SUCCESS
SET UP
FOR
SUCCESS

360
This is my last message for 360: The Magazine of San Diego State University, and I am very proud that this issue focuses on our community’s achievements over the past six years.

Through our collaborative work to develop and implement our strategic plan, “Building on Excellence,” our SDSU family has moved the university forward in student success, research and creative endeavors, and community engagement. In this issue, you will meet five extraordinary students who exemplify how our strategic plan initiatives are supporting student success and academic excellence.

The presidential transition comes as we are constructing our new Engineering and Interdisciplinary Sciences Complex, launching our new sophomore success initiative and planning to hire 70 additional faculty members as part of our multiyear plan to add 300 new tenure-track faculty. This is a busy time—just as it should be for a university aspiring to greater excellence and developing as a top 50 public research university.

This issue of 360 also features an interview with incoming president Sally Roush. Many of you know her from her more than three decades at SDSU—including 19 years as senior vice president for Business and Financial Affairs—and others will get to know President Roush in the coming months. President Roush will be aided by our tradition of shared governance and an engaged and vibrant Aztec family, and I have every confidence in her leadership and in the university’s future success.

I hope you enjoy this issue 360: The Magazine of San Diego State University that looks back at our recent achievements and looks ahead to new ones.

I have been privileged to spend time over the past six years with our students, faculty, staff, alumni and friends in the community. I am grateful for these opportunities, and I will miss them. Thank you all for supporting our students and San Diego State University. I wish you godspeed as the journey of SDSU continues.

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It may not be as flashy as other carnivorous plants like the Venus flytrap, but the humped bladderwort (Utricularia gibba) is a fearsome foe for tiny invertebrates living in ponds and bogs. The stringy plants float atop the water and dangle small, bulbous traps below that suck in prey, then digest and absorb their nitrogen and phosphorous.

San Diego State University biologist Tanya Renner was part of a team that published the plant’s first full genome sequence. “Some of these genes code for enzymes that are used by humans as meat tenderizer,” she said. The species’ relatively small genome could make it a model organism for studying plant carnivory more generally.

Digging for work

Students enrolled in archaeological field methods classes at San Diego State University spent the spring semester digging at the homestead site of Nate Harrison, a legendary San Diego County pioneer. Born a slave in Kentucky, Harrison was the first permanent African-American settler in the area. Digs at the property yield treasure troves of fascinating artifacts, ranging from broken bottles to fired rifle cartridges and tobacco cans—all providing historical and cultural insight.

The payoff for this physically demanding work can be much more than an interesting educational experience. Both the National Historic Preservation Act and the California Environmental Quality Act contain provisions requiring certain protections of sites deemed historically, environmentally or culturally significant. Disturbance of such a site for any reason often requires analysis by an archaeologist. There are 30,000 such sites in San Diego County, and SDSU is one of just a handful of local institutions offering the field school training students need to gain experience to land jobs at those sites.

Returning this fall

The campus is expecting a larger-than-usual crowd for Homecoming 2017 in October. Members of San Diego State University’s regional councils have RSVP’d for the second annual Fall Forum, and many have not been back to visit since their graduation.

SDSU supports seven regional councils in Los Angeles, Orange County, the Bay Area, the Pacific Northwest, Dallas-Fort Worth, the New York tri-state area and Austin, Texas.

The Fall Forum agenda will include a tour of the under-construction Engineering and Interdisciplinary Sciences (EIS) Complex, a discussion of best practices for regional councils, meetings with the SDSU National Leadership Council, college deans and students, and a get-together with President Sally Roush.

The weekend culminates in the Battle for the Old Oil Can against Fresno State at 7:30 p.m. on Saturday, Oct. 21, at Qualcomm Stadium.

This year’s Fall Forum organizers are John Wills (Los Angeles), Jessica Hickey (Pacific Northwest), Kent Grubaugh (Bay Area) and Stephanie Dathe (San Diego). For information, contact Amy Harmon (aharmon@mail.sdsu.edu).
The common wealth

A delegation of leading robotics and artificial intelligence researchers from several institutions in the United Kingdom visited the laboratory of San Diego State University neuromechanics researcher Harsimran “Sim” Baweja in May. The scientists toured the lab, discussed various potential collaborations, and took a spin inside Baweja’s virtual reality (VR) environments and driving simulator, which are designed to measure people’s physiological responses to VR-induced stress.

The visit by eight UK scientists was spurred in part by the recent opening of a trade-focused British Consular Office in San Diego.

Baweja said his experience as both a research scientist and a clinician gives his lab important insights into how disparate disciplines like engineering, robotics, artificial intelligence, computer science, public health and physical therapy can come together to answer unsolved questions in science. Attention to cross-disciplinary collaboration lies at the heart of SDSU’s forthcoming Engineering and Interdisciplinary Sciences Complex, due to open next year.

Fowler College dean

Lance Nail has been named dean of San Diego State University’s Fowler College of Business. Nail previously served as dean of the business schools at Texas Tech University and the University of Southern Mississippi. Most recently, he was founding chair of the board of advisors for the Texas Tech University Innovation Hub and Research Park.

“I believe in the vision of the Fowler College of Business and look forward to supporting our students, faculty and staff as we grow our programs and lead an already excellent business school to achieve even greater success,” said Nail. “I saw the passion for SDSU and the Fowler College of Business, and I am excited to be a part of it.”

