



**A SPECIAL ISSUE:**

## **THE NEVER-ENDING CRISIS**

How WPI navigated a global pandemic by staying true to its North Star: protecting the health and safety of the community



**INTERIM EDITOR**  
Michael Dorsey  
[wpjjournal@wpi.edu](mailto:wpjjournal@wpi.edu)

**EXECUTIVE EDITOR**  
Jessica Grimes

**ASSOCIATE EDITOR**  
Peggy Isaacson

**CONTRIBUTING EDITOR**  
Judith Jaeger

**DESIGN & CREATIVE**  
Lynn Saunders  
Todd Verlander

**PRODUCTION MANAGER**  
Brian O'Connell

**CONTRIBUTORS**

Andy Baron  
Arthur Carlson  
Lauren Borsa-Curran  
Maureen Deiana  
Lisa Eckelbecker  
Sira Naras Frongillo  
Sharon Gaudin  
Jessica Grimes  
Judith Jaeger  
Laurie Leshin  
Sharron Kahn Luttrell  
Eileen Brangan Mell  
Julia Quinn-Szcesuil  
Allison Racicot  
Susan Shalhoub  
Sharyn Williams  
Judy Zolli '87

**ILLUSTRATORS**

Helena Perez Garcia  
Sean Loose  
Kathryn Rathke

**PHOTOGRAPHY**

Matthew Burgos  
Matt Furman

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**CONTACT US**

Email: [wpjjournal@wpi.edu](mailto:wpjjournal@wpi.edu)  
Class Notes: [classnotes@wpi.edu](mailto:classnotes@wpi.edu)  
Address changes, phone/email updates: [infoupdate@wpi.edu](mailto:infoupdate@wpi.edu)

**EDITORIAL OFFICE**

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**A SPECIAL ISSUE: THE NEVER-ENDING CRISIS**

The COVID-19 pandemic posed an existential threat to the WPI community. But having built an emergency response infrastructure before the virus arrived, the university was prepared to mount a comprehensive, coordinated, and data-driven response—one that involved the entire campus. By staying ahead of the curve, acting with intelligence and compassion, and always putting the health and safety of the community (our North Star) first, WPI weathered the storm and emerged a smarter and better institution.

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**PROJECT-BASED LEARNING AND THE PANDEMIC**

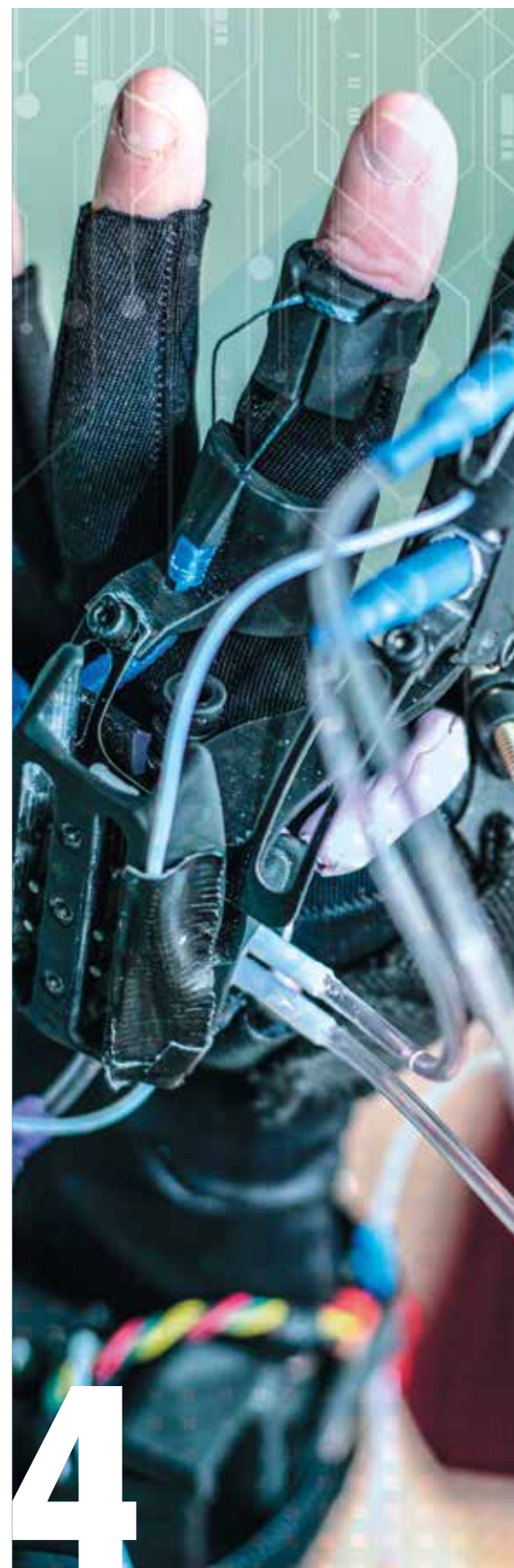
With education under threat, WPI's signature approach to learning proved its worth.

**THINKING GLOBAL, STAYING LOCAL**

With travel suspended, WPI still managed to expand its global focus and launch a new school.

**DISCOVERY COULDN'T WAIT**

WPI researchers kept their projects moving even when they couldn't be on campus.





# LETTERS

## to and from the editor

Letters to the editor may be altered for length, clarity, and accuracy. We ask that letters offer the reader's opinion without rancor. Letters that mock or insult will not be published. Opinions expressed do not necessarily reflect the views of WPI. Send your letters to [wpjjournal@wpi.edu](mailto:wpjjournal@wpi.edu).

## The Ultimate Real-World Project

### News is a first rough draft of history.

—Often attributed to Washington Post President and Publisher Philip Graham

The *WPI Journal* is many things to many readers, but there is one mission it has sought to fulfill since its first issue in 1897: to serve as a document of record to capture the events, accomplishments, and deeds of the WPI community and to share them with the wider world. The news you read in each issue of this magazine is meant to be not only consumed in real time, but also sought out years later by readers and researchers seeking to understand the university and its story.

The past year and a half in WPI's history will surely be looked back on and studied long into the future. Beset by a worldwide pandemic, WPI persevered thanks to a rigorous approach to emergency management, the talents and hard work of individuals all across the university, and the willingness of everyone—students, staff, and faculty—to make sacrifices to ensure that the university could continue to operate, that students could continue to be educated, and that everyone could stay safe and healthy.

This special Summer 2021 edition of the *Journal* tells the story of how the university navigated that global public health crisis in ways both large and small, and introduces readers to some of the people behind that monumental response.

At its core, it is a story of collaborative problem solving. Appropriately, it happened at a university that has made its name preparing students to be highly effective problem solvers through its renowned project-based approach to education.

In some ways, as President Laurie Leshin pointed out in her charge to the Class of 2021, the pandemic was the largest and most dangerous problem the university has ever had to tackle. The collective effort of hundreds of individuals rising to an extraordinary challenge and finding within themselves strength and resiliency they didn't know they had, was the ultimate Interactive Qualifying Project (IQP)—the interdisciplinary science, technology, and society project that all WPI undergraduates must complete.

And like the best IQPs, it began with a wholly undefined problem, one with a generous mix of uncertainty and hazy unknowns. It threw its problem-solvers into situations for which they were prepared, and into others that would take them to places unknown and present them with hurdles even their best contingency planning had not imagined.

It asked them to do more than they thought possible, against impossible deadlines, with the health, safety, and financial security of the entire university community on the line. And having navigated the whirlpools of doubt, the torrents of sheer terror, and the relentlessly shape-shifting crisis, Worcester Polytechnic Institute found that it had grown and learned and changed in ways that have left it even better prepared to face a still-uncertain future.

The story begins with a look at the origins and work of WPI's Coronavirus Emergency Response Team (CERT) as it strove to understand and address the immense challenges posed by the pandemic ("A Perfect Storm of Goodness," page 16). The details of that monumental effort emerge in the stories that follow, and our coverage concludes with an essay by President Leshin that explores what was learned from more than 18 months of upheaval and uncertainty, and how those lessons may shape the university that is emerging from the pandemic.

We cannot—in the pages of this one issue of the *WPI Journal*, or even through the additional content you will find in the online version of the magazine ([wpi.edu/+journal](http://wpi.edu/+journal))—tell the full scope of a story with so many twists and turns, and so many valiant and heroic players. This, in short, is not a comprehensive history, but a high-level look at the people and events that shaped a time unlike any other.

We hope you like this special issue. As always, we welcome your feedback at [wpjjournal@wpi.edu](mailto:wpjjournal@wpi.edu).

—Michael Dorsey, Interim Editor

### Clarification on Jerk

I'm no physicist, but I feel I must comment on the interpretation of the "confusing" face mask symbol given in the Spring 2021 *Journal*. My recollection from P1 (my first semester physics course back in 1955) is that the differential quantity shown on the face mask actually represents the change of velocity with time or an object's actual acceleration, not its change in acceleration. A sudden change in acceleration certainly would be experienced as a jerk. And I wholly agree with the wearer's sentiment to those who refuse to wear a mask. Just my two-cents worth.

