LYLES SCHOOL OF CIVIL ENGINEERING

PURDUE UNIVERSITY DECEMBER 2016



CELEBRATING PURDUE'S TE ALE ENGINEER









MESSAGE FROM SCHOOL HEAD, "G.S." GOVINDARAJU

👕 t is with great pleasure and excitement that I write this opening letter for our revised edition of Transitions Magazine, which some of our alums may remember. For some time now, we (the staff and faculty) have wanted to revive this ____ publication with its focus on the Purdue Lyles School of Civil Engineering family - alumni, friends and supporters.

Over time, our plan with this magazine is to focus on the lives, gifts and accomplishments of our alumni. Of course, those wanting to stay informed about our research projects will be happy to know that our fall and spring editions of IMPACT will continue as usual.

In keeping with this magazine's theme of recognizing our donors, I'd like to personally thank a few loyal Purdue civil engineers and families who have greatly contributed to our school and whose names can be seen throughout our building.

It seems appropriate that I start with the individuals for whom our school is named: the Lyles family. In 2014, we became the Lyles School of Civil Engineering in honor of the \$15 million gift from the Lyles Foundation. Thanks to the Lyles family, we have been able to broaden our school's capacities for learning and discovery and for generating solutions to critical global problems.

Two other people closely associated with our school are Delon and Elizabeth Hampton, the namesakes of our building — most commonly known as Hampton Hall. In 2012, we received a \$7.5 million gift from Delon, made in honor of his mother, Elizabeth. We are eternally grateful to Delon and are proud of the many things he has accomplished in his career.

I'd also like to recognize Chris and Susan Burke — a pair of names I see every day as I head off to teach my classes. In 2010, we named our Hydraulics and Hydrology Research Laboratory after Chris and Susan in thanks for their \$750,000 contribution to our \$1.65 million lab. The facility is a tremendous asset to our school, allowing us to impart experiential learning to our students.

These people are just a few of the thousands who have generously contributed to the continuing excellence of our school. It is due to the greater capacity enabled by our alumni and friends that our school continues to reach bold new heights. Thanks to you all, we were recognized as this year's No. 1 civil engineering school in the world by ShanghaiRanking in an independent, global ranking of civil engineering programs.

All the best.

by ana Inderter

RAO S. GOVINDARAJU Bowen Engineering Head of Civil Engineering and Christopher B. and Susan S. Burke Professor of Civil Engineering



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On the cover: Longtime Lyles School supporter Tom Page funds a new facility for civil engineering students.



MEET THE DEVELOPMENT TEAM FIR PURDUE'S LYLES SCHOOL IF CIVIL ENGINEERING

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Moving? Send change of address to:



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"To come into a field like civil engineering, with no role models before her, I think took a tremendous amount of courage." — Dulcy Abraham, Purdue Professor of Civil Engineering

his spring marks the 120th anniversary of the graduation of Martha Dicks Stevens — Purdue's first female engineer, and a civil engineer, at that.

Graduating in 1897, Stevens was the definition of a trailblazer — and she continues to serve as an inspiration for faculty, students, staff and alumnae.

"It's just so hard to imagine what it must have been like for her," says Lyles School of Civil Engineering senior Keelee Roggenbuck. "I think it took such amazing passion for civil engineering to fight against what was expected then and pursue what she loved. This is a person who got her engineering degree before women even had the right to vote in America."

In fact, Stevens graduated more than 20 years before the 19th Amendment was ratified in 1920 — which came two years after her death in 1918. Other significant moments in United States history that Stevens' civil engineering degree predated include the creation of the automobile, the Wright brothers' first powered flight and the first Major League Baseball World Series.

Dulcy Abraham, Purdue professor of civil engineering, says Stevens clearly was an incredibly brave and motivated person to do something so unheard of for that time.

"To come into a field like civil engineering, with no role models before her, I think took a tremendous amount of courage," Abraham says. "I think it speaks a great deal to her character and her determination — and I'm sure she received encouragement from her family." Specifically, Abraham says, Martha likely received encouragement from her father — Moses Cobb Stevens — who became a professor of higher mathematics at Purdue in 1893 and later served as head of the department.

Stevens' interests and pursuits at Purdue were not limited to engineering. In addition to her being a part of Purdue Civil Engineering's 10th graduating class, she earned a bachelor's degree in 1894 and a master's degree in 1898. She also served as president of the Purdue Photographic Club and as vice president of the University's Philalethean Literary Society.