Where there’s smoke

An ambitious study led by San Diego State University researchers has investigated factors contributing to air pollution inside the home. Not surprisingly, cigarette smoke emerged as a major source of airborne particles in homes with smokers, but cleaning products, candles, frying food and marijuana smoking also jumped out as polluters.

The findings are especially relevant to families with children living in low-income households. These kids are at greater risk of health problems that result from poor air quality, according to the research team led by SDSU environmental health scientist and lead author Neil Klepeis and behavioral health researcher and principal investigator Melbourne Hovell.

“The aim of our research is, ultimately, to find effective ways to promote smoke-free homes and also to find good strategies for reducing exposure to household pollution,” Klepeis said. “The findings from our work will allow for better education and feedback to families.”

All natural

A new exhibit at the San Diego State University Downtown Gallery explores the fringes of photography, sculpture and painting around notions of sustainability.

Through the unorthodox use of media, such as encaustic wax, rock, minerals, precious metals, textile, clay and other naturally-sourced materials, the exhibit highlights the ways each individual artist extends beyond boundaries to produce provocative and experimental results.

Artists in the exhibition include SDSU School of Art and Design alumni Stephanie Bedwell and Jennifer Anne Bennett, as well as Scott B. Davis, Roman de Salvo, John Oliver Lewis, Jessica McCambly and Meghann Riepenhoff.

The SDSU Downtown Gallery, located at 725 West Broadway in San Diego, is open from 11 a.m.- 4 p.m., Thursday through Monday, and admission is free.
What to Expect from President Sally Roush

San Diego State University has been fortunate to experience only a handful of presidential transitions in its 120-year history. This summer, one of those rare transitions will occur when Sally Roush becomes SDSU’s new president, the first woman to fill the role.

The long-time SDSU administrator will serve as president for approximately one year until a permanent president, appointed by the California State University Board of Trustees, arrives sometime next summer.

CSU Chancellor Timothy White said Roush possesses the key attributes needed to promote the standard of excellence SDSU has achieved under President Elliot Hirshman.

“During a long and distinguished career of serving SDSU, including 19 years as a senior vice president, Sally always demonstrated passion and dedication for the university mission,” White said. “She brings deep understanding of the academic excellence and administrative functions of the university.”

Roush said her main focus is to be a thoughtful steward of resources—both the financial and human capital that keep the university running—so as to ensure a smooth transition.

“SDSU is the result of 120 years of people’s efforts. The people make this university what it is,” Roush said. “Students are the reason we are here; faculty help them achieve the goals they’ve set for themselves, and staff create and maintain the environment in which this remarkable experience occurs.”

Roush will oversee the fifth year of SDSU’s strategic plan, “Building on Excellence,” a document she helped to write as chair of the plan’s steering committee. As a collaborator, she believes there is no better place to experience the impact of collaboration than an institution of higher education.

“We have a lot of smart people on this campus, and the more we can bring them together to work on solutions, the better the outcomes,” she said.

Roush singled out SDSU’s alumni as the best example of the university’s success. “Alumni are the real-life, day-to-day outcome of what we do here. They contribute to society in a meaningful way, and it is through them that we demonstrate SDSU’s contributions to the region. We are very proud of them.”

Roush returns to SDSU at a time when attention to the university’s future has never been more public. In recent months, SDSU has articulated its growing need for space outside of Montezuma Mesa.

Critical to that is the property where Qualcomm Stadium resides, which is currently the subject of a citizens’ initiative that doesn’t provide the university with the growth opportunities it will need in the coming years.

“I can’t predict what the outcome will be, but SDSU has a history and commitment to meeting all challenges with thoughtful, effective solutions,” Roush said.

—Gina Jacobs
Hunting the Original Star Stuff. Fridolin Weber scans the universe for Big Bang matter.

By Michael Price

Every atom in every molecule of your body was born in a single spectacular, 2000-billion-degree Kelvin explosion some 13.8 billion years ago. But the Big Bang also produced exotic forms of matter that lasted only fleeting seconds before blinking out of existence. Fridolin Weber searches the universe for these elusive particles that can only exist in extreme astronomical conditions, such as inside the hearts of super-dense neutron stars. The San Diego State University theoretical astrophysicist was awarded this year’s Albert W. Johnson University Research Lectureship, which recognizes outstanding achievement in research and scholarship by SDSU faculty.

Weber’s quarry is the quark, an elementary particle that constitutes matter’s most fundamental building block. Quarks are bound up in composite particles like protons and neutrons and are generally not found in nature by themselves. The exception is inside neutron stars, which are incredibly dense remnants of massive stars blown apart by supernova explosions. Composed primarily of neutrons, they are only 24 kilometers (15 miles) or so in diameter, yet are twice as massive as our Sun.

Cosmic rearview

That amount of mass packed tightly into a relatively small area creates extraordinary density at the star’s core, squeezing atomic nuclei so tightly that their structures collapse and fundamental particles like quarks can exist freely. This chaotic swirl of exotic particles is the closest parallel to conditions immediately after the Big Bang that we know of in our universe.
“We want to understand what happened in the moments and minutes after that gigantic explosion,” Weber said. “We turn to neutron stars to see if we can detect the astrophysical signature of this Big Bang matter.”

To that end, Weber and his colleagues trawl data from enormous radio telescopes scattered around the world. Stars emit radio waves detectable by these telescopes, and the intense heat of neutron stars distorts their radio waves in characteristic ways. Right now, astrophysicists know of about 2,000 neutron stars in the sky, but Weber expects that number to grow to more than 30,000 in the coming years as telescopes and computing technology improve.