Congrats on a great *Journal*. I enjoy every copy!

—George Rizzi '59, Chemistry

## Pride and Gratitude

In its long and celebrated history, WPI has persevered through many difficult times. The COVID-19 pandemic surely will be counted among the greatest challenges ever faced by our community. Operating the campus safely during the pandemic meant that everything we do at WPI changed. Everything. Every department, every activity, every student, and every employee was affected. This crisis was all-encompassing, and it took the work, commitment, and collaboration of everyone in our community to bring us through it.

In important ways, WPI was well-positioned to take on this monumental challenge. First, as a STEM institution we make data-driven decisions and follow the science, both of which are critical when addressing a rapidly evolving public-health emergency. Second, WPI had built an emergency response process and hired a seasoned emergency response director more than a year before the pandemic emerged. With our infrastructure in place, we began our planning well before many other colleges and universities did.

Following our emergency protocols, we created the forerunner of our Coronavirus Emergency Response Team (CERT) in January 2020, just three weeks after the first cases of what would become known as COVID-19 were diagnosed in Wuhan, China. CERT has re-formed six times throughout the different phases of the pandemic, and at one time or another has included representatives of virtually every university functional area, which meant every recommendation and decision was built collaboratively. Closely monitoring the threat and the situation on campus, regionally, and globally, they developed carefully researched and considered plans for nearly every conceivable contingency. Overcoming constant changes, CERT provided thoughtful recommendations to me and other WPI leaders as we put the policies and procedures in place to allow the campus to operate as we navigated this multifaceted challenge.

WPI was also fortunate to have the collaboration and resolve of our Board of Trustees. A subset of the board met weekly during the peak of the crisis. That group helped us plan conservatively, which assured our financial health in the face of the greatest fiscal uncertainty in modern WPI history, and they pushed us to be clear-eyed in our assessment of what needed to be done to manage the crisis. And when we went to the Board with our plan to bring students back last fall, with all the costs and logistical challenges that would entail, they probed our plans, and then supported us wholeheartedly.

Our students played an essential role. They took the safety measures incredibly seriously, and they figured out how to still meet one another and stay connected. It was difficult for them in many ways,

“Along the way we learned valuable lessons that will put us in good stead as we look to the future of higher education and prepare for future crises.”

but they stuck with it and with us. During the academic year, we were able to have between 85 and 90 percent of our undergraduates back on campus, and I'm so proud that they were able to continue to advance their WPI education. Our parents deserve credit too—for supporting us and their students so creatively through these uncertain times.

Our students' educational success during the pandemic can be traced directly to our dedicated faculty, who figured out how to massively pivot our academic operations while staying focused on student learning. Their impressive teaching innovations, born of necessity during the pandemic, will continue to serve students well for many years to come. Finally, I'm so grateful for our staff and administrative leadership team. They stepped up and got the job done—whatever job was needed—every single time.

Early in the pandemic, I was fortunate to have the opportunity to serve on Massachusetts Governor Charlie Baker's Reopening Advisory Board (RAB), which gave me insight into what was happening nationally and locally and into how the pandemic was affecting a broad range of industries. As part of my work for the RAB, I convened a 14-member Higher Education Working Group that crafted and led the reopening plan for the state's higher ed institutions. The group met with experts, documented best practices, and provided valuable guidance that was officially adopted by the commonwealth to be used across all of higher education. Many of those best practices were developed by WPI; indeed, many other institutions looked to our leadership and our example as they navigated the pandemic on their own campuses.

The knowledge we shared with our peers was hard won. Every day I am thankful to work at a place where putting theory into practice is in our DNA. At WPI we are used to rolling up our sleeves, asking, “What do we have to do to solve this?” and knocking down problems one at a time until we have the answers we need to move forward.

We found those answers, time and time again. With each hurdle we overcame, each new challenge we faced and tackled, our confidence grew. And along the way we learned valuable lessons that will put us in good stead as we look to the future of higher education and prepare for future crises.

We often spoke about getting through the pandemic “WPI Together,” and we did. My pride in our community has never been greater. I hope you share it.

—Laurie Leshin



## BY DESIGNING A PARTIAL HAND PROSTHESIS, WPI STUDENTS GIVE A FUTURE DOCTOR A NEW LEASE ON LIFE

In 2019, a horrible accident upended Payton Heiberger's life. When her car was struck on the driver's side by an out-of-control vehicle, the violent impact severed her left thumb and a finger. "I knew instantly that it was a disaster," the Houston, Texas, student told the *Boston Globe*.

When prosthetics companies could offer her only cosmetic replacement fingers that don't move, she rejected them. "I don't see the point in making it just look normal," says Heiberger, a junior on a pre-med track at the University of Houston who dreams of becoming a plastic surgeon. "I want to use it for mobility and structure and have it be useful."

Thanks to a creative team of engineering students at WPI, that vision may finally be in sight. The team, **Mia Buccowich '22** (biomedical engineering), **Brian Fay '22** (mechanical engineering), and **Andy Strauss '23** (robotics engineering), designed a partial-hand prosthesis for Heiberger as their Major Qualifying Project (MQP), a professional-level research or design project all WPI undergraduates must complete. The project was advised by **Marko Popovic**, assistant research professor of robotics engineering, who heard about Heiberger's situation from personal contacts.

"The glaring thing to me was that while there are some partial hand prostheses," Strauss says, "the ones that do exist don't work for Payton's specific injury, which is why her parents reached out to our lab."

With a plaster mold of Heiberger's injured hand and a laser scan of her good hand to provide a reference for how long and thick to make the fingers, the team went to work. With the goal of replacing some of the functionality of Heiberger's fingers, Buccowich focused on sensing and actuation aspects of the prototype, Strauss designed the mechanical components, and Fay worked on a wrist band that will house the actuator for thumb movement and a small solenoid that locks it in place. Sensors that Heiberger can press with the remaining portion of her thumb will allow her to move the prosthetic thumb forward and backward.

As they developed concepts for the device and began to build prototypes, the students spoke regularly with Heiberger by phone and Zoom. One of the ongoing challenges they faced was finding the best way to integrate the device with her hand. "Making the finger prostheses is relatively easy," Strauss says. "The hard part is figuring out how to attach fingers to the person's partial hand." He notes that the team sought to design "a system that can connect any kind of prosthesis to a person's hand."

Heiberger visited WPI in December 2020 and in April 2021 to meet Popovic and the student team and to try on their prototypes. After testing the team's fourth iteration in April, she was heartened by their progress, but also struck by a nagging question: "How do you stabilize it with these knuckles moving and keep everything in the same spot?" she asked. "So that's what we've been tackling recently."

The WPI students, who applied for a provisional patent for their design, will hand the project off to another MQP team that will make any final adjustments to the technology.

"We're all invested in Payton and invested in making sure this works," Buccowich said as the academic year wound down. "Our goal is to have a prosthesis for her by the end of the school year, but we will continue perfecting it until she is happy with it."

"The WPI team has been amazing," Heiberger says. "I feel like I've grown as a person and I owe a lot of that to working with Andy, Mia, and Brian. It's unbelievable to me that I've been able to meet people my age working on such an important project. I'm really grateful for our partnership and friendship."

—Andy Baron

PHOTO BY MATTHEW BURGOS





## Mimi Sheller Named Inaugural Dean of The Global School

Following an international search, **Mimi Sheller**, formerly head of the Department of Sociology at Drexel University and a distinguished and internationally recognized scholar and educational leader with 15 years of executive leadership of academic units, research centers, and professional organizations, has been named the inaugural dean of The Global School at WPI.

“With her depth of knowledge of global issues, her extensive network of collaborators around the world, and her pioneering research in mobility justice,” President **Laurie Leshin** says, “Mimi Sheller will help the university build on its half century of leadership in global project-based learning to create a new model for applied global scholarship and education.”

Launched in 2020, The Global School is a focal point and platform for academic and research programs and global partnerships aimed at helping meet a host of pressing global challenges and improving the quality of life for people around the world. While it has its own faculty and programs, the new school has been expressly designed to forge linkages with WPI’s other schools, providing opportunities for engagement for people in all corners of the university and in all corners of the world.

With an AB in history and literature from Harvard and Radcliffe Colleges and an MA in sociology and historical studies and a PhD in sociology from the New School for Social Research, Sheller has held a number of academic positions, including senior lecturer in sociology and founding co-director of the Centre for Mobilities Research at Lancaster University in the UK and president of the International Association for the History of Transport, Traffic, and Mobility. She joined Drexel as a professor of sociology in 2009 and was named head of the Sociology Department in 2020.

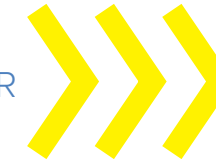
She is co-founder of the interdisciplinary field of mobilities research, which studies the movement of people, objects, and information, as well as the complex new mobilities (and immobilities) that are afforded by changing technologies and infrastructures. “In my work, I focus on mobility justice,” she says, “which explores the inequities in who has access to movement and who doesn’t, and also who has the right to dwell or to stay in place. The complexity of the world today demands a new interdisciplinary social science informed by humanities, arts, engineering, planning, and design.

