TALENT, TEAMWORK ON DISPLAY

It’s difficult to do justice to the array of senior projects presented at the School of Engineering and Applied Science’s annual showcase on Foley Lawn, but consider these from among the 41 displays on a sunny and warm May 3:

- How to enhance a pre-surgical tool used to both strengthen the lung capacity of patients and provide care after surgeries requiring general anesthesia.
- How to make sure the welds in your vacuum-sealed water bottle aren’t compromised during the polishing procedures at the end of the manufacturing process.
- How to mitigate the harmful environmental effects of fluids used in airplane deicing by creating a design for embedding a thermal emitter into the composite material of a plane’s surface that would melt ice that accumulates on the wings.
- How to suppress lithium-ion fires in the holding pit of the Spokane Waste to Energy plant without putting workers’ health in danger or calling the fire department.

The breadth and sophistication of the projects come thanks to 29 sponsoring organizations and an involved Design Advisory Board of 55 professionals who volunteer their time, resources and talents with the student teams. Overseeing it all is Ryan Kellogg (’14), himself no stranger to tackling research solutions to high-profile challenges. He spent seven years at SpaceX, the first five in Los Angeles, working on the Dragon 2 capsule, which is currently the only U.S. spacecraft to transport cargo and crew members to the International Space Station.

A big part of Kellogg’s job at GU as academic director of the Center of Engineering, Design, and Entrepreneurship is building relationships with industrial and government leaders to bring design ideas to students – who have plenty of takeaways from their projects.

Jaspreet Kaur, a computer engineering major from Spokane, was part of a team that worked with Lung Technologies on its pre-surgical tool. “Learning on a large-scale project, for nine months” offered something different from the shorter-term class projects, Kaur said.

The favorite aspect for one of her partners, Yuchen Huang, was “extending the software learned in classes.” Huang is a mechanical engineering major from Shanghai.

Both cited friendships as another important takeaway.

Tyler Adams, mechanical engineering, worked on the water bottle weld inspection for their project’s sponsor, Keytronic. Looking back, he highlighted “teamwork, the management side, adhering to a stricter schedule.”

One of his partners, fellow Spokanite and mechanical engineering major Jacob Delger, elaborated. “We needed to do testing earlier” of prototypes and components. They also wrestled with 3D printing issues. Some materials came out better than others.

The aircraft deicing project also drew plenty of onlookers. For Olivia Tufte, working to reduce the 25 million gallons of environmentally harmful fluid used each year was key. “Definitely the sustainability part of it, along with tons of hands-on work,” said Tufte, a mechanical engineering major from Fort Collins, Colorado.

Getting a dose of manufacturing was a highlight for Claire Martin, of Seattle. Boeing was originally planning to provide materials, but plans changed, and team members ended up problem-solving with other solutions. The deicing system design involved embedding a thermal emitter into the composite material on the skin of the airliner, particularly the wings, so finding the right material for laminates took testing.

Teamwork | Continued on Page 8
ORIENTATION MOVES TO SUMMER

‘Great Feedback’ on Pilot Program Leads to Shift from Four-Day Whirlwind

Summer heats up in a special way this year as new student orientation — previously a late-August event — arrives on campus in the month of July.

Rather than a single monumental event that hosts more than 2,000 new students and families in the four days prior to the first day of class, this year’s midsummer orientation is divided into a series of five smaller sessions that provide a more personal and connected atmosphere.

Nicola Mannetter, director of New Student and Family Programs, says it’s a format offering a greater sense of belonging for students making the major transition away from family and into the next chapter of their lives.

"There is a lot to absorb in preparing yourself for the college experience," Mannetter says. "In the past there was a lot of programming and information packed into the four days of orientation leading right up to the first day of class. And year over year we heard that it’s too much. There just wasn’t enough time for students to feel settled and ready for school to begin. They had fun, but they were toast by the time that first class started.