Just because you’ve located a neutron star doesn’t mean you’ve found quarks, though. Once a good candidate is identified, Weber looks for a specific pattern.

**Spin Cycle**

A neutron star is a magnetically charged sphere that radiates energy over time, causing its rotation to slow, or “spin down,” like a spinning figure skater with outstretched arms. At the same time, the star is becoming denser and denser. Finally, the theory goes, the density will become so great that the atomic nuclei within the star’s core will break apart, forming quarks.

This briefly makes the star “spin up” again—the figure skater pulling in her arms—before the quarks dissipate and the star resumes spinning down. Astrophysicists like Weber can detect this “spin down, spin up, then spin down again” pattern, allowing them to peer indirectly into a tiny chunk of the universe rewound to its very beginning.

“These quarks inside a neutron star would exist as plasma, which would have existed in the first couple of minutes after the Big Bang,” he said.

It’s easy to get lost in the fine-grained data and math-heavy details needed to study complex astrophysics, but when Weber steps back from those academic considerations and ponders the connection every single molecule in the universe shares with that single celestial moment, he’s humbled.

“It’s kind of mind-boggling,” he said. “If things had happened just a little differently in the early universe, we wouldn’t be here.”
During six years as president, Elliot Hirshman raised the aspirations of the SDSU community and elevated the university’s national profile.

In his book, “Hail Montezuma,” an account of San Diego State University’s 100-plus-year history, anthropologist Seth Mallios chose a descriptor for each of SDSU’s first seven presidents. Samuel Black is the founder; Edward Hardy, the expansionist; Walter Hepner, the builder; Malcolm Love, the people’s president; Brage Golding, the short-timer; Thomas Day, the visionary; and Stephen Weber, the uniter.

Mallios, an SDSU professor, published his book in 2012, just a year after the university’s eighth president, Elliot Hirshman, took office and far too early for the SDSU community to evaluate his leadership. But if a second edition were ever published, outlining all this president has accomplished, Hirshman might be described as the game-changer.

In six years at the helm, Hirshman led SDSU to financial stability; strengthened faculty and staff commitment to student success; did some heavy lifting in the campaign that raised $800 million in private philanthropy; guided the progress of a strategic plan, “Building on Excellence,” that crystallized the university’s mission; and reshaped the physical landscape to showcase SDSU as an institution advancing on many fronts, including research and innovation.

As Elliot and Jeri Hirshman leave San Diego for Maryland, where he will take on the presidency of Stevenson University, faculty, staff, donors and colleagues said Hirshman’s ability to think conceptually and act with laser focus changed the course of SDSU’s future.

“Elliot is not satisfied with small ambitions,” said Mary Ruth Carleton, vice president for University Relations and Development. “He had a vision that helped us hone who we are and a spirit that pushed us to be the best we can be.”

**More than lip service**

During year one of his tenure, Hirshman met with thousands of faculty, staff, students, alumni and friends of the university. It was an early sign of his belief in shared governance, a philosophy he “lives and breathes,” said Marcie Bober-Michel, chair of the University Senate. The veteran professor said shared governance is more lip service than reality on many campuses, but Hirshman “genuinely appreciates the faculty and wants to know what they think.” His commitment to fund the hiring of 300 new tenure-track faculty members energized the campus after years of belt-tightening.

“The actual number hired may not be as significant as the vision it represents,” Bober-Michel said. “Elliot led the reinvention of this university by steering the colleges toward hiring young faculty in emerging research areas.”

Many faculty members consider this his greatest legacy. During Hirshman’s six years, SDSU moved up 37 spots in the U.S. News and World Report ranking of national universities—from No. 183 to No. 146—and also reached No. 74 among public research universities. But more significantly, Hirshman leaves behind a team with heightened research aspirations and an increasingly successful record of winning research grants, said Sam Kassegne, a professor in the College of Engineering.

“From the beginning, he made commitments to our research mission, and he kept them,” Kassegne asserted. “He understood that in order for us to be a 21st century institution, we need 21st century facilities. The Engineering and Interdisciplinary Sciences (EIS) Complex, which will open next year, is a clear indication of our ambitions.”

Hirshman developed a funding model for the EIS Complex involving private, state and university support. Then he worked with the university’s fundraising team to secure major gifts. William Leonhard, ’64, is one of 22 donors whose philanthropy has named centers, conference rooms and other spaces within the EIS Complex (story on page 24).

“He puts donors at ease, but he also gets you to understand that making a gift is important to the university,” Leonhard said. “Years ago, he invited me to breakfast, and I ended the meal pledging $1 million. It was all very low-key, no pressure.” Leonhard laughed. “Now I tell him: no more breakfast invitations.”

**Great partnership**

Hirshman became president as SDSU publicly launched its first comprehensive campaign in 2011. Neither he nor his wife, Jeri, had extensive fundraising experience, but they met with donors frequently to press SDSU’s case for support, Carleton recalled.

“They have a great partnership,” she said, “and they knew it was important for both to
be involved in the business of the university.”

Hirshman’s determination to forge stronger alliances with the San Diego community took shape in several initiatives, including Price Community Scholars. He approached the Price Philanthropies Foundation with a proposal to provide financial support to incoming freshmen from the economically disadvantaged City Heights area.