“The world faces so many challenges: climate change, the pandemic, refugee crises, worries about wars and national borders,” she adds. “Now more than ever, we need global connections to build a more socially just world. The Global School can lead the way in showing how to prepare globally engaged leaders and problem solvers who can help take on these challenges in partnership with communities and people around the world.”

—Michael Dorsey

PHOTO BY MATTHEW BURGOS

## DATA SCIENTIST AND PHILOSOPHER NAMED SMITH PROFESSORS



**Elke Rundensteiner**, professor of computer science, and **Roger S. Gottlieb**, professor of philosophy, have been named William B. Smith Professors. The professorships were established by the estate of William Binns Smith, a local entrepreneur and 20th-century industrialist who died in 1952.

**Jean King**, WPI’s Peterson Family Dean of Arts and Sciences, has the highest praise for the two faculty members recognized with the professorships.

“Elke Rundensteiner is the ultimate scientist, who uses big data to address the toughest societal problems and complexities,” she says. “She is the most highly cited scientist in the School of Arts and Sciences—and perhaps the university—and we are so lucky to have her as a world leader in data science.”

King credits Rundensteiner with leading WPI’s most rapidly growing interdisciplinary program—data science—with a current growth rate of 36 percent. She also has high praise for her federal grant success and describes as exemplary her commitment to women in data science, mentoring, collaboration, and scientific rigor.

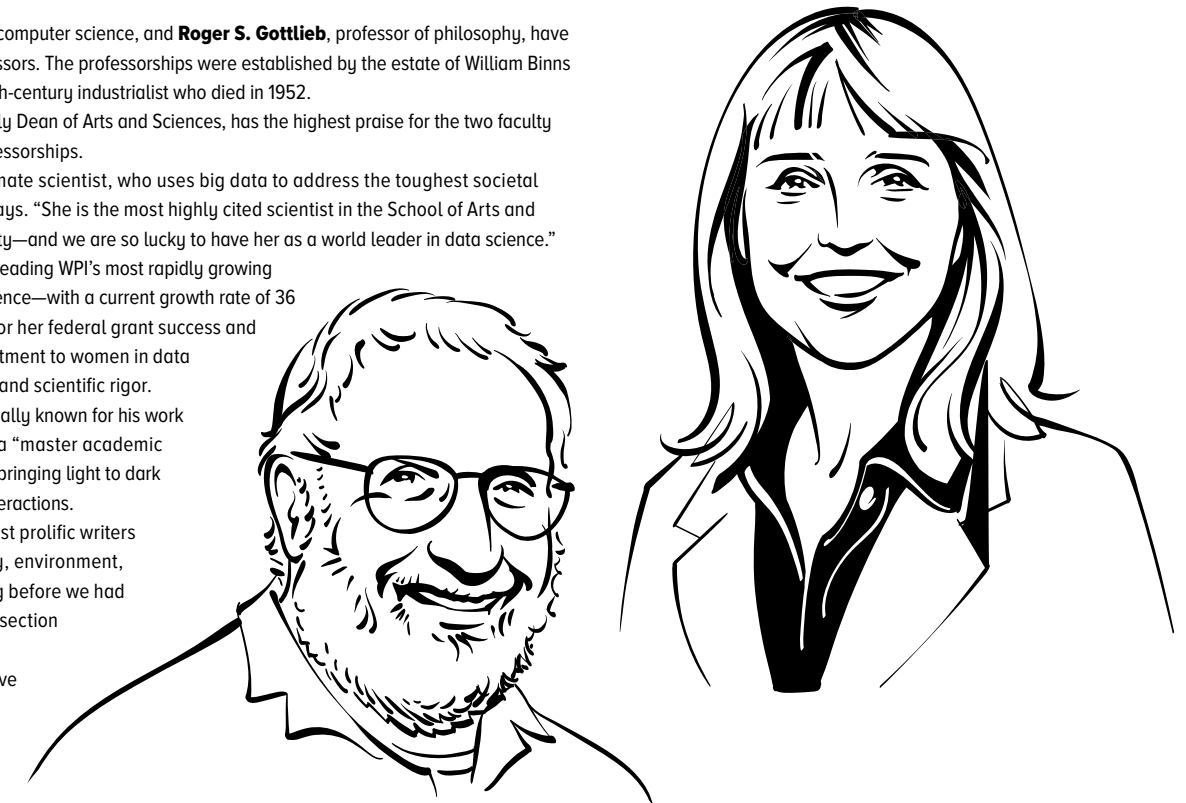
Gottlieb, King says, is internationally known for his work in religious environmentalism, as a “master academic conductor—acting as a connector—bringing light to dark spaces and meaning to complex interactions.

“Roger Gottlieb is one of the most prolific writers who combines religion, spirituality, environment, ethics, and social justice—and long before we had a global understanding of the intersection among these topics,” she notes.

Smith left nearly \$29 million to five Worcester-area organizations; WPI received \$7 million from the estate in 2015 when his last surviving heir passed away.

—Jessica Grimes

ILLUSTRATION BY KATHRYN RATHKE



## WPI Names New Board Chair



**Andrew Aberdale ’89**, a member of WPI’s Board of Trustees since 2012, has been elected board chair. He succeeds Jack Mollen, whose term as chair began in 2016. A former CFO of Target Hospitality, Aberdale, who holds a BS in chemical engineering from WPI and an MBA from St. Mary’s College of California, previously spent 12 years at W.R. Grace in various engineering, manufacturing, and plant management roles.

He was one of the original members of the WPI Tech Advisors Network, a group of more than 80 alumni and friends who, as experienced entrepreneurs, innovators, and mentors, offer their expertise and networks to support other WPI innovators and entrepreneurs. Through this work and other endeavors, Aberdale has forged solid relationships with faculty, staff, students,

and others in the broader WPI community. He has also been a leader in supporting the university’s goals of increasing global impact, bringing more women into STEM, diversifying the student body, and infusing inclusion and equity into all aspects of campus life.

“Andy’s commitment to WPI, his professional acumen, his experience, and his perspective will serve the university well in his role as board chair,” says President Laurie Leshin. “As the university continues to transform lives, turn knowledge into action to confront global challenges, and revolutionize STEM through our distinctive project-based learning and research, Andy’s guidance will be critical. He understands and appreciates the intelligence, dedication, and potential within our students, faculty, and staff. As a business leader, he also understands the need for universities to strengthen existing and forge new relationships so we can better prepare more people for the work of the future.”

“I received an incredible education at WPI,” Aberdale says, “and I consider it a major part of my success—so it’s always been important to me that I find ways to give back to a place that gave me so much.”

Aberdale’s wife, LindaLeigh (Richert) Aberdale ’88, is a member of the executive board of WPI’s Women’s Impact Network and co-chairs The Business School Dean’s Council of Strategic Advisors. Their son, Andrew Aberdale II, earned bachelor’s (’18) and master’s (’20) degrees at WPI.



# HERD FUNDED

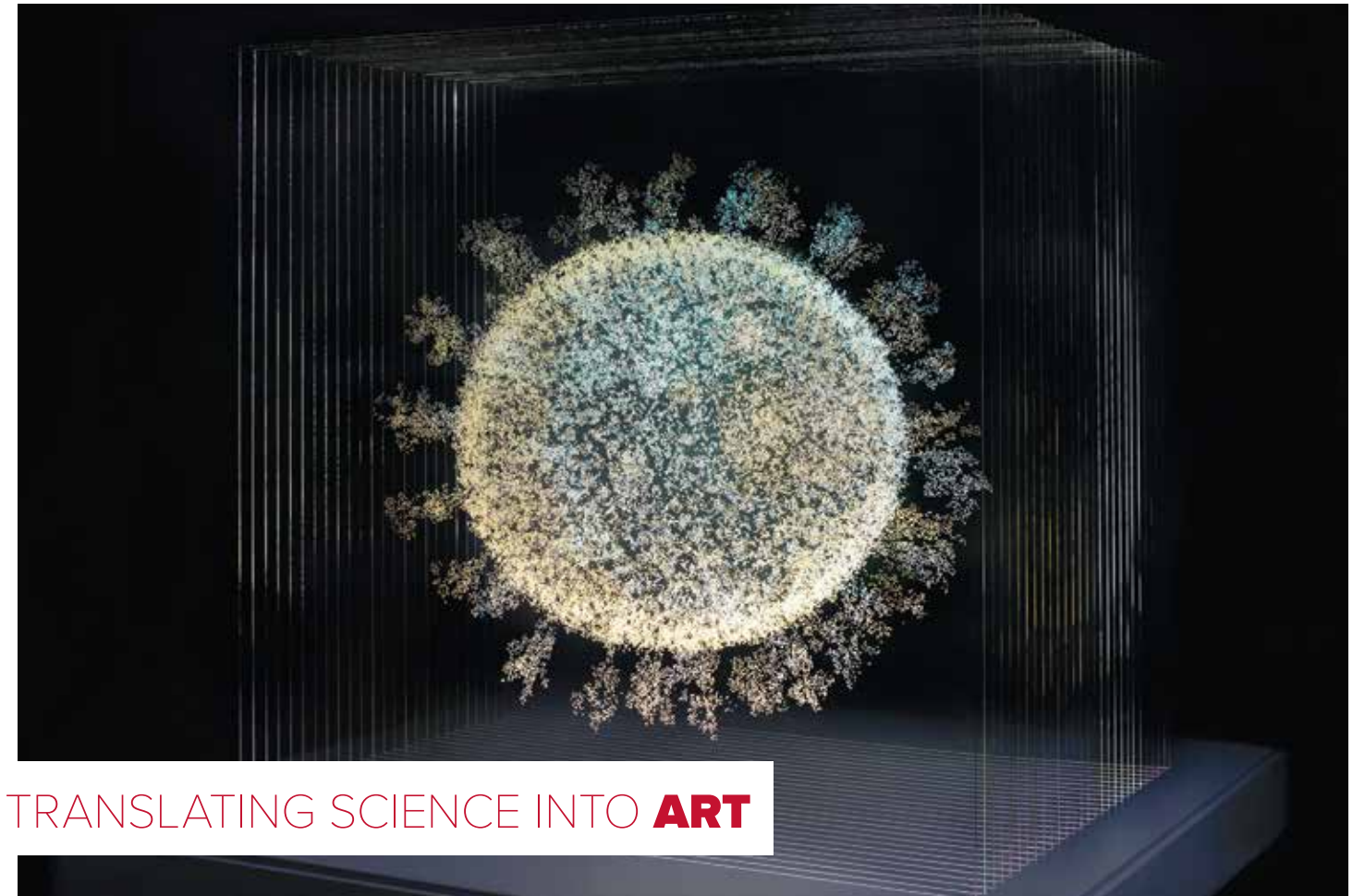
## SUPPORT THE CAUSES THAT MEAN THE MOST TO YOU