"Last summer we experimented with a small pilot summer program of 100 students. We focused on a sense of belonging, really getting to know campus and feeling like you have a place here and that you matter. And we got great feedback. We think this will help our students be much more prepared and comfortable when the semester begins."

The two-day/two-night sessions begin July 12, July 16, July 19, July 23 and July 26. Each orientation will host 200 students who will stay in Coughlin Hall with orientation advisers. Each day will provide more focused and individualized attention on class registration, navigating University offices and systems, skill-building, community engagement and mission integration.

"Summer orientation creates a longer runway to introduce our new students to campus life and makes for a smoother transition," Mannetter says. "It’s proven to be much more successful."

Mannetter notes that the summer experience is favored by a majority of Jesuit universities and institutions comparable to Gonzaga. Students participating in last summer’s pilot program said they felt far more connected and knowledgeable of campus resources than students polled in prior pre-semester orientations.

Knowing that not all students are able to accommodate a summer experience, the University also plans a final two-day orientation leading into the start of the semester, similar to prior years. Beginning Aug. 23, the two-day session segues into a new Welcome Weekend to include all new students, parents and families, and includes many of the well-known activities of years past, such as the President’s Welcome and Reception, Playfair, Academic Open Houses and Petting Zoo.

“What’s really great about summer sessions is the ability to get to know your classmates," Mannetter says. "So when you come back in August, it’s more about reconnecting and refamiliarizing yourself rather than learning everything new.

“This really connects with who we are at Gonzaga – high-touch, individual, cura personalis. We’re excited and think this will be a great experience for everybody."

Registration for the summer orientation sessions is currently open. Contact the office of New Student & Family Programs for more information.

- By Jamie Aitken
When Charlita Shelton, Ph.D., first came to Gonzaga University, she served as the Interim Associate Chief Diversity Officer. Shelton was charged with supporting staff and faculty diversity, equity and inclusion development efforts.

Months into her role, the pandemic had just taken hold and was tightening its grip. President McCulloh then asked Shelton to lead the Pandemic Response Task Force. She began connecting with leaders, faculty, staff, students and families and discovered that several of them had something in common with her: military service.

“When I find out someone is a veteran or is serving in the military,” explained Shelton, “I always reach out because there is something special in terms of our common realities.” Shelton was very impressed to learn that Gonzaga's president had served in the U.S. Army as a cook and sees his story as an important lesson for others.

“His experience is evidence that anyone who aspires to be a leader can do so with their own level of wit and determination,” she said. “We both enlisted and ended up having roles as university presidents. Education is the great equalizer to obtain your goals, and if someone believes in you, you can do it.” Shelton has a deep appreciation for her colleagues in roles across campus whose experiences in various branches led them here.

“I often think that if they can do something so challenging and commit themselves to their particular service,” she said, “and then they come to us — what a gift!”

Shelton herself has been a gift to the Gonzaga community in her role on the Pandemic Response Task Force and as Chief of Staff. To every assignment, she brings with her the lessons gained during her four years in the Marine Corps.

“Semper Fidelis means always faithful,” said Shelton. “You’re faithful to God, your country and your family. In the service we are there to protect the country, which is all about protecting humans. At Gonzaga, we care for human beings — cura personalis — and it’s those humanistic values that align the mission of the military with that of the University.”

Recently, Shelton spent time with a 1999 Gonzaga graduate who was a member of the Bulldog Battalion Reserve Officer Training Corps. He told her about the indelible impact his Gonzaga ROTC experience had on him because of the way that his Army officer training was bridged by the Jesuit, Catholic and humanistic education. Shelton proudly declared that the same exemplary humanistic training and development continues at Gonzaga in the ROTC.

“They do a fantastic job with the individuals enrolling in the program,” she said. “There has been a reduction in forces in recent years, and I think there are a lot of people who could better understand the benefits military service can have for you, your family and your future career.”

Shelton was the keynote speaker at the 2022 Veterans Day Luncheon — an annual event hosted by the President’s Office to recognize and celebrate Gonzaga’s veteran community. There, she shared her personal story of service and what it means to her to be part of the Gonzaga community, which has great reverence for veterans.