Martha would later go on to marry John Bibb Mills, an attorney from Maryland. She and John had four children and lived the rest of their days together in their Baltimore home.

Purdue Civil Engineering alumna Sara Hoffman (BSCE '11) says she has tremendous admiration for Martha and hopes many more young women follow in her footsteps.

"Even now, the engineering field is still mostly populated by men, but more women are showing interest in the STEM fields," Hoffman says. "Obviously, we've come a long way, but I think we'd all like to see more women pursue an engineering career. Not only are there many opportunities for professional civil engineers, but companies are always looking to hire graduates who have different perspectives and backgrounds."



im and Carol Cure look at the world through a wide-angle lens. They pay close attention to where their help is most needed, now and into the future. They have given selflessly of their time and resources to Purdue and faith-based causes.

"We've been extraordinarily blessed," Jim (BSCE '75) says. "I feel that we wouldn't have what we have if I hadn't gotten my education at Purdue. It's opened so many doors for me."

Jim's wife, Carol, sums up the couple's attitude toward giving: "We have an overall philosophy that none of us owns anything. Everything is on loan, and we hand it off to the next generation."

BOILERMAKER BLOOD

A Martinsville, Indiana, native, Jim came from a family of Purdue alumni. Four of his siblings are Purdue grads, and his father, William Cure (BSEE '39), was a Purdue engineer.

Jim started at Purdue in 1965 but deferred his education to join the Navy in early 1968. After four years as a communications technician, he returned to Purdue. A leader on campus, he was president of the student chapter of the American Society of Civil Engineers.

HANDING IT OFF To the next generation

GRATEFUL COUPLE SEEKS TO ENSURE PURDUE CIVIL ENGINEERING STAYS VIBRANT FOR FUTURE GENERATIONS

He graduated in 1975 with his civil engineering degree focused on construction management. In 2007, he retired after seven years as president of Advanced Technology Group, a provider of specialized architectural and mechanical services, based in Hillsboro, Oregon. Currently he is a partner of Curetech LLC, a construction consulting firm in Beaverton, Oregon.

SUPPORT FOR HIGH-ACHIEVING FACULTY, STUDENTS The Cures have contributed \$2 million that will benefit the students in the Lyles School of Civil Engineering. It will fund both the Jim and Carol Cure Professorship in Civil Engineering and the Civil Engineering Advisory Council Scholarship.

Among those most grateful for the Cures' gift is Rao "G.S." Govindaraju, the Bowen Engineering Head of Civil Engineering and Christopher B. and Susan S. Burke Professor of Civil Engineering.

"An important tenet of our school's strategic plan is to recruit and retain high-performing faculty who interact with students in areas of discovery, learning and engagement to create leaders of tomorrow," Govindaraju says. "Our goal is to have 15 named professorships in the school by 2019. The Cures' gift directly aids our efforts to amplify our impact on society."

The Cures decided to name their scholarship for the school's Advisory Council, to encourage its members to contribute. Jim says: "Ten years from now, whoever receives this scholarship will understand its meaning. We want it to go to potential leaders in the industry — the cream of the crop. We want students to come to Purdue and maintain its high standing."

INTRODUCING THE THOMAS A. PAGE PAVILION

LONGTIME LYLES SCHOOL SUPPORTER FUNDS A NEW FACILITY FOR STUDENT ENGINEERS

"I wanted this to be a place where these students could work, work together and share ideas. In my professional experience, one of the biggest things I've ever learned was that the chance for success dramatically increases when you are able to collaborate with others and collect new ideas and perspectives."

— Tom Page

edicated to amplifying impact and providing students with the tools to grow and succeed, the Purdue Lyles School of Civil Engineering recently completed construction of a new building, designed for student collaboration and competition.

This fall, the school unveiled its newest addition — the Thomas A. Page Pavilion. The new facility, named after its primary donor, Tom Page (BSCE '55, MSIA '63, HDR '94), serves as a place for student teams to plan, design, fabricate and finish projects. Part of the building also will be used for material staging for the adjacent Robert L. and Terry L. Bowen Laboratory for Large-Scale Civil Engineering Research.

On Oct. 13, 2016, Purdue University held a dedication ceremony for the new structure, which included a speech by



University President Mitch Daniels, who said the Page Pavilion was yet another testament to Purdue Civil Engineering's tradition of excellence and dedication to its students.