Herd Funded, WPI's secure crowdfunding site, provides a platform for students and faculty to raise funds for projects and activities that contribute to the university's mission and community. Through Herd Funded donations, alumni, parents, and friends have made a big impact on the initiatives below, and on many more areas of the university:

- DEAN JOHN P. VAN ALSTYNE–  
MEMORIAL FUND
- ALDEN VOICES: SOSTENUTO–
- DEFALCO WRESTLING–  
ENDOWMENT FUND
- 2021 SENIOR CLASS GIFT–
- WPI EMERGENCY ASSISTANCE–  
FUND
- VARSITY ATHLETICS–

Whatever you love about WPI, you can support it!  
**support.wpi.edu**

PHOTO ANDREW SMART OF A.C. COOPER LTD.



## TRANSLATING SCIENCE INTO ART

In early 2020 the genome of the virus that causes COVID-19 was released to the world by scientists in China. For **Dmitry Korkin**, professor of computer science and director of the university's Bioinformatics and Computational Biology Program, it was a moment for which he'd been preparing for several years. With expertise in using molecular modeling, structural bioinformatics, biological data mining, and machine learning to study the molecular mechanisms that underlie such infectious and genetic disorders as cancer, diabetes, autism, and pandemic flu, he had the knowledge and the digital tools to transform that raw data into something supremely useful.

Working with a team of graduate students, he used bioinformatics and molecular modeling to reconstruct the 3D structure of the virus's major proteins and their interactions with human proteins—what he calls a structural 3D roadmap of the new coronavirus. He quickly shared his models with the world and published more details about their creation in the journal *Viruses*. The article has since been cited more than 150 times.

"We're confident that our data and visual models could provide the guidance for experimental scientists

worldwide who are working feverishly to address this pandemic," Korkin said at the time, noting that they could "help experimental scientists in their deciphering of the molecular mechanisms implicated in infection by the new coronavirus as well as in vaccine development and antiviral drug discovery."

It turns out that scientists were not the only ones who found the models intriguing. Scottish artist **Angela Palmer**, whose sculptures can be found in the permanent collections of several major museums and institutions worldwide—including the Smithsonian and the Scottish National Gallery—decided to create a new work based on Korkin's data, which plots the spatial relationships of 60 million atoms. Palmer translated this complex data set into 28 cross sections hand-engraved onto large sheets of glass. Stacked together vertically, they form a three-dimensional representation of SARS-CoV-2, the COVID-19 virus, that is eight million times the size of the actual virus.

The sculpture was on display during the spring and summer of 2021 at Oxford University Museum of Natural History in the UK in an exhibit titled *2020: The Sphere that Changed the World*. Sarah Gilbert, lead developer

of the Oxford-AstraZeneca vaccine, unveiled the work. The sculpture will find a permanent home at the Science Museum in London.

"When I saw the virus in its entirety for the first time, suspended in its glass chamber, I was taken aback by its beauty," Palmer says. "It was totally unexpected. It seemed in direct contradiction to the nature of this menace that has terrorized us all and continues to do so. It was hauntingly beautiful, paradoxically so. I found it strangely transfixing and mesmerizing: the invisible enemy, as we know it, was suddenly rendered tangible, trapped, while the whole of mankind is trapped by it."

Says Korkin, "The sculpture represents one of the deadliest enemies of humankind and makes us realize how vulnerable and fragile—as glass—we, as humans, still are. But I think it carries another powerful message: that we can understand, fight, and eventually conquer such an enemy with science."

—Michael Dorsey



# Congratulations to our 2020 and 2021 Alumni Award Recipients!

Each year, the WPI Alumni Association presents awards to a select group of alumni in recognition of their professional achievements and their service to the university and the Association. First established in 1961, with additions and changes made over the years to reflect the changing alumni body, these awards are sometimes presented to other members of the WPI community, such as faculty, staff, trustees, and friends of the university.

## ROBERT H. GODDARD ALUMNI AWARD FOR OUTSTANDING PROFESSIONAL ACHIEVEMENT

Michael Aspinwall '75  
Justin Cutroni '96  
Eugene Dionne '65  
Doug Folsom '91  
Lynne Handanyan '86  
Lennox Hoyte '80  
Edward Mackey Jr. '85  
Elizabeth Phalen '85  
Sharon Savage '91  
Jeffrey Smith '81  
John Stauffer '60 PhD (posthumously)  
Amy Swotinsky '86  
Urvashi Tyagi '01 MS

## ICHABOD WASHBURN YOUNG ALUMNI AWARD FOR PROFESSIONAL ACHIEVEMENT

Naif Al-Sudairy '01  
Ashley King '06  
Paul Liberman '05

## HERBERT F. TAYLOR ALUMNI AWARD FOR DISTINGUISHED SERVICE TO WPI

Henry Fitzgerald '75  
Donald Peterson '71

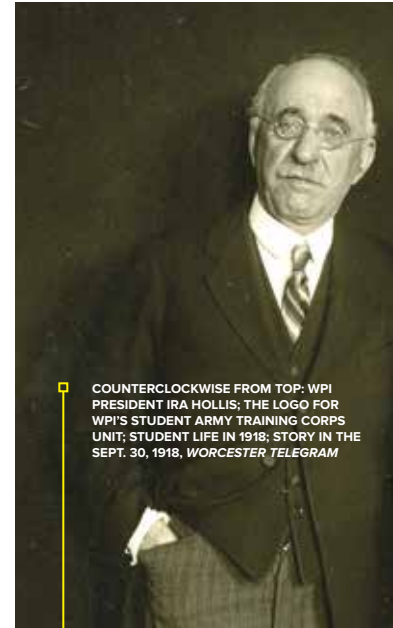
## JOHN BOYNTON YOUNG ALUMNI AWARD FOR SERVICE TO WPI

Pamela (Giasson) Lynch '05  
Christopher Stank '00, '05 MS

## EDWIN "TED" B. COGLIN JR. '56 HUMANITARIAN LEADERSHIP AWARD

Daniel Maguire '66  
Bernard Tetreault '60

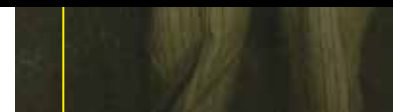
PHOTOS WPI ARCHIVES



COUNTERCLOCKWISE FROM TOP: WPI PRESIDENT IRA HOLLIS; THE LOGO FOR WPI'S STUDENT ARMY TRAINING CORPS UNIT; STUDENT LIFE IN 1918; STORY IN THE SEPT. 30, 1918, WORCESTER TELEGRAM

## THE ARCHIVIST

Remembering the Other Pandemic:  
The Spanish Flu at WPI



On Sept. 16, 1918, public health officials in Worcester issued a notice to citizens warning them to take precautions against an emerging influenza outbreak in Massachusetts. Though no cases had been reported in Worcester, Boston health officials had observed that this strain of flu was causing serious complications in people of all ages, not just the young and the elderly.

Three days later, Walter R. Roache of 142 West Street, a 25-year-old U.S. Navy sailor home on leave, succumbed to what was becoming known as the Spanish Flu, because the newspapers in Spain were the first to report on widespread outbreaks in Europe back in May. Roache was Worcester's first victim; by Sept. 23, City Hospital was a quarantine zone with more than 100 influenza patients, including 15 nurses. By the time the global pandemic had run its course, the city of Worcester would record 6,884 cases and nearly 1,300 deaths.