After graduating with her bachelor’s degree in communication, Shelton enlisted in the Marine Corps to “wait out” a potential recession and for assistance in paying off her student loans. It turned out to be an entirely life-changing experience. She received a top-secret NATO clearance as a radio operator and spent time in Camp Lejeune, North Carolina, and later in a Hawaiian bunker that had been shot up during the Dec. 7, 1941, attack on Pearl Harbor.

“I learned a lot about people, personalities and communications,” she recalled, “especially in terms of being able to work as a team to get things done. The Marine Corps helped me muster up a level of confidence in myself and my abilities. I learned how to plan as a leader, how to organize and recognize skills relative to tasks on a timeline, and most of all, how to inspire. I carry these with me to this day.”

Shelton looks forward to connecting with other veterans through the Gonzaga University Military Service community that launched in April, alongside the 75th-anniversary celebration of the Bulldog Battalion Reserve Officer Training Corps.
INDOOR TRAINING FACILITY NEXT FOR BASEBALL

Playing college baseball in the northern latitudes of the United States presents challenges. But Gonzaga is doing everything it can to reduce any obstacles the weather might present with a two-stage renovation of its baseball facilities.

Phase I was the installation of artificial turf on the Patterson Baseball Complex/Coach Steve Hertz Field last fall, making the surface playable almost year-round. If snow blankets the field, a tractor with a special plow can easily clear the field without damage to the surface, something that couldn’t be done on the previous natural grass field.

Phase II calls for groundbreaking in June on a 17,000-square-foot, one-story indoor practice facility directly southwest of the current stadium. It will connect to the home team’s locker room and give student-athletes access to work out year-round.

The new complex, funded entirely by donations, will sport four batting cages and two pitching mounds.

Athletic Director Chris Standiford, Associate Athletic Director for facilities and events Rob Kavon and the coaching staff began researching the value of an indoor performance facility back in 2017, and took copious notes by touring other teams’ facilities, scouring the internet and seeing how other schools are using their buildings to recruit and train players.

"Every baseball program that has an indoor facility does a video about them as a recruiting piece," Kavon says. "Particularly for Division I schools who compete in the north half of the U.S., an indoor training facility has become the standard."

The project will include expansion of the current clubhouse, which is no longer of sufficient size for the number of student-athletes on the baseball team. Renovations include graphics and updates to the film room. The current clubhouse includes a coaches’ office, laundry facilities, showers and toilets, a training room and small team lounge.

The project is due for completion by the start of the spring 2024 season, Jan. 15.

Meanwhile, the Zags are playing on the new field surface this spring, and despite some early skepticism by baseball traditionalists, the advantages have become clear. In addition to gaining many more days on the field, players are finding the more natural hops off the new surface a welcome change. Sand is spread over the field to better simulate natural hops on a regular grass surface.

"The players and coaches have come around on the need for it in our climate," Kavon says. "It’s such a big advantage to go out and play whenever you want. It is always ready."

"We plowed the snow off the field for our first home series in March, and we were able to play a doubleheader the next day."
$5 MILLION GIFT LAUNCHES NEW INITIATIVE

Institute for Informatics and Applied Technology

The Pacific Northwest has a long history of technological advancement fueled by creativity and passion. The past century’s successes — from Boeing to Nike, Microsoft to Amazon, and more — put the region on the map as the global leader in high-tech innovation, manufacturing and progress. A $5 million lead gift to support the development of a new Institute for Informatics and Applied Technology ensures that when the history of the next 100 years is written, Gonzaga will be a major part of the story.

“Technology shapes and impacts nearly every aspect of human life, enhancing our ability to connect with the world, our knowledge of phenomena, our ability to explore, even extending life itself,” said President Thayne McCulloh. “Industries like aerospace manufacturing, health care and computer engineering are all central elements of the Inland Northwest economy, and the Institute for Informatics and Applied Technology will create new opportunities for our students to be leaders in high-tech industries for years to come.”