Each Price Community Scholar is matched with three City Heights middle school students in long-term mentoring relationships that teach the younger students about high school graduation requirements, SAT testing, financial aid and other college-prep topics. Many of the middle schoolers later become the first in their families to attend college.

“The results are demonstrable and compelling,” observed Price Philanthropies President Robert Price. “San Diego State has always been an important part of this community, but the level of scholarship has advanced under Elliot Hirshman. He is responsive, dependable and engaging. There’s a certain lightness about him that makes people feel comfortable.”

Connection points

Members of the President’s Cabinet said he set high expectations for senior administrators, and challenged them to identify potential seismic shifts in their divisions. Eric Rivera, vice president for Student Affairs, recalled an early conversation with Hirshman that literally transformed the lives of many commuter students.

The university’s year-to-year increases in graduation rates had been a point of pride since the early 2000s, but Hirshman dug deeper into those numbers. “Tell me who’s not graduating,” he asked Rivera.

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“Elliot is not satisfied with small ambitions.”
Do you recall the goals you had when you arrived and how they evolved over time?

My goal was to build on the momentum that President Emeritus Stephen Weber and his team had established and then to understand what would be the next steps in moving forward. The [early] budget challenges dramatically overshadowed those good intentions, however, and led to the planning process for our strategic plan, “Building on Excellence.”

During this process, we had significant discussion on how, in a moment of financial challenge, we could continue to improve the university and evolve our concept of excellence.

I think over the last six years there has been a broadening and an evolution of the notion of excellence on the campus.

Some of that reflects the programmatic developments in research, creative and performing arts, academic support, financial support and social engagement.

In the creative arts, for example, the campus has always been focused on excellence, but maybe not on integrating the artistic excellence of our faculty, staff and students into the daily experience of students. It’s a slight change in thinking—an immersive model that touches more people.

When we talk about areas of research excellence, we understand there is individual excellence in each faculty member who is carrying out research, but there is a change when you see seven faculty members come together to make an impact in an area of societal need.

Was there a moment when you realized that “Building on Excellence” had been successful?

Yes, that moment was the approval of the Student Success Fee. As we came out of a most challenging budget period, the university was in a box. It was imperative that we add more full-time faculty because they play core roles, not just in the academic program, but also across the university. Adding full-time faculty is very expensive, so we asked: How do we find the resources to support that and still be able to pursue all the

Elliot Hirshman’s last day as president of San Diego State University was June 30. Before leaving he sat down for an interview with 360 magazine and reflected on his six-year tenure.
other issues, challenges and programs that are necessary to be successful?

The Student Success Fee created the dedicated source to contribute to the renewal of our faculty. We’ve been able to hire about 240 new tenure-track faculty, and we project even more hiring in the coming year. Secondly, the Student Success Fee provided the opportunity to fund co-curricular academic programs, including guest speakers and academic conferences that students have organized on our campus in addition to attendance at academic conferences in other cities. These are experiences that create a broadening of ideas. Approving the Student Success Fee was a difficult process, but I do feel very deeply that it provided the resources necessary to help us move forward.

What are some of the most consequential changes at SDSU over the last six years?

Programmatic changes have been significant, as I mentioned. Secondly, the look of the campus has changed with significant renovation and new construction, such as the Zura Hall renovation; the Jeff Jacobs JAM Center construction; and on the academic side, the Page Pavilion and other renovation in the Fowler College of Business. The mixed-use development at South Campus Plaza is a different approach to student housing and the Engineering and Interdisciplinary Sciences Complex, which is nearly completed, will advance our research.

Other areas of growth give students significant opportunities, such as undergraduate research and internships. These are indicative of a model in which the university is trying—with diligence and dedication—to help students not just earn academic degrees, but also prepare for their roles in what is a challenging and changing society.

Certainly one of the most exciting developments has been seeing the impact of The Campaign for SDSU and how it has engaged people, bringing them closer to the university. I think that will continue well beyond my tenure here in that people have formed bonds and renewed their bonds with the university through financial support, their engagement in the life of the university and their participation and attendance at events.

What have you learned about San Diego State University and about San Diego?

I had an inkling, but I think I’ve learned in a deeper way just how complex a university is. There are so many different facets, subcultures and perspectives across the divisions and departments and also different business models. There is an incredible complexity to the size and breadth of San Diego State. Experiencing that was very enriching.

I had not spent a lot of time in San Diego before coming here. I learned some things about the complexity of the border region and the vibrancy and confluence of different cultures in a border region. I learned about how a town can be pretty large and still friendly and, in some ways, still small. San Diego is an interconnected town in a way that many big cities are not, and it has aspirations to continue to make progress and move forward, aspira-

There has been a broadening and an evolution of the notion of excellence on the campus.

Do you have any advice for the next SDSU president?

Always keep in mind that this is a very, very large place. Always understand that because it’s so large, there will be good and bad things happening at the same time. When good things happen, try to find ways to shine a spotlight on them so that in a complex environment, people can become aware of them. And when bad things happen, try to understand them in the context of the massive size of the institution.

If I could leave a last will and testament to the next president, I would leave stable budgets, good relations with the University Senate, winning athletics teams, good relations with the unions and the opportunity to help the university continue on a positive trajectory.
Meet five San Diego State University students and recent graduates whose impressive resumes forecast bright futures. Each one chose a different path to success, but a common theme is evident: They heaped their plates high with experiences from SDSU’s vast and growing smorgasbord of academic, research and leadership opportunities. As the university takes giant strides toward joining the ranks of the top public research institutions, there has never been a better time to become an Aztec.