In some ways, the response at WPI mirrored how the university would tackle the COVID-19 pandemic more than a century later. In other ways, the response was more muted because, with World War I still underway and many students and even faculty and staff members away serving in the military, the campus was far emptier than it would have been in peacetime. And in the fall, the campus would be transformed into an officer training program for the U.S. Army.

Under the direction of **President Ira N. Hollis**, administrators at WPI immediately moved to delay the start of the 1918–19 academic year by three weeks to better assess conditions, much as the university delayed the start of D-Term in 2020. The traditional summer courses in the Washburn Shops had been

cancelled that year to assist the U.S. Army with training 285 engineers, machinists, and electricians.

When classes resumed in October, all the students were sworn in as cadets of the Student Army Training Corps and subject to all military protocols to prevent the spread of the disease. They were instructed to quarantine for a week prior to arrival, open windows when practical, get plenty of fresh air, wear cloth masks over their faces, reduce occupancy of shared spaces, and undergo temperature checks—actions that would seem familiar to those who managed student life at WPI over the past year and a half.

Despite the restrictions, students found ways to carry on some campus traditions. A football team was organized, though some scheduled games were cancelled owing to outbreaks at other schools. By November, the epidemic in Massachusetts had mostly subsided. And after the war ended on Nov. 11, the campus began to return to a more normal state. The first social function of the school year was planned for Dec. 7 to thank the faculty and a dance was held the following week. By January, students were beginning to return from active service. The Commencement ceremonies in 1919 were limited affairs; in fact, many of the members of the Classes of 1918 and 1919 would not cross the stage to receive their diplomas until 1920, in a distinct parallel to the Class of 2020, which celebrated its graduation in August 2021.

—**Arthur Carlson**, University Archivist and Assistant  
Director of WPI's George C. Gordon Library

## RED CROSS WOMEN FAITHFULLY COMPLY WITH CALL FOR MASKS

By Four O'clock Yesterday 3250 Fan-Masks Are Ready For Shipment  
to Camp Devens, and Are There at Night

More than 500 volunteer Red Cross workers passed the first churchless Sunday making 3000 masks to be used by the physicians and nurses who are caring for the stricken soldiers at Camp Devens. Work on these masks was started at 9 o'clock yesterday morning in the Red Cross mansion, Lincoln square, and at 4 o'clock in the afternoon 3250 masks were packed ready for shipment. Telephone calls came to the mansion, asking if help was needed. By 6 o'clock the last of the workers had departed, and it was plain that each worker carried away a feeling of deep satisfaction at the privilege of assisting in the peculiarly significant and humane task. In addition to the gauze masks so un-





## A Commencement Marathon

During a year when nothing was normal, WPI celebrated the May graduation of the Class of 2021 in a most unusual way. To maintain social distancing, the university held six ceremonies—five in-person and one virtual (for students unable to come to campus). Two in-person ceremonies celebrated graduate students; three were devoted to undergrads (one for The Business School and the School of Arts & Sciences, and two for the School of Engineering). For President Laurie Leshin, that meant delivering six speeches and enduring three consecutive days of elbow bumps. For graduates, it meant enjoying the tradition of crossing Earle Bridge one last time as students. And for parents, it was the opportunity to cheer on their students as they crossed a real stage (even if their cheers were muffled by masks). Members of the Class of 2020, whose in-person graduation was deferred, had their chance to cross the bridge and the stage during a single ceremony on Aug. 7.

PHOTO BY MATTHEW BURGOS

SENSE OF PLACE





# The Never-Ending crisis The Never-Ending crisis The Never-Ending crisis The Never-Ending crisis The Never-Ending crisis

The COVID-19 pandemic posed an existential threat to the WPI community. This is the story, told in 13 chapters (three of which you will find only in the digital *Journal*, [wpi.edu/+Journal](http://wpi.edu/+Journal)), of the process and the people behind WPI's response to this monumental challenge.

How was it done? First, it was a matter of thoughtful preparation and sound planning. For having built an emergency response infrastructure well before the virus arrived, the university was prepared to mount a comprehensive, coordinated, and data-driven response—one that involved the entire campus.

Second, it was accomplished with foresight, perseverance, and care for others. For it was only by staying ahead of the curve, acting with intelligence and compassion, and always putting the health and safety of the community (our North Star) first, that WPI was able to weather the storm and emerge a smarter and better institution.





CAPTION

## A PERFECT STORM OF GOODNESS

When the COVID-19 pandemic hit, WPI was prepared to mount a comprehensive response much earlier than many of its peers. Early on it had formed the Coronavirus Emergency Response Team, which skillfully guided the university through its most challenging year and a half, always guided by WPI's North Star: putting the health and safety of the community first.

By Michael Dorsey and Eileen Brangan Mell | Illustrations by Sean Loose | Photography by Matthew Burgos

When looking back on a sprawling, monumental period like the COVID-19 pandemic—one chock-full of critical milestones, momentous decisions, and people caught up in the blur of rapidly shifting events and worries—it can be difficult to pinpoint the moment when everything changed. At WPI, that moment most likely arrived in the middle of January 2020.

Just a few weeks earlier, in late December, officials in China had concluded that a novel coronavirus was responsible for a cluster of pneumonia cases in Wuhan, the capital of Central China's Hubei province. In mid-January **Regina Roberto**, then the director of health services at WPI, brought news of the viral outbreak to some of WPI's senior leaders. At that time, their concerns centered on the potential impact of this new illness on WPI students who lived in the region and on the approaching Chinese Lunar New Year, which was expected to bring an increase in travel to and from the affected area.

But even at that time, only weeks out from its initial discovery in Wuhan, WPI's emergency management leaders believed this new strain of coronavirus had the potential to pose a serious impact well beyond its point of origin. And they recognized the urgent need to begin preparing the university for this gathering storm.

And so—long before a small outbreak would become a pandemic, weeks before this new disease would come to the attention of most

Americans, and months before many colleges and universities in the United States would take their first steps to address the threat to their communities—WPI started to lay the groundwork for a comprehensive, university-wide response to the greatest public health threat the world has seen in over a century. This is the story of that work.

### AN OUNCE OF PREVENTION

The roots of WPI's response to the COVID-19 pandemic stretch back several years, says **Philip Clay**, vice president for student affairs. "WPI's first comprehensive emergency preparedness plan was developed more than two decades ago under the leadership of the late **Bernie Brown**, then vice president for student affairs," he says. "**Janet Richardson**, who succeeded Bernie as vice president, and **Jeff Solomon**, then executive vice president and chief financial officer, working with **Cheryl Martunas**, our police chief, took that further by introducing what is known as the Incident Command System to the university. They put that overlay on our emergency response work and said this is how we are going to organize our efforts."

The Incident Command System, or ICS, "is a federally recognized means of standardizing emergency response incident command for anything from a building fire to an armed attack," says **Lt. Col. Ron Bashista**, WPI's inaugural director of emergency management. "So,

well before the coronavirus was around, when WPI was looking at how best to deal with any sort of incident—natural or manmade, the micro to the macro—the senior leadership embraced the ICS because it allows the institution to speak on the same terms as our municipal partners and it gives us credibility because it shows that we understand, within our own resources, how to organize and manage any sort of incident."

"We had the bones of an ICS in place," Solomon says, "but we hadn't tested it. We didn't have anybody who was dedicated to owning it on a regular basis. It was part of several people's jobs, and none of us was an expert in this. We knew we needed it, we knew the power of it, but I don't think we were in a position to really own it and embed it in the organization. That's why we created the director of emergency management position, and we were lucky to find someone who was an expert in this. If we didn't have someone with the gravitas and expertise of Col. Bashista, I think our response to the pandemic would have been a free-for-all."

A retired United States Army officer with more than 20 years of active-duty service, including three combat tours, Bashista came to WPI in 2018 from Boston, where he spent nine years as the director of emergency planning. In that time, he was involved in numerous emergency response operations for the city, including running its Emergency Operations Center during the Boston Marathon bombing and Watertown manhunt; hurricanes Earl (2010), Irene (2011), and Sandy (2012); and the Back Bay power outage in 2012. At WPI, he facilitated some of the first applications of the ICS methodology during planned events.

Working out of the Emergency Operations Center (EOC) in the lower level of Founders Hall, the location of WPI's Campus Police Station, he coordinated teams that watched over major events like Commencement, Homecoming Weekend, and TouchTomorrow, an annual one-day science and technology festival that drew upwards of 10,000 people to campus each year between 2012 and 2019. The EOC has the technology for monitoring media feeds, gathering the information needed to make decisions, and coordinating the response operations associated with those decisions. The composition of the group that sits at its rows of long tables depends on the nature of the incident. Key among them is the incident commander.

The incident commander is the primary source of expertise and guidance for the incident. The person who fills that role changes from event to event. For a chemical spill, it would be the director of environmental health and safety. For a tornado, it would be the chief of police. And for a public health emergency, like a small norovirus outbreak that occurred in 2019 and the pandemic of 2020 and 2021, it would be the director of health services.