The concept of the institute evolved out of several years of discussion with government and industry leaders, as well as faculty colleagues and Trustees. A generous contribution by the David and Cathleen Reisenauer family allows Gonzaga to immediately launch a search for an inaugural institute director.

By augmenting current faculty with new hires and developing new degree and certificate programs, the institute will serve as a major focal point for technology and information science at Gonzaga. Its collective expertise will offer a chance to partner with local industries, government agencies and health providers, while enhancing current relationships such as the University’s ongoing partnership with the University of Washington School of Medicine.

Rooted in a deeply held appreciation for their alma mater’s Jesuit mission — especially the principles of being people who serve others and the pursuit of excellence — the Reisenauers’ generosity provides the springboard to launch the Institute of Informatics and Applied Technology.

“This is an opportunity for Gonzaga to demonstrate the next level of academic excellence, adding back to its mission in service of others,” said Cathleen Reisenauer (’84), who earned her degree in business before working for Bank of America and Hewlett Packard.

Dave Reisenauer (’82) added, “We seek out ways to have an impact that may not exist today and will go far beyond our lifetime.” He earned degrees in electrical engineering and mathematics before working in the tech field for companies ranging from IBM to Hitachi and now NVIDIA.

Given the outsized importance of information science and technology to not only economic security but also national security and individuals’ well-being, Gonzaga plans to launch new programs that put students at the heart of harnessing — and protecting — “big data.” That includes potential degrees in data sciences, artificial intelligence, cybersecurity, bioinformatics, biomedical engineering and software engineering.

With the considerable expertise already on campus, Provost Sacha Kopp believes Gonzaga is uniquely positioned to explore the needs and solutions of an increasingly data-driven world.

“We seek to understand how complementary economic policies can create opportunity for struggling areas of the domestic labor force,” Kopp said. “We seek to understand how big data and artificial intelligence can extract powerful insights in technology development, manufacturing, pharmaceuticals and health care. And we seek to understand the threats posed to national, individual and private-sector security due to information and resource theft or attacks in cyberspace.”

- By Dan Nailen

GU Partners with Pat Tillman Foundation

The University’s commitment to its military-affiliated community members has been bolstered by joining the Pat Tillman Foundation University Partner community.

The partnership will enhance GU’s ability to recruit and retain military members and veterans to its student body through the support services, financial aid and scholarships provided by the foundation. Each year, the Pat Tillman Foundation selects 60 Tillman Scholars based on merit for a multiyear scholarship that averages more than $22,000 per recipient.

The Pat Tillman Foundation is a national nonprofit formed in 2004 by friends and family of NFL player-turned-U.S. Army Ranger Pat Tillman to support the educational and leadership development of veterans and military spouses.

The ties between GU and the foundation have been significant. Dan Futrell, the foundation’s CEO, is a 2005 Gonzaga graduate and a 2011 Tillman Scholar who utilized the honor to earn a master's degree at Harvard University. Gonzaga law student Jennifer Scanlon — a U.S. Army veteran and Russian linguist — used her own Tillman Scholar award to move beyond her career in higher education to pursue her Juris Doctor. The two Gonzaga Tillman Scholars met on campus in fall 2022.

“As a U.S. Army veteran, I am proud to lead a university that is so supportive of our students, colleagues and families dedicated to military service,” said President Thayne McCulloh. “Our partnership with the Pat Tillman Foundation will aid in the recruitment of military-affiliated students, and deliver financial support, personal support and leadership development for military servicemembers and veterans who join the Gonzaga community.”
In honor of the 25th anniversary of the Unity Multicultural Education Center, the Unity Mural was unveiled on first floor of the Hemmingson Center on May 3.

The mixed-medium acrylic and spraypaint artwork by local artist Daniel Lopez depicts "Godffiti" seen on local freeways and building walls around town that represent Gonzaga’s mission and devotion to God.