Profiles by Coleen L. Geraghty, Michael Price and Tobin Vaughn

Photos by Lauren Radack
To grow you have to put yourself in uncomfortable situations.

Chimezie Ebiriekwe

Anywhere he goes on campus, Chimezie Ebiriekwe sees a friend. A brief walk between the bookstore and the Conrad Prebys Aztec Student Union can become a 10-minute chat fest for the affable fourth-year marketing major, who is frequently stopped by students, faculty, staff and administrators alike.

When he forgets a name, he apologizes and may promise a cup of coffee to someone he repeatedly fails to remember. “I don’t like to spend money,” he jokes, “so I make sure I remember that name.”

Ebiriekwe received more than 60 percent of the student vote to become the 2017-18 Associated Students president. His family originally hails from Nigeria, where relatives followed his campaign on Facebook “sending blessings and a lot of love,” he said.

During freshman year, the 20-year-old Carson, California, native held his first student leadership office as treasurer of the Afrikan Student Union. He admits to a few mistakes on the way to becoming A.S. president, but believes those missteps helped him grow into his current role.

Ebiriekwe has learned that with leadership comes responsibility and the realization that “a lot of people are looking up to you and are inspired by you.”

He has also discovered the payoff to persistence. “If you want to achieve a goal and continually work toward it, you can attain almost anything on this campus,” Ebiriekwe said. “I tell prospective students, if you come here, your life is going to change for the better.”

Future plans: a career in sports law or sports management

Annual family vacation: visiting relatives in Nigeria

In the kitchen: French toast is a favorite for breakfast
"My high school spirit leader was the Aztec, too, so I’ve literally been an Aztec for life.

Eric Gonzalez

As a voracious consumer of science fiction, Eric Gonzalez knows how scientists tend to be portrayed on the big screen: geeky glasses, lab coats and few interpersonal skills. As a recent biochemistry graduate with research experience and accolades under his belt and a science career in his future, though, he knows there’s so much more to being a scientist.

"Doing research as an undergraduate helps you to understand how science actually works versus how it’s portrayed in the movies," Gonzalez said. “I learned early on what it means to be a career scientist.”

His career kicked off in Professor Tom Huxford’s chemistry lab where Gonzalez entered the graduate school-focused Maximizing Access to Research Careers (MARC) program, which emphasizes mentoring and research experience for underrepresented minorities. He then joined the undergraduate research lab of biochemist Christal Sohl. There, with the help of a MARC-sponsored research stipend and tuition support, he investigated the structure and chemical reactivity of a protein called IDH1 (pictured behind Gonzalez), a mutated version of which is found in about 70 percent of brain cancers. “Learning the way these mutations work will hopefully lead to new treatments,” Gonzalez said.

This fall, he’ll begin a Ph.D. program at the University of California, San Francisco, where he plans to focus on the intersection of biochemistry and infectious disease while mentoring the next generation of scientists. “Having benefitted from mentoring myself, I want to give back,” Gonzalez said.

- Favorite films: “Interstellar” and the Star Wars saga
- Career ambition: to study the molecular building blocks for malaria
- Proud member: of the Society for Advancement of Chicanos/Hispanics and Native Americans in Science
I love competing in research competitions; they hone my ideas and presentation skills.

Hedaya Rizeq

“Driven” is an appropriate word to describe Hedaya Rizeq. First of all, the master’s student studying kinesiology at San Diego State University comes from a long line of racing enthusiasts. Although she herself has never raced in anything besides a go-kart, she dreams of one day seeing a Formula One race in Monaco.

Secondly, she’s using virtual reality to study how speed and distractions such as cell phones affect young people’s driving performance. Though her research is in its early stages, she is already working on a pair of academic papers with her mentor and advisor, neuromechanics researcher Harsimran “Sim” Baweja.

Now she’s even more cautious around other drivers—especially her peers. “The younger generation, we’re so arrogant that we think we can cope with distractions like texting while we’re driving, but we can’t,” she explained.

Finally, Rizeq is driven to compete and succeed in academia. She chose to attend SDSU specifically to work with Baweja, believing his lab’s unique blend of physical therapy, neuromechanics and VR will provide rigorous, interdisciplinary research experiences. “Going into Sim’s lab was a bit intimidating at first because I’d never worked with VR,” she said, “but at the same time I found it fascinating.”

Her drive has already yielded results: She received a President’s Award at this year’s Student Research Symposium for her investigation into gender differences in distracted driving—she didn’t find any—and represented SDSU at the California State University system-wide student research competition.

Early years: born in New Jersey, attended high school and college in Jordan

Next career step: to study spinal cord injuries as a doctoral student

Home away from home: her lab mates are more like family than colleagues
Courtney Dickson

With three internships, a study abroad month in Europe and membership in 15 student organizations under her belt, Courtney Dickson has crammed more learning into four years than many people do in a lifetime.

The newly graduated Aztec also double majored in political science and ISCOR, San Diego State University’s acclaimed program in international security and conflict resolution. It’s not surprising that she is headed to George Washington University Law School in the fall.

“An SDSU education is about service and leadership in addition to academics,” Dickson said. “You learn to work with people who have different understandings of what’s being taught in the classroom.”

Dickson is interested in international human rights law, an outgrowth of the work she did on campus through Sororities Invested in Survivor Support, Training and Ending Rape culture (SISSTER). As one of 11 founding members, she tabled, networked and made presentations to raise awareness of sexual assault on college campuses.