"The system's flexibility is one of its greatest strengths," Bashista says. "It is designed to involve every relevant aspect of a community in terms of managing an emergency. When you drop that down on our community, there is already a mechanism for involving Facilities, the

**"If we didn't have someone with the gravitas and expertise of Col. Bashista, I think our response to the pandemic would have been a free-for-all." —Jeff Solomon**

Budget Office, Talent and Inclusion, and so on. Very little adaptation needed to be made [for the pandemic] and that adaptation came rather quickly because we had been using the system for other types of emergencies and events."

### JOINING FORCES

In the early days of the developing pandemic, WPI's emergency planners had two concerns: one immediate and one still to be assessed. The immediate concern was travel: by students and faculty advisors then working at WPI's Hong Kong Project Center, located about 900 miles to the south of Wuhan; by Chinese students who would soon be heading to WPI for the start of C-Term; and by other community members with plans to travel to and from China. Risks associated with travel are the domain of the Global Travel Review and Response Team (GTRRT), which met for the first time in mid-January to receive a briefing from Health Services on the situation in Wuhan and to begin preparing recommendations on possible changes in WPI's travel policies.

The other looming concern was the potential effect of the viral outbreak on the campus community and potential threats to WPI's operations, including the threat posed by students and faculty and staff returning to the campus from Asia. That was the kind of crisis that the Emergency Response Team (ERT) was designed to address, using the ICS process. Recognizing the overlap in interests between the GTRRT and the ERT, university leadership pulled members of both groups together to create the Coronavirus Working Group (CWG). "This put more eyes on the emerging situation," Clay says.

At the CWG's first meeting on Jan. 24, Health Services shared news that an emergency committee convened just the day before by the director general of the World Health Organization had been unable to reach a consensus on whether the outbreak constituted a public health emergency of international concern. The U.S. Centers for Disease Control had already issued a Level One Travel Advisory for China, urging travelers to use caution; it had also reported the first case of COVID-19 in the United States (the patient had recently returned to Washington state from Wuhan).

On Jan. 27, the CDC upgraded its travel advisory to Level Three, urging travelers to avoid all nonessential travel to China. Then on Jan. 30, just a day after the CWG's second meeting, the U.S. State Department issued a Level Four Travel Advisory urging Americans to avoid all travel to China. Level Four warnings apply only to areas with a "greater likelihood of life-threatening risks," the State Department noted.

At the recommendation of the CWG, the university soon recalled students and faculty members from all active global project centers. Then, in early March, in response to guidance from the CDC, the State Department, and the Massachusetts Governor's Office, it cancelled all international travel.

### WPI'S NORTH STAR

In short order, the coronavirus, SARS-CoV-2, had jumped across an ocean and landed in America. A once-isolated viral outbreak now seemed poised to become much larger, and it was beginning to appear that the university, like the rest of the world, could be in for a long siege. It was time for the temporary, ad hoc CWG to evolve into a new entity built for a long-term emergency.



Adhering to the ICS model, the Coronavirus Emergency Response Team (CERT) was born in March 2020. With the Health Services director as its incident commander, and Clay, Solomon, and Bashista as its leaders, the team would undergo six changes in composition and structure as the nature of the external threat and the needs of the campus community evolved. In each of those iterations, CERT reported to the Executive Policy Group (EPG), the university's senior leadership team, and ultimately to President **Laurie Leshin**, who would serve as the primary decision maker. As members of both CERT and EPG, Clay and Solomon served as conduits to keep information flowing between the groups.

Sticking to WPI's established emergency response structure offered two principal advantages, Bashista says. First, it enabled the university to begin addressing the pandemic early and without delay. "A lot of other institutions chose to reinvent the wheel internally," he says. "Even when the ICS approach was already available and had been used on their campuses, they didn't immediately recognize that this was, essentially, no different than any other emergency."

Second, having senior leadership involved elevated the seriousness of CERT's mission. "When senior leadership has buy-in on something, it is amazing how the rest of the organization follows," Bashista says. "Attendance at our meetings became very easy to gather up."

Along with Clay and Solomon, members of the senior leadership team often attended CERT meetings, particularly as the pandemic progressed and the threat to the campus increased, Bashista says. "As this grew bigger and bigger and the impact grew larger, you saw the active involvement, for example, of senior vice president and general counsel **David Bunis** and vice president and chief of staff **Amy Morton**. They were right there in the EOC, sitting in those chairs, working through the planning process with us, right up until we couldn't meet in person anymore."

At critical junctures, when the size and scope of the issues before CERT loomed large, President Leshin often sat in on CERT meetings to immerse herself more fully in understanding the challenges, providing real-time guidance and decision making, and seemingly memorizing every bit of data presented to her. Her presence increased during the spring and summer of 2020, as plans emerged for reopening the campus in the fall.

"Not only did she manage to stay on top of everything," Clay says, "but she was often a step ahead. Jeff and I have worked with Laurie long enough that her depth of knowledge and commitment weren't a surprise to us. But it was a new experience for some of the CERT team members to witness her leadership up close, and it was inspiring to see how her energy fed theirs, and vice versa."

From the early days of the pandemic, Leshin established a baseline for CERT decision making and a guiding principle for its deliberations: the top priority would always be the health and safety of the community. Every decision the team made and every plan it developed must meet that minimal test. It came to be known as "our North Star."

CERT was dedicated to making decisions based on data and facts, which put a premium on the flow of accurate, up-to-date information. Associate general counsel **Amy Fabiano** took on that responsibility. "Every week," Clay says, "she tracked changes in federal, state, and CDC guidelines; kept an eye on decisions made by other universities in relationship to their responses to COVID; and monitored national and local news stories about the coronavirus, cases, hot spots, and so on."

**"We had the systems in place, we had the right people around the table, and we continued to evolve, in terms of the structure, and the membership."** —Philip Clay

During critical phases of WPI's response, Fabiano compiled an analysis of the most relevant news stories and sent a weekly digest to EPG and CERT. "Amy's work allowed CERT to keep its fingers on the pulse of what was going on outside of WPI and how that might impact our operations," Clay says. "When there was a change in state or federal regulations, or new guidance on a particular part of our campus operations, Amy analyzed it, mapped it against our current protocols, and worked with departments to adapt or modify their protocols to ensure that we were in compliance."

### FEASIBLE, SUPPORTABLE, EXECUTABLE

From the start, CERT has used a deceptively simple three-word test for assessing possible actions and plans. "The planning process is always hallmarked by three dynamics," Bashista says. "It has to be **feasible**, meaning it is something within the realm of the possible given what we have on campus, what we can procure, and what we can staff. And, of course, it actually has to solve the problem. It has to be **supportable**, meaning this is something we need to maintain going forward. And then it has to be **executable**, meaning it has to be able to make the transition from a plan on paper into actual mechanics on campus to effect the correct impact on the tactical problem."

Clay cites the large-scale COVID-19 testing program developed over the summer of 2020 as an example of how a solution passed through this gauntlet. The program was a must if students and faculty were to return in the fall, because without regular testing there would be no way to track and contain the spread of the virus on campus. "When we first came up with this idea," he says, "and as the state's Higher Education Working Group was looking into it, we weren't sure that this was going to meet the litmus test for any of those three words."

In time, the pieces started falling into place. In particular, the Broad Institute in Boston agreed to assemble a high-throughput operation for analyzing thousands of tests a day and reporting results back to campuses within a window that eventually shrank to less than 24 hours. Using a platform created at Tufts University, WPI built dashboards that could take the daily tests data and turn it into trends that could be monitored daily by CERT and displayed for the campus community. Also important, the university looked at its budget and determined that it could pay for the testing program.

As often happened in the course of CERT's work, answering one question would bring others to the fore, Clay notes. "Once we start testing, what do we do when students test positive? What about their close contacts? How do we follow up with them? Where are the affected students going to live? Will they stay in place, or will they need to move? If it's the latter, where will we create isolation and quarantine spaces? How are we going to feed students in those spaces? Once we made the decision to test, it opened up a host of other decisions that needed to be made."

"And this," he adds, "is another way we benefited from starting to think things through much earlier than many other institutions. We had the systems in place, we had the right people around the

table, and we continued to evolve, in terms of the structure, and the membership. Many of our peer schools went remote in March 2020, as we did, but they really didn't start to unpack these other kinds of decisions until July. That's why some schools said, "We don't have testing or appropriate infrastructure in place so we're not able to bring people back."

### PHASES AND CHANGES

Like a chameleon that can change its appearance to blend in with its environment, CERT changed its structure and composition to suit the evolving needs of the university. Its first post-CWG phase, known as CERT 2, was concerned with such pressing issues as how WPI's academic operation would have to change should the campus shut down, how a prolonged shutdown might affect the university's operations, and how WPI could recruit a new class if campus visits and information sessions could not take place. The CERT organizational chart for that phase was dominated by campus units responsible for those areas.

A short-lived CERT 3 explored options for Commencement (in-person or not?), summer programs (in-person or remote?), and the logistics of moving students and their belongings out of residence halls once the decision was made to offer all classes remotely. "At the same time," Bashista says. "We had one group focused on recovery and reopening, because even at that stage we wanted to dedicate folks to looking at how do we return once this is over. If you wait until it's over to start planning, it's too late. If you are constantly working on these things, informed by the incident commander, it gives the senior leadership viable options to select from to guide the organization."