The Unity Mural project was coordinated by Tere Graham and a committee of students, staff and faculty, working closely with GU's administration and the artist.

“It is meant to convey a sense of belonging for all our students, faculty, staff and campus as a whole that UMEC, the Lincoln Resource Center and many other offices foster across campus,” says Graham, program manager for Social Justice Programming.

The mural dimensions are nearly 12 feet by 10 feet and the artwork stretches between Iggy’s and U.S. Bank.

Lopez changed his path through a nonprofit Christian organization dedicated to helping homeless men. He has crafted several murals around Spokane: in the Garland district, near downtown and on the Wonder Building.

“The committee believes that Daniel's mural embodies Gonzaga's Catholic, Jesuit and humanistic identity,” Graham says. “We hope that this artwork will foster other contributions to creative enterprise on campus.”

Lopez’s website is: godffiti.com

Class of 2023 The University anticipates awarding these degrees:

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IT TAKES EVERYONE TO HELP KEEP MEDICAL COSTS (AND FRUSTRATIONS) DOWN

- By Human Resources Benefits Team

Health plan expenses $1.7M over budget in ’22; We’re $363K over budget in the first quarter this year

For years, Spokane hospitals have struggled with a shortage of emergency room beds to meet demand. Did you know that ERs serve as the “safety net” for the many individuals who don’t have insurance to cover regular physician appointments? As a result, ER waiting rooms are overcrowded, and the wait time to see a provider can be quite frustrating.

Seeking nonemergency care in the ER is also far more costly than care provided in an urgent care setting or physician’s office. That cost impacts both your wallet and the University’s health plans. In 2022, visits to the ER by individuals covered through Gonzaga plans rose 18 percent — and 25 percent of those visits were coded as non-urgent by the provider.

While the University worked hard to keep the premium increase for employees at 4 percent last year, our medical plan expenses at the end of 2022 were $1.7 million over budget. This year, medical inflation is already predicted to be up 8 percent. Currently, we are already running 9.6 percent over budget.

One easy way to mitigate costs is careful consideration about where you receive care. Although scheduling a quick appointment with your primary care provider isn’t always a solution, Gonzaga offers multiple telehealth services for needs such as primary care, physical therapy and mental health, as well as chronic care management solutions.

The Gonzaga benefits plan offers several solutions to save you time and money as part of the health plan. By using these alternatives — and by carefully managing chronic conditions — you help keep costs down for yourself and for all who subscribe to the University’s health plan.

Some of our highest claims utilization is coming from mental health and chronic pain. Gonzaga’s plan offers great solutions that allow employees the ability to get care that is convenient and at no cost.

Here are a few other ways you can help:

- Through the MyPremera app, you have access to telehealth services through Doctor on Demand and 98Point6 that will save you time and money, as well as save the plan money. Don’t forget that when you are traveling or you can’t get an appointment with your provider, you have this resource. They can even write you a prescription. The cost of a virtual visit through Doctor on Demand is $10. We also offer mental health visits through this service at the same low cost. https://www.premera.com/visitor
- Signing up for Express Scripts mail order for maintenance prescription drugs you take every month will save you (and the plan) time and money with the benefit of a 90-day supply for less. https://www.premera.com/visitor
- Turning on electronic EOBs (Explanation of Benefits) in place of receiving statements by mail supports our sustainability efforts and cuts down on the overall cost to the plan. Think about how many of these you get in a year! https://www.premera.com/visitor

Our mission is simple: to provide employees with an affordable and robust benefits package. But we need your help. As we look to 2024 and see higher plan costs and increased utilization, we have the opportunity to continue to get the care we need AND be good stewards of our benefits.

For easy access to all of our great resources visit: https://benefits.gonzaga.edu/.

Some of our highest claims utilization is coming from mental health and chronic pain. Gonzaga’s plan offers great solutions that allow employees the ability to get care that is convenient and at no cost.