Dickson also made the cut for the 2015 Fred J. Hansen Summer Institute on Leadership and International Cooperation. Her team of four won the $2,000 top prize to fund a project they developed and pitched—training Liberian women to make locally sourced laundry soap to sell in their community. Half the profits paid the trainees and half funded a program to provide sexual health education to teenage girls in Liberia.

Graduation has not tempered Dickson’s energy. Before law school, she’ll complete a summer internship with the U.S. Department of State.

Rocky adventure: climbing Joshua Tree National Park’s 80-foot granite cliffs

Creative outlet: dancing ballet for 10 years

Rare achievement: committing the U.S. Bill of Rights to memory
Matthew Bacher

Artist Matthew Bacher realized early on that he didn’t fit in the New York City tattoo scene. While other tattoo artists hustled to make money, Bacher worked the overnight shift so he could attend community college during the day. He insisted on having Thursdays off to visit the galleries, where he met other artists.

And then—a breakthrough. He won a scholarship to attend a bronze sculpture workshop at the Modern Art Foundry in Astoria, Queens, a prominent source of landmark urban sculpture.

When Bacher’s partner was accepted into San Diego State University’s graduate program in applied psychology, he relocated with her and also enrolled. He became vice president and curator of the student art club; showed his paintings at the Athenaeum Music and Arts Library in La Jolla; collaborated with Professor Eva Struble for an exhibit at the Japanese Friendship Garden in Balboa Park; and tried his hand at furniture design in a class taught by Professor Matthew Hebert.

Through Hebert’s intervention, Wilsonart, a national manufacturer of laminate and other surfaces, provided guidance and materials for the students to create original furniture. Last month, the company also flew six students (and their work) to New York for the International Contemporary Furniture Fair and chose Bacher’s chair, “A Piece of Tlaltecuhtli,” as the winner of its annual competition. Now a promising young artist, Bacher continues to experiment and excel.

“At SDSU, I’m working to learn some of the things school doesn’t teach, which is how an artist survives.”
Lucky Penny. After years as the No. 2 running back, Rashaad Penny is ready to step up and lead the Aztecs.

For most of his youth, Rashaad Penny played baseball, not football. He didn’t put on a helmet and pads until his freshman year of high school.

“I was scared of contact,” he said.

Though he’s long since shed that fear, there are times when the San Diego State University running back still appears to be running for his life with the football in his hands. He’s a 5-foot-11, 220-pound rocket in red and black. Five times he’s returned kickoffs for touchdowns, three times from 100 yards or more. He had three touchdown runs of 70 or more yards in 2016. At times, he’s gone untouched.

“He has great vision and anticipation,” said Jeff Horton, SDSU’s associate head coach/offensive coordinator, who also oversees the running back squad. “When he sees something, he can really accelerate. Nobody can catch him when he sees it and hits it.”

As a junior last year, Penny was prodigious, rushing for 1,018 yards. As a runner, receiver and returner, he scored 16 touchdowns and gained nearly 1,900 yards.

Yet for all his success, Penny played his first three seasons in the shadow of Donnel Pumphrey. At a school known for great running backs—think Marshall Faulk, Larry Ned, Ronnie Hillman and Adam Muema—Pumphrey is No. 1. After all, he’s major college football’s all-time rushing leader.

In his final season, Penny will finally step into the spotlight, starting for a program that is coming off back-to-back 11-3 seasons and bowl victories. He knows he’ll have to live up to expectations.

“I’m pretty excited for it,” Penny said. “I’ve just been waiting my turn.”
To Penny, the waiting game has been a blessing. He came to SDSU after having video game–like stats at Norwalk High School (51 touchdowns as a senior), yet hardly played his first year. So instead he studied. Penny watched and absorbed, his confidence growing as his role increased over the years. He learned to better read defenses. He was inspired by Pumphrey’s toughness. And he stayed upbeat, with a smile and a positive outlook.

“I’ve never seen him down,” said Horton.

Now that he’s the featured back, he’ll put what he learned from Pumphrey into practice.

“How small he is, he’s never going to give up,” Penny said of Pumphrey. “He’s always going to keep fighting at the end of a play, and I learned that from him. Just to run through anybody who’s wearing a different color jersey.”

This summer, Pumphrey, who was drafted by the Philadelphia Eagles, has kept in touch.

“He told me, ‘I don’t want you to be like me, I want you to be better than me,’” Penny said.

Horton also is confident Penny will excel.

“To me, he was a starting running back last year,” he said. “Donnel was 1A and Rashaad was 1B. You rush for over 1,000 yards, you’re not considered a backup.”

Penny rushed for 100 or more yards in five games in 2016, including 117 in the Mountain West Conference championship win over Wyoming. Against Nevada, he rushed for 208 yards.

Plus, there are his game-changing kickoff returns. He had one 100-yarder in a win over Cal last season, and another to open a Hawaii Bowl victory over Cincinnati in 2015. The past two seasons he was named the MW Special Teams Player of the Year.

He’s just two shy of the major-college career record for TD returns. And he still wants to return kicks in 2017, even though he’s finally the 1A back.

“A lot of people say, ‘You need to take a break,’” he said. “No, it’s my senior year. I want to win. We want to win. I’m willing to do whatever it takes.”