Recovery and reopening dominated the work of CERT 4, which began in the spring of 2020. The organizational chart for that phase is filled with task forces working on the challenges of **delivering** academics with multiple modalities (in-person, remote, and hybrid), **restarting** the on-campus research enterprise, **supporting** global project work when travel was still not permitted, **managing** a de-densified residential life, **reconfiguring** events and food service, and many other details of repopulating a campus in the midst of a pandemic.

"Once a plan is in place, it's not a self-licking ice cream cone," Bashista says. "A group has to be there managing it and making sure that what was planned continues to be feasible, supportable, and executable." That was the mission of CERT 5, the organization dedicated to executing the return and recovery plans and adapting and adjusting to the changing conditions on the ground. With units dedicated to business operations, academics, student life, employees, and communications, and with the constant flow of intel from Fabiano, CERT navigated one of the most intense and taxing phases of the pandemic at WPI.

**"No independent action is allowed. It's like the cylinders on a car. They work in a synchronized manner. When they don't, the car doesn't run."** —Ron Bashista

### NO INDEPENDENT ACTION

Throughout the crisis, CERT has served as the university's central coordination agent — evaluating the latest information, formulating plans for the senior leadership to consider, and coordinating and evaluating the work of the rest of the community as those plans were executed. "CERT is the primary coordinating agency because it involves representatives from the entire campus and every aspect of campus operations," Bashista says. "The section chiefs and branch leaders are empowered to work issues, because we cannot allow ourselves to get bogged down in the day-to-day, dot the 'i' and cross the 't.' So once things are approved, they are pushed down."

"But at any level," he says, "if someone identifies a war stopper—something that will take us off our game—they highlight it and they bring it to the collective group, along with what they have identified up to that point as potential solutions. Above all," he adds, "and this is always there in red on our slides—everything, every decision, has to be a collective, synchronized action. No independent action is allowed. It's like the cylinders on a car. They work in a synchronized manner. When they don't, the car doesn't run."

At universities like WPI, community members normally have a fair amount of leeway in how they carry out their responsibilities, says Clay. "We have parameters and guidelines for everyone," he says, "but there is a lot of latitude in terms of how people navigate their day. When people are used to acting on their own, they have to learn to adapt. We occasionally have had to push back against independent actions, but not too often."

Learning to route all pandemic-related communications through CERT is an example of one area where unlearning old ways was sometimes difficult, he says. "People weren't going rogue, but there was bristling at times. We were just trying to get people to recognize that this is a synchronized effort, so we need to work collaboratively. If we don't, that's when things can go off the rails."

### TRIGGERS AND CONTINGENCIES

Another way CERT worked to keep the university's pandemic response from leaving the tracks was to look ahead, plot out the range of scenarios that could befall the campus, and work out contingency plans for many of them. Key to this kind of planning is the identification of triggers that signal the need to change course and put a new plan into action. Triggers include pre-identified numbers of new COVID cases, low levels of cleaning supplies, and nearly full quarantine and isolation spaces. "These are the kinds of things that could have led to our having to shut the university down and operate remotely again," Clay says.

"We developed road maps," Solomon says, "sets of plans that were not fully developed, but that allowed us to say, should we fall into this category, that these are the kinds of things we would have to start doing pretty quickly."

"If we were to reach a trigger point," Bashista says, "we had already identified two or three feasible, supportable, executable contingency plans that could be further developed and executed. The triggers alert everyone to a problem and give you the time and space to maneuver before it becomes catastrophic."

"Colonel Bashista likes to say, 'The virus gets a vote,'" Clay says. "We make our plans, but the coronavirus doesn't give a lick about them. You are always planning against the unknown."



**“In addition to dealing with all the challenges of COVID, we all had our own personal challenges, and none of us could be there in person to be there for each other.” —Jeff Solomon**

The triggers that were in place during the fall and winter of the 2020–21 academic year had been developed the previous May, as CERT made plans for the campus reopening. “That’s when Health services said, ‘This is where we would break,’” Bashista says. “If we had this many cases, or if we saturated our isolation and quarantine capability, or if we had this much of an outbreak in a residence hall, the system would break.”

Throughout that fall and winter, CERT carefully tracked COVID-19 cases in students and the number of students in quarantine and isolation, along with the number of cases and the positivity rate in Worcester. The trends in all of those statistics began turning upward in early November, perhaps precipitated by Halloween parties. As the numbers edged toward the pre-set triggers, and as uncertainty grew over how the pandemic might progress during the upcoming holiday season, when the virus would likely spread during family gatherings, CERT pulled out its contingency plans.

To keep possibly infected students away from campus, WPI told students who headed home for Thanksgiving not to return for the balance of B-Term. And to give the university some breathing room between the holidays and the start of classes, it delayed the start of C-Term. In addition, the academic calendar was adjusted to reduce the lengths of breaks to encourage students to stick around and not head off campus.

“Honestly,” Clay says, “our students were phenomenal in their response. If they had not taken it as seriously as they did, we would not have been successful, because we would have had good plans that no one followed. Good plans on our part; good thinking went into developing them. But our students were the key to our success.”

## THE DELICATE BALANCE

During those tense days of November and December, the pre-set triggers led the university to move into more restrictive levels of its campus response plan, which meant that students were confined to their residence hall rooms except when they were attending classes or labs, getting meals, or seeking medical care. For Clay, this time epitomized the delicate balance CERT sought to maintain between the greater good (keeping the campus open, keeping people safe, minimizing the spread of the virus) and the impact the rules and restrictions had on people’s lives.

“We were making decisions based on the triggers,” he says, “and they told us we needed to ramp things up and put more restrictions in place to keep the campus open and keep people safe. But we knew that in some cases those decisions were going to make it harder for students and for our employees.”

Students isolated in their rooms (some of whom may not even have had a roommate to talk with because the roommate didn’t return to campus after Thanksgiving) felt isolated and disconnected. “There was such a psychological weight,” Clay says. “Plus, people’s lives were

being affected in other ways. Many of our community members had family members or friends who were affected, who got sick, and, in some cases, who died. So you add to the psychological weight the anxieties about, ‘Am I safe? Am I putting my family members at risk?’ That’s where I struggled the most. These weren’t arbitrary decisions we were making just to be restrictive, but we were always struggling to balance physical health against the impact on mental health.”

Solomon says he saw this struggle play out in his team. “In addition to dealing with all the challenges of COVID,” he says, “we all had our own personal challenges, and none of us could be there in person to be there for each other. That added another layer of difficulty, because we were together but we weren’t *together*. And we were all doing our regular jobs along with the additional work associated with keeping the campus safe and open.”

For Clay, the importance of the work he and others did for CERT helped balance out the hardships and the constant stress. “This is the hardest, most challenging, and most important work I have done in my career,” he says. “The opportunity for the university to stay open and for students to take classes—that was the real motivator. The work was worth it because it was for the greater good of this amazing institution.”

## CERT 6 AND BEYOND

In a classic action movie, the heroes endure seemingly insurmountable challenges and face peril after peril, but they triumph in the end, the movie reaches a satisfying denouement, and the audience goes home relieved and happy. As the eventful 2020–21 academic year neared its end, CERT switched to its sixth iteration, with a focus on the fall of 2021 and the transition to something approaching the pre-pandemic normal. Will this be the final version of CERT? Has the time come for the team to walk collectively into the sunset?

Bashista says the end of CERT will be a gradual one. “You won’t see the end come abruptly,” he says. “CERT adapted through the depth of the pandemic to whatever the university needed. It will continue to adapt to those needs until such time as it is no longer needed.”

While CERT may fade away, its lessons should not, Bashista says. “We had an exceptionally sound process,” he says. “We stayed ahead of the curve because of that process. We had absolutely the right people. And by right people, I don’t just mean on CERT, but across the campus. Above all, we had a very engaged senior leadership team that was monitoring this closely. And we certainly had the community—which is all inclusive of students, staff, and faculty—to make this work. Because the greatest plans and the most informed decisions come to no end unless there is a willingness to see that through. This all came together in a perfect storm of goodness.

“This has been 18 sustained months of working together on a daily basis, getting to know others on campus, understanding what they are responsible for, what they are capable of, and what they’re concerns are—and understanding that we can adapt a process as a means of doing business to manage pretty much anything, collectively, as a community. This understanding is what can’t go away after this is over ... and I don’t foresee it going away.”

## ALL HANDS ON DECK

The membership of the Coronavirus Emergency Response Team (CERT) changed from time to time as the team evolved through several phases reflecting the changing needs of the university. Listed below are the core members (those who have been CERT members all along), those who have joined the team during various phases of the response, and the members of WPI’s senior leadership team, who have been actively engaged with CERT throughout.