"This particular complex of academic enterprise is squarely in our mission as a land-grant school. In an information- and knowledge-based economy and age, it is absolutely the best contribution we can make to a stronger state and nation," Daniels said. "And also, by the way, it follows the time-honored principle of doing what you're good at. Purdue is good at civil engineering."

After taking his first tour through the newly constructed pavilion, Page was very pleased with the work done and is excited for the students, who now have a dedicated location to house and work on their projects for iconic Purdue civil engineering competitions such as the concrete canoe race, the steel bridge competition and the seismic design competition.

"This was identified as a problem that had an obvious solution," Page says. "Our students needed a place where they could work on their projects. And they needed a place where they could store their work. When I was told about this potential solution, I felt a need to help — and, looking at the facility now, I know I made the right decision."

Student organizations such as the Purdue chapter of the American Society of Civil Engineers and Chi Epsilon will make great use of the Page Pavilion. Purdue ASCE President Nathan Shellhamer says he cannot wait to begin working on 2017's concrete canoe with his fellow civil engineering students.

"It's just so great to finally have this pavilion," Shellhamer says. "This solves so many logistical nightmares for us. In the past, we always had to plan out how we were going to store our work and where we could find available space to even do



At the October 2016 Page Pavilion dedication ceremony, Tom Page (far left) placed his hands in concrete to create the memorial plaque that will be installed in the facility lobby. President Mitch Daniels and Lyles School Head Rao "G.S." Govindaraju look on.

Nathan Shellhamer (near left), president of the student chapter of the ASCE, spoke on behalf of the grateful engineering students destined to spend many creative hours in the building. KJG Architecture Inc. of West Lafayette, Ind., designed the structure, shown in the rendering below.



our work. Also, it's just nice to have a place that is dedicated to student activities. I am extremely grateful to Mr. Page for his contribution — and to the school for always having the students in mind."

Page says that, in addition to working on projects, he hopes students gain experience and understanding beyond what they typically attain from their text books.

"In industry, seldom — if ever — are things done solely by the individual," Page says. "And no project sells itself. You need to know how to work with others, to communicate. You need to articulate your work."

Most of all, Page says, he hopes the facility will be used by the students as a place where they gain experience in working with others and learn the value of collaboration.

"Right from the start, I wanted this to be a more thoughtful project," he says. "I wanted this to be a place where these students could work, work together and share ideas. In my professional experience, one of the biggest things I've ever learned was that the chance for success dramatically increases when you are able to collaborate with others and collect new ideas and perspectives. I look forward to seeing what our students will develop now."

THE THOMAS A. PAGE PAVILION

- Land Area: .93 Acres
- Building Dimensions: 60' (W) x 120' (L) x 25' (H)
- Floor Space: 8,400 square feet
- Purpose: Dual purpose to effectively provide vital space for Civil Engineering student organizations and staging and storage area for Civil Engineering research.
- Student Activity Section: 50' x 60' space including 12' x 25' team collaboration room, two bays with 48' x 50' space, two 12' tall overhead doors.
- Cost: \$1,640,000



The Page Pavilion provides a much-needed space for students to work on and store their projects, such as this concrete canoe, destined for the annual ASCE Concrete Canoe National Competition.

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t's something that happens often with our grads — that connection, that shared interest, that same excellent taste in engiheering schools. Whatever the spark, there are quite a few Lyles School of Civil Engineering couples that either graduated as a couple or met later in their professional lives.

One such couple is Cheryl Cunningham (BSCE '80) and Chester "Chet" Parsons (BSCE '74). They met each other at work (now known as Parsons, Cunningham & Shartle Engineering) in 1992, when Cheryl moved from California to work at Chet's Indianapolis-based firm.

Cheryl says her friendship with Chet was near-instant, and the romantic relationship slowly developed over time.

"We got along right away," she says. "There was just this immediate connection we had. We both had the same college background and shared many of the same interests. We just complemented each other perfectly."

A RAINY-DAY RELATIONSHIP

"We have the nerdiest relationship in the world," Chet says. "We love all the little details about civil engineering. One of our favorite things to do was

..... To encourage young women to pursue civil engineering careers, Cheryl and Chet recently made a gift, which was matched dollar-for-dollar from the PRF matching scholarship fund. The Cheryl

A. Cunningham and Chester

A. Parsons Civil Engineering

Scholarship will be awarded

to a first-year female student

in good academic standing

who indicates an interest in attending the Lyles School of

Civil Engineering.