- For employees who need services to help with conditions such as stress, depression and anxiety, you and your family have FREE confidential resources through SupportLinc, which can also refer you to a medical provider when necessary. Virtual, in-person, support groups, text therapy: They have it all, give them a call. https://gonzaga.mysupportportal.com/
- If you have musculoskeletal issues like back, hip and neck pain, Hinge Health offers on-demand physical therapy for preventive, acute, chronic and pre-rehab and post-rehab conditions. Some individuals qualify for a free non-narcotic pain management device that is a great solution for many. hinge.health/ gonzaga-begin
NEW HIREs
Amy Shadd, admin asst III, Provost; Brandi Estrada, faculty asst, Law; Emily Harper, assoc general counsel, General Counsel; Kori Baker, asst director/alumni programs, Alumni Relations; Lyndsey Gum, counselor, Student Financial Services; Micah Storey, custodian, Plant; Naomi Teeter, electronic resources, processing specialist, Foley; Stacey Harrison, program asst II, Human Resources

POSITION CHANGES/PROMOTIONS
Julia Bjordahl, director of operations, President; Sharon Young, director, Student Health Clinic; Todd Ulrich, lead groundskeeper, Plant

GOODBYES
Alisha Lombardi, study abroad senior adviser, Global Engagement; Colleen Fischer, asst director, Global Engagement; Haley Topliff, marketing & recruiting specialist, Graduate Enrollment Management; Maetheek Vue, residence director; Michael Spencer, technician III, ITS; Saul Roman, case manager, Curia Personalis; Scott MacGregor, infrastructure admin II, ITS

ANNIVERSARIES:
25 Jason Gilman, asset & application release admin, ITS
20 Karen Franks-Harding, manager, Career Center; Rian Oliver, sr assoc athletic director/compliance & student services, Athletics
15 Scott Wittel, assoc director, Security; John Sklut, sr adviser to the president & governmental affairs, President
10 Steffany Galbraith, asst athletic director/academic support, Athletics; Matt Davis, Enterprise application developer III, ITS
5 Sandra Vance, asst director, Admission; Wendy McCliment, admin asst, Jesuit Community; Robin Thompson, asst director, Rudolf Fitness Center; Nick Wood, facilities coordinator II, GUEST

NOTEWORTHY

There was more electrical engineering than expected,” said Martin, an engineering management (mechanical) major. The four mechanical engineering majors working on an automated fire extinguishing system that can target a water jet onto a fire without approaching. This project was developed for the holding pit at the Waste to Energy plant. The team got to test their newly designed equipment on a fire at the Spokane Fire Department Training Center. Brian Applonie, of Spokane, showed a video of their success, adding that while the horizontal flow put out the blaze, the effectiveness would rise even further with the equipment hanging over the plant’s bays, showering any fire from above.

Alexander Delgado, of Tacoma, said completing the system would be a multiyear project. “We built the base,” he said, and perhaps another team will tackle the remaining aspects next year.

Brandon Duff cited new skills he learned. “We were over budget initially and had to restart: smaller, lighter, cheaper,” said Duff, of Seabeck, Washington. The team’s display showed their design’s cost at the low end of comparable equipment on the market.

As Dean Karlene Hoo put it in the showcase booklet: “To transform innovative ideas into proofs-of-concept and prototypes, our students learned about project planning, communications, report writing, budgeting, and resource management.”

The design teams “worked hard all year long to take the project from ideation to the physical realization you are presenting today,” Hoo wrote. Find a brief explanation of all the senior projects, plus introductions by Dean Karlene Hoo and Academic Director Ryan Kellogg, in the Senior Design Showcase booklet here.

Teamwork | Continued from Page 1

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The design teams “worked hard all year long to take the project from ideation to the physical realization you are presenting today,” Hoo wrote. Find a brief explanation of all the senior projects, plus introductions by Dean Karlene Hoo and Academic Director Ryan Kellogg, in the Senior Design Showcase booklet here.

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Alexander Delgado, of Tacoma, said completing the system would be a multiyear project. “We built the base,” he said, and perhaps another team will tackle the remaining aspects next year.

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