those problems—coming up with new ideas and innovative ways of being efficient and effective. In CFR, we match the key objectives of the various corporations with the expertise and long-term funding needs that Penn State has in those areas. The key to this process is face-to-face interaction, where we bring faculty and administrators together with company representatives to uncover the best ways to meet our organizations’ respective goals. That’s why our development officers work hard to nurture strong relationships with their corporate counterparts.

The corporate philanthropy resulting from these efforts has a real impact on discovery and education at Penn State. Often, a company will make a gift providing general operating support for research. Let’s say a faculty member is studying how to clean up groundwater to make it potable. A company may provide funds so the faculty member can hire student lab assistants and purchase equipment. The outcomes of this kind of research are widely distributed, through the media and academic or professional publications, and it then becomes available for others to use, broadening our impact on global problems. In a similar vein, corporations sometimes support facilities renovations or construction, or they create scholarships or fellowships for students studying in their area of interest. These types of gifts enable the creation and dissemination of new knowledge, which is a key part of Penn State’s land-grant mission.

Mark Armagost, executive director of corporate and foundation relations, leads the CFR team in their efforts to grow philanthropic support benefitting the students, faculty members, and programs of Penn State. Mark has fifteen years of experience in this area. He joined Penn State in 2013 following a tenure as director of CFR at Virginia Tech and prior work as senior associate director of CFR at North Carolina State University. You can reach Mark at armagost@psu.edu or 814-863-4308.
In 1970, Gerson “Gus” Rosenberg, Ph.D., was a graduate student in mechanical engineering at Penn State, tapped by cardiothoracic surgeon Dr. William S. Pierce to join a research team in artificial organs research at the then-new Milton S. Hershey Medical Center. That group went on to pioneer advances such as the electric total artificial heart that Rosenberg is holding in the image above left (circa 1978). It became the first completely implanted device of its kind. Over the years, Penn State researchers have developed other technologies, including the Arrow Lionheart left ventricular assist device, which have helped thousands of patients and made the Medical Center’s Division of Artificial Organs one of the most important contributors to the field worldwide. Today, Dr. Rosenberg is chief of the division, and he is shown at right holding an early prototype for the next generation of heart assist devices. Dr. Rosenberg has been able to accelerate the progress of this effort with support from the C. McCollister Evarts, M.D. Professorship in Artificial Organs, and philanthropy has the potential to advance new devices now in development, such as pediatric heart assist technologies. To learn more about the impact your philanthropy can make, please visit engage.pennstatehershey.org.
Your Gift, Your Penn State
How the University honors the philanthropy and the vision of our supporters

“I feel very blessed to be in a position to give back, and Sandy did, too. Like many Penn Staters, we chose to give not for recognition, but because we wanted to say ‘thank you’ to the University that has meant so much in my life and in the life of our family. To be thanked in return just makes the experience that much more meaningful.”

James D. Reese is a 1966 graduate of the College of Arts and Architecture and a retired managing partner at RLPS Architects in Lancaster, PA, where he resides.

In April, Jim Reese was inducted into the Mount Nittany Society, along with seventeen other top donors to Penn State, in recognition of his gift to create the James D. and Sandra M. Reese Endowment in Architecture. Jim created the endowment in 2015, shortly after his wife, Sandy, passed away, to strengthen his academic home and honor her memory for years to come. Jim’s support has also qualified him for inclusion in the Laurel Circle.

Each spring, the members of the Mount Nittany Society (whose giving has reached or exceeded $250,000) come together on the University Park campus for a gala celebrating their leadership. Within the society, members of the Laurel Circle have achieved cumulative lifetime giving that has reached $1,000,000, while members of the Elm Circle have reached $5,000,000. Penn State recognizes annual gifts through The Penn State President’s Club and The Golden Lion Society, while The Atherton Society recognizes donors who support Penn State with a planned gift. To learn more about the benefits of Penn State’s recognition societies for donors, please visit giveto.psu.edu/honor.