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- when it would rain - we would get in our car and look at our designs and see what they looked like in wet weather."

Cheryl also wants to inspire young girls with a love for engineering. She and her sister, Judith, have published three children's books aimed at getting girls interested in the engineering field. Their books can be found at icanbeanengineer.com

Ask Cheryl and Chet what they personally love most about civil engineering, and they'll say it's working together on a project and tackling the problem from different angles.

"My background is more structural and hers is more water management, so we are able to approach a project from all sides," Chet says. "We're a perfect match. From our first designs together, I could feel a spark between us."

Cheryl says that their shared connection with Purdue further fueled their relationship.

"It is such a wonderful thing to have that connection with him," she says. "We go to Purdue games all the time now, and that's something I never really did before we were together. It's funny, but in a way, it was our loving connection to each other that deepened our connection to Purdue." The Lyles School of Civil

Engineering is grateful to these donors who leveraged the PRF matching scholarship fund to make a permanent impact on the lives of our students:

Terry and George Adams Roger Au and Lorel Bloom Au Kelly Baria

Mary Clyburn

Cheryl Cunningham and Chet Parsons

David and Ann Derrick Steve and Beth Osborn Mamon and Cynthia Powers Patrick and Heather Sheehan United Consulting ••••••



Research Foundation enables Civil Engineering to expand diversity. In May 2015, thanks to an amazingly generous anonymous donor, Purdue University was able to offer \$5 million in matching funds for donors wishing to establish scholarships for underrepresented minority and women undergraduates. In a little over a year, the Lyles School of Civil Engineering has raised \$600,000 in scholarship pledges to boost diversity, one of the primary goals set forth in the College of Engineering's Strategic Growth Initiative.



CE ALUMS LEVERAGE MATCHING FUNDS FOR MINORITY **SCHOLARSHIPS**

PRF MATCHING FUNDS BOOST SCHOLARSHIPS FOR MINORITIES AND WOMEN

matching opportunity from the Purdue

To help meet that key goal, several CE alumni and friends doubled their gifts — and doubled their impact. The generosity of these individuals is enabling more minority and female students to afford a Purdue Civil Engineering degree. Lorel Bloom

Au (BSIDE '73, MSCE '75) and Roger Au (BSCE '73) are among those who have pledged to

allocate more of their funds to ensure Purdue Civil Engineering can provide opportunities to a more diverse group of students. Lorel says that she and Roger believe one of the greatest ways to bring in new ideas and deepen civil engineering's talent pool is to ensure all sources for promising CE students are thoroughly tapped.

"It was always our desire to give back to the Lyles School of Civil Engineering as a way of expressing our gratitude for the transformative education we both received," Lorel says. "The PRF matching scholarship program provided a unique opportunity for us to participate in the mission of the school and double our financial impact toward helping others experience the same world-class education that we did."

The \$600,000 in PRF-targeted scholarships is enabling many more students, especially underrepresented students, to study civil engineering at Purdue. The goal of improving diversity aligns with those of affordability and accessibility, key components to the Purdue Moves effort initiated by President Mitch Daniels.

Don Fry, managing director of development for the Lyles School, says, "Student support is obviously important and diversity is a priority for all of us. Going forward, we will seek donors excited to help boost our school's diversity and help fund our efforts to recruit the very best students who see a civil engineering education as the best path to their future."

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A LOOK BACK AT 2016



This year, CE was able to award more than \$800,000 in scholarships, fellowships, and awards to our top students. Pictured are 23 of the 32 H.K. Tony Clark Scholarship recipients — showing just how far a scholarship can reach.



Purdue CE takes over the Rock and Roll Hall of Fame for an alumni event and to celebrate local donors. From left: Rao Govindaraju, Audrey Kleason, Hugh Kleason, Scott Hinkel.



2016 Civil Engineering Alumni Achievement Award Recipients, from left: Jim Cure, Mark Perniconi, Carlos Hernandez, Nancy Uridil, Jeff Copeland, David Reuter.



Purdue Day of Giving: A group of CE students come together to celebrate giving back.



Meeting the next generation of Purdue Civils at the Annual CE Homecoming Breakfast.



CE Open Golf Outing. From left: Bob Bowen, Terry Bowen, Roxanne Drnevich, Vince Drnevich.