—Doug Williams
San Diego State University’s Engineering and Interdisciplinary Sciences (EIS) Complex is a centerpiece of the university’s drive to become a top-50 public research university. The brand new complex, set to open in January, is built around the idea of fostering collaboration, with cutting-edge labs and equipment, plentiful shared workspaces and glass walls to inspire curiosity.

The students, scientists and engineers who work there will be tasked with sharing their ideas with one another and seeking guidance from other fields to spur innovation. And none of this would be possible without the generous support of SDSU’s donors.

“With the development of the EIS Complex, we’re asking donors to support our research vision,” said Mary Ruth Carleton, SDSU vice president for University Relations and Development. “We are putting our flag in the ground and saying, ‘We are a research university and we need people who believe in us to invest in that identity. Take a look at those who have made the investment; it is quite an impressive roster of alumni and friends.’”

Aztec connections

The names of many of those alumni and friends will grace spaces within the complex. So far 22 spaces have been named by donors who are committed to inspiring the scientific and innovation leaders of the future. That’s what drove SDSU Alumni Advisory Board President Alan Dulgeroff, ’92, to give a gift naming the Alan M. Dulgeroff Engineering, Mentoring and Collaboration Connection (E=MC²).

Conveniently located across from the William E. Leonhard Entrepreneurial Center and the Mintz Levin Innovation Café—entrepreneurial spirit and caffeine being critical ingredients of innovation, after all—E=MC² will be a bright, glass-filled space designed for industry mentors to share their practical career knowledge with students and discuss design projects.

Dulgeroff graduated with an electrical engineering degree from SDSU, parlayed that experience into an internship with San Diego Gas and Electric, and has been working there ever since. He appreciates that SDSU has always provided a high-quality education grounded in regional workforce needs.

“My professors really took the time to mentor me and connect me with real-world problems to be solved in industry,” he said.

Within his own company, that’s reflected in the fact that about one in every 10 employees is an Aztec. Dulgeroff continues that tradition through his own passion for mentoring and giving back, serving on the electrical engineering curriculum advisory board, and by encouraging SDSU alumni to give new graduates an opportunity to prove themselves through the Aztec Mentor Program and Aztecs Hiring Aztecs initiatives.

“I wanted to memorialize the importance of giving students that real-world experience in the EIS Complex,” Dulgeroff said. “My hope is that the university and industry partners keep a close connection that helps mentor students, advises them, and allows them to work on technical problems relevant to the real world—and I hope a lot of that happens right in that room.”
Mind-blowing

Stephen Doyle, ’80, president of San Diego–based builder and developer Sandy Point Properties, has been giving back to the university in some form since he graduated with a civil engineering degree. Besides his financial contributions, he serves on the College of Engineering Dean’s Advisory Board, helping to shape curriculum and mentoring experiences for students. He is excited to see how the EIS Complex will boost the opportunities for both students and industry partners to mutually benefit from the state-of-the-art technology and commitment to collaboration.

“The things that are going to be going on in EIS are mind-blowing,” he said. “The potential for new ideas and for students and industry to come together to develop solutions to long-standing problems is thrilling.”

Although Doyle fondly remembers his education and experiences participating in surveying competitions, he knew even then the facilities weren’t exactly top-of-the-line. “I recall the labs were cold and institutional-looking,” he said.

When he learned about the EIS Complex, he wanted to be involved, but wasn’t quite sure how best to commemorate the opportunities SDSU gave him as a student. Finally, an otherwise prosaic architectural feature caught his eye: the bridge connecting the old engineering building to the new EIS Complex.

The Stephen and Lynne Doyle Pedestrian Bridge serves as both a physical connection between two buildings and a metaphorical one between SDSU’s past and its potential. “For me, it’s the perfect solution,” Doyle said. “It bridges the old building, where I learned to be a civil engineer, to the future.”
1950s

’56 Roland Schneider (industrial arts) was the 2017 male inductee into the USA National Shuffleboard Association’s Hall of Fame.

1960s

’68 Diana Lindsay ★ (MA ’73 history) published “Coast to Cactus: The Canyoneer Guide to San Diego Outdoors” in partnership with the San Diego Natural History Museum (Sunbelt Publications 2016).

1970s

’71 David Heald (finance) is president and CEO of Santa Cruz County Bank.

’74 Mark Krasner ★ (accounting) was elected to the board of directors of the National Council of Juvenile and Family Court Judges; George Vercessi (mass communication), a retired Navy captain, published the suspense novel, “Saving Leo Kleinman.”

’75 Michael Cohen (physical education) retired after 45 years with the Lawrence Family Jewish Community Center in La Jolla, California.

’76 Benito (Benny) Ricardo (journalism), a retired NFL player and broadcaster, was keynote speaker at Orange Coast College’s 2017 commencement.

’77 Lisa Winokur Allen (anthropology) is chief patient experience officer at Johns Hopkins Hospital in Baltimore, Maryland; Catherine Lutz Hastings (accounting) is chief accounting officer and treasurer for Innovative Industrial Properties.

’79 Denise Trani-Morris (journalism) joined the law firm of Jackson Lewis P.C. as a principal.

1980s

’80 Patricia Panahi (English; ’83 MA linguistics), recently retired from the University of Hawaii and published a first novel, “Veil of Walls” (Black Rose 2017).

’82 Mark Hamilton (’90 MA English) published a second volume of poetry, “100 Miles of Heat” (Finishing Line Press 2017); Jeffrey Zellmer (finance) is chief financial officer for Yanna Technologies.