GREETINGS FROM DON FRY senior managing director of development for Civil Engineering



fter nearly a decade away, it is amazing to return to Purdue and Civil Engineering and find hat the Lyles School is ranked No. 1 in the world! Countless faculty, students, staff, alumni, friends and corporate partners have contributed to the many successes that I've seen since 1994, when I first started my fundraising career in Civil Engineering.

I've been privileged to assist the school in three major capital campaigns: Vision 21, The Campaign for Purdue, and the current Ever True campaign. Many great opportunities have grown from

these fundraising efforts, opportunities that assuredly can be considered major contributors to the prestigious reputation and high rankings that our school enjoys. In the '90s, CE raised \$18 million in the Vision 21 campaign; in the first decade of the 21st century, CE raised \$32 million in The Campaign for Purdue.

Now, the Ever True campaign goal is for CE to raise \$60 million. We will do that, and with your help we will surpass that number!

The development staff has grown over the years. Now there are four of us supporting the Lyles School of Civil Engineering. Strictly speaking, we are employed by the University Development Office, which is now a part of the Purdue Research Foundation. In PRF, we enjoy the luxury of having colleagues with expertise in areas such as planned giving, annual giving, special events and endowment investments.

The CE development offices are in Hampton Hall, and we welcome hearing from you about ways you can provide a brighter future for our students, faculty and our facilities.

Hail Purdue!

Don Fry

Senior Managing Director of Development — Lyles School of Civil Engineering University Development Office — Purdue Research Foundation Delon and Elizabeth Hampton Hall of Civil Engineering



Purdue's Ever True campaign was announced in October 2015 and will end June 30, 2019. All giving since July 1, 2012, is being counted toward campaign goals. The Lyles School of Civil Engineering goal is \$60 million, but we intend to exceed this goal. Additional funds are necessary to keep the Lyles School on the leading edge of educating civil engineering students and to attract and retain the best students, faculty and staff.

Funds for scholarships and fellowships are vital to growing our program. Equally important is funding for highly productive senior and junior faculty members. As we attract the best students and faculty, Hampton Hall facilities need substantial renovation, reimagining and repurposing. It's estimated nearly \$30 million is needed to enhance the 1962 version of Hampton Hall. We don't have that large number in our campaign goals, but we will continue to talk with alumni and friends who want to make big dreams possible.



LYLES SCHOOL OF CIVIL ENGINEERING Delon and Elizabeth Hampton Hall of Civil Engineering 550 Stadium Mall Drive West Lafayette, IN 47907-2051



HOW YOU CAN HELP

Through Ever True: The Campaign for Purdue University, we will meet the call for highly qualified civil engineers by concentrating on the following components, aligning with strategic growth initiatives.

Students

- Endowed scholarships enable Civil Engineering to continue its commitment to quality and diversity by recruiting and retaining the best, most creative students.
- Endowed fellowships attract outstanding graduate students, bolstering the reputation of Purdue Engineering and drawing high-quality faculty and increased research funding. To be competitive, we must be able to offer our graduate students tuition and living stipends.

Faculty

- Endowed professorships attract and help retain top faculty. Our goal is to have a total of 15 named professorships.
- "Rising Star" faculty endowments recognize and retain accomplished early-career professors.
- Faculty of engineering practice teach, mentor, and engage students in the application of knowledge and putting research into practice.

Programs

- New/enhanced curricula for experiential learning, including global experiences, design projects, internships, practica, service learning, and undergraduate research.
- A hybrid undergraduate distance-learning/oncampus program.
- A program enabling students to *earn an MS* degree after their BS + 1 year of graduate study.
- A professional MS degree program.

Facilities:

Repair, renovation, and repurposing (R3) of teaching, laboratory, and research space. This is critical to support student growth and to attract and retain superb faculty. We anticipate a need to invest as much as \$30 million in R3 projects over the course of our strategic growth. Investments will enhance learning and research experiences for undergrad and grad students.

We invite you to join us in supporting these initiatives. Help us shape the Lyles School of Civil Engineering to ensure the education and leadership we provide our students and our profession remains the very best in the world. Together, we build.

For information, contact:

Don Fry, Senior Managing Director of Development (Ph: 765-494-2236; email: drfry@prf.org)





DAVID ROBERT LEWIS, PURDUE'S FIRST AFRICAN-AMERICAN ENGINEERING GRADUATE – **125 YEARS** IN 2019