’83 Michael Yang ★ (marketing) is chief commercial officer for Acadia Pharmaceuticals.

’86 James Kilgore (civil engineering) received the ICON Engineer of the Year Award in 2016 from the Building Industry Association of San Diego.

’88 Stephen Arnot (political science) joined the law firm of William Kastner in Portland, Oregon.

’89 Mark Clemens (accounting) is managing partner for KPMG’s Orange County office.

1990s

’91 Joana Breckner (speech communication) wrote about surviving oral cancer in the April 2017 Costco Connection magazine.

’93 Suzanne Anastasios Mulvihill (criminal justice) is managing partner of Haight Brown and Bonesteel LLP’s Sacramento, California, office.
Man with a Plan
(continued from page 11)

“Elliot picked up on the achievement gap between commuter and residential students. He understood the need for a connection point on campus for every student,” Rivera said.

As a result, SDSU opened a Commuter Resource Center and created peer mentoring programs, learning communities and support staff positions dedicated to commuter student success. In just three years, the graduation rate for commuter students rose by 10 percentage points—from 58 to 68 percent.

“He wanted to understand the student experience,” explained Andrea Dooley, Hirshman’s first chief of staff and now an assistant vice president for Student Affairs. “If something wasn’t right, he wanted to fix it. Ultimately, he cares deeply about our students, and they have flourished under his leadership.”

Humanity and wisdom

Hirshman came to SDSU during a period when his own children were college students, a factor that profoundly influenced his outlook, Rivera said. Keith Behner, ’71, a donor who became friendly with the Hirshmans, recalled an occurrence that illustrates the parent within the president.

“We were attending a football game and the Aztec quarterback was having a rough time,” Behner said. “When the crowd started to boo, Elliot was genuinely distressed. ‘That kid is doing the best he can,’ Elliot said. ‘Don’t they realize he is somebody’s son?’

Hirshman’s humanity—and his wisdom—are apparent to those who know him well, said Mildred Garcia, president of California State University Fullerton. His vision has shaped the future of the CSU system and created a campus of excellence in San Diego that supports high achieving students from all environments.

“Elliot’s deep commitment to issues of social justice and equity is reflected in San Diego State’s record as a top university for recruiting and retaining underserved students,” Garcia said. “As a woman of color, it is wonderful to see someone who represents the majority speak up for these young people.”

There has been no shortage of tributes to the Hirshmans during the last few months. Alumni Susan, ’89, and Scott, ’87, Salka honored their tenure with an endowed gift to the School of Nursing, noting that Jeri spent two decades as a nurse before retiring to become first lady of SDSU.

“The impact made by Elliot and Jeri Hirshman at SDSU and in the San Diego community sets us up for a stronger and more successful future,” Susan explained. “Honoring them with an endowment seemed like a great way to thank them and to keep a part of them here with their SDSU family.”

The Hirshmans are also leaving a legacy in the form of an endowment supporting academic initiatives and student scholarships—both game-changers for the next generation of Aztecs.

Class Notes

1990s

‘95 Vince Hall ★ (speech communication) is CEO of Feeding San Diego; Sean Sheppard (MA sports psychology), CEO of the community organization Embrace, was honored as a California Hero.

‘99 Chemen Denby Tate (biology), assistant professor at the Indiana University School of Medicine, received the 2016 Research Trailblazer Award from the Indiana University Center of Excellence and MDwise Inc.

2000s

‘01 Gina Jacobs ★ (journalism; ’10 MA mass communication) won a bronze Bernays Award for the media relations campaign behind San Diego City Councilman Mark Kersey’s Rebuild San Diego initiative; Jamie Little (journalism) is the Fox Sports NASCAR reporter based in Las Vegas, Nevada.

‘02 Debra Gessner (MS regulatory affairs) is vice president for Poseida Therapeutics.

‘05 Guadalupe Venegas (communication) is a main anchor at a new Telemundo station to launch July 1 in San Diego; Christopher Quinley (financial services) was recognized by Investment News as a 40 under 40 financial planning advisor; Dallas Cowan (master of public health) leads the Southern California office of the Center for Toxicology and Environmental Health LLC.

‘07 Kevin Craig (executive MBA) is senior vice president of AMG/Parade’s Newspaper Relations Group; Chris Connelly (management) is the founder of Contrarian Investments LLC.

‘09 Amber Frankhuizen (marketing) is vice president of sales and marketing for the San Diego-based real estate developer Zephyr; Michelle Hamilton (MA ’13 history) manages the Mary Washington House historic site in Fredericksburg, Virginia, home of George Washington’s mother.

2010s

‘10 Braydon Moreno (entrepreneurship), and ’12 Coby Kabili (bioengineering), cofounders of Robo 3D, are among Forbes’ 30 under 30 for 2017 in the manufacturing and industry sector.

‘11 Michael Cully ★ (EMBA) is CEO for the San Diego North Development Council; B.J. Gay (women’s studies) was named to the Aztec Hall of Fame for his accomplishments in men’s basketball.

‘12 Whitney Ashley (journalism), 2012 NCAA champion in the discus throw, was named to the Aztec Hall of Fame.
In Memoriam

1936 Helen Bourke, Phyllis Friedrichs; 1937 Mary Baldwin; 1938 Elizabeth Jessop, Bernita Sipan; 1939 Martha Hearold, Marjorie Beach McCauley, Virginia Richie New, George Thompson.


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