### CORE MEMBERS

**Ronald Bashista**, Emergency Preparedness Director

**Eric Beattie**, Vice President for Campus Planning

**Philip Clay**, Vice President for Student Affairs<sup>1</sup>

**Kristan Coffey**, Director of Talent and Human Resources

**Alison Duffy**, Director of Strategic Communications

**Amy Fabiano**, Associate General Counsel

**Chloe Green**, COVID Testing Coordinator

**Jessica Grimes**, Director of Content Strategy

**Jennifer Hapgood-White**, Isolation/Quarantine Coordinator

**Rachel LeBlanc**, Associate Vice President for Strategic Initiatives

**Cheryl Martunas**, Director of Public Safety and Chief of Police

**Eileen Brangan Mell**, Assistant Vice President for Public Relations

**Anne Ogilvie**, Director for Team Learning

**Patty Patria**, Vice President for Information Technology and Chief Information Officer

**Lisa Pearlman**, Director of Health Services

**Emily Perlow**, Associate Dean of Students

**Daniel Sarachick**, Director of Environmental Health and Safety

**Jeffrey Solomon**, Executive Vice President and Chief Financial Officer<sup>1,2</sup>

**Casey Wall**, Assistant Dean and Director of Residential Services

**Colleen Bamford Wamback**, Director of Public Relations

### MEMBERS DURING VARIOUS PHASES

**Andrew Baron**, Associate Director of Public Relations<sup>2</sup>

**Cathy Battelle**, Associate Registrar

**William Battelle**, Events Director

**Kristen Billiar**, Professor and Head, Department of Biomedical Engineering

**Emily Burke**, Contact Tracing Coordinator<sup>2</sup>

**Mary Calarese**, Associate Vice President of Finance

**Colleen Callahan-Panday**, Director of International Student Life

**April Childs**, Registered Nurse and Clinical Coordinator

**Meredith Clancy**, Organizational Effectiveness and Talent Development Specialist<sup>2</sup>

**Laurie Colella**, Director of Procurement Services

**Gary Collins**, Associate Director of Global Risk Management<sup>2</sup>

**Christina DeVries**, Executive Director of Advancement Services

**Lisa Eckelbecker**, Research Communicator

**Adam Epstein**, Director of Undergraduate Enrollment Systems and Operations

**Gina Ferraro**, Senior Executive Administrator, Talent and Inclusion

**Gregory Fischer**, Professor of Robotics Engineering

**Rory Flinn**, Assistant Dean of Graduate Studies

**Matthew Foster**, Associate Director of Residential Education

**Sharon Gaudin**, Science Writer<sup>2</sup>

**Sheila Georger**, Executive Director of Marketing Communications

**Anna Gold**, University Librarian

**Stacey Happy**, Digital Media Associate

**Patrick Hitchcock**, Controller

**Michelle Jones-Johnson**, Vice President for Talent Development and Chief Diversity Officer<sup>2</sup>

**Joe Kraskouskas**, Director of Dining Services

**Amy Beth Laythe**, Senior Associate Director of Residential Operations

**Julie Loveless**, Associate Director of Admissions

**Stephen Marsh**, Associate Director of Public Safety

**William McAvoy**, Vice President for University Advancement<sup>2</sup>

**Sarah Miles**, University Registrar

**Alicia Mills**, Vice President for Talent and Inclusion and Chief Diversity Officer ad interim

**Charles Morse**, Associate Dean and Director of Counseling

**Ron O’Brien**, Director of Facilities

**Diane O’Keefe**, Director of Marketing

**Andrew Palumbo**, Assistant Vice President for Enrollment Management and Dean of Admissions and Financial Aid

**Jennifer Parissi-Forti**, Events Planner

**Julia Quinn-Szcesuil**, Senior Writer and Project Manager

**Allison Racicot**, Writer and Project Manager

**Reeta Rao**, Professor and Head, Department of Biology and Biotechnology

**Julie Richard**, Assistant Director of the Global Experience Office

**Regina Roberto**, Director of Health Services<sup>2</sup>

**Christine Sharry**, Assistant Dean of Students Activities

**Greg Snoddy**, Dean of Students

**Susan Sontgerath**, Director of Pre-Collegiate Outreach Programs<sup>2</sup>

**William Spratt**, Director of Facilities Operations<sup>2</sup>

**Donna Stock**, Vice President of University Advancement

**Kristopher Sullivan**, Associate Vice President for Academic Affairs

**Mark Taricco**, Executive Director of IT Infrastructure and Operations

**Melissa Terrio**, Executive Director of Graduate Recruitment and Admissions

**Matthew Thaler**, Deputy General Counsel

**Suzanne Weekes**, Associate Dean of Undergraduate Studies<sup>2</sup>

### SENIOR LEADERSHIP

**David Bunis**, Senior Vice President and General Counsel

**Terri Camesano**, Dean of Graduate Studies

**Maureen Deiana**, Vice President and Chief Marketing Officer

**Dana Harmon**, Director of Physical Education and Athletics

**Arthur Heinricher**, Dean of Undergraduate Studies

**Laurie Leshin**, President

**John McNeill**, Dean of Engineering

**Amy Morton**, Vice President and Chief of Staff

**Kent Rissmiller**, Dean ad interim, The Global School (through July 2021)

**Wole Soboyejo**, Provost

**Bogdan Vernescu**, Associate Provost for Research

<sup>1</sup> ALSO A MEMBER OF THE SENIOR LEADERSHIP

<sup>2</sup> HAS SINCE RETIRED OR LEFT THE UNIVERSITY

<b>2019 DEC. 31</b>	Local health authorities report that a novel coronavirus	has caused a cluster of pneumonia cases, with no deaths, in Wuhan, China	<b>2020 JAN. 12</b>	China shares genetic sequence of the SARS-CoV-2 virus	<b>JAN. 14</b> WHO reports possible human-to-human COVID-19 transmission with risk of a wider outbreak	<b>JAN. 20</b> First COVID-19 case in the United States (Washington state)	<b>JAN. 24</b> First meeting of WPI’s Coronavirus Working Group
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ANSWERING THE CALL

WHEN THE COVID-19 PANDEMIC CREATED SOCIAL NEEDS, WPI FACULTY, STAFF, STUDENTS, AND ALUMNI ASKED, “HOW CAN I HELP?”

“What if,” “why does,” “how can”—WPI is all about questions and how to answer them. The university’s closing its doors in the wake of the COVID-19 pandemic back in March 2020 sparked dozens more, with one in particular quickly becoming the most prevalent: “How can I help?”

For **Kristin Boudreau**, professor of humanities and arts, the answer came—appropriately enough—in the form of another question. “[Professor of biology and biotechnology] Tanja Dominko texted me and asked if I knew how to sew and would I lead an effort to make face masks,” Boudreau says. Dominko’s commitment to helping and getting work done (and her complete confidence in the fact that Boudreau could help) spurred her to say, “Yes.”

Boudreau put out a call on WPI’s faculty/staff email listserv, began researching peer-reviewed, credible information on making safe and effective homemade masks for healthcare workers, and created a Facebook group, which quickly grew to more than 200 members.

“Everyone stepped up,” she says. “We were sewing all the time. People would leave sewing machines and supplies on my porch; I would drive to other towns to pick them up or drop them off ... everyone was so selfless in all their efforts.”

While Boudreau’s porch served as the physical presence for the group’s efforts, a virtual one was also needed. Enter **Ryan Meadows**, director of pre-collegiate outreach programs ad interim: she took on the responsibility of not only running the Facebook group, but contributing to mask-making herself.

Meadows and her family and friends (many of whom had never sewed before) were quick to create an assembly line of sorts—one friend who didn’t sew washed and cut fabric and delivered it to Meadows’s home. Meadows assembled the masks, inserting a nose piece in each. Then she and her family sewed it all together, eventually producing about 1,500 masks.

“We were learning as we sewed, making masks, and helping save lives,” she says. “It was surreal ... but the community needed it, and it was something we could help with. We had the resources, we had people who cared, and we did it.”

The handmade masks were not the only personal protective equipment WPI sent out into the community. In an effort coordinated by Dominko, **Glenn Gaudette**, at the time a professor of biomedical engineering, and **Dan Sarachick**, director of environmental health and safety, the university scoured its storage rooms and supply closets and packed up multiple pallets of supplies, mostly from WPI’s research labs: more than 39,000 nitrile and latex gloves, more than 800 surgical masks, 700 surgical caps, 41 protective gowns, 200 chemical protective suits, and 4,000 cotton-tipped swabs, among other items. The pallets were delivered to UMass Memorial Medical Center and the Massachusetts Emergency Management Agency.

HELPING THE HELPERS

**Katie Bilotta**, director of community relations, who’d joined WPI only a few months prior to the pandemic, had already worked with WPI’s Government and Community Relations team to orchestrate other efforts, like collecting and donating surplus rolls of toilet paper from now-empty campus buildings. She coordinated hundreds of face mask ordering and drop-off efforts with local organizations, while **Chris Bellerive**, senior operations manager in WPI’s Biomanufacturing Education and Training Center, joined Boudreau every day for five months to sterilize masks so recipients would be confident they wouldn’t import COVID-19 into their facilities.

The result? Over 7,000 masks were made and delivered to homeless shelters, medical clinics, drug rehab treatment centers, assisted living communities, and hospitals in and around Worcester. “There were so many in the city putting their own lives on the line,” Boudreau says. “Knowing that they didn’t have the protective gear they needed and that we could help them with that kept us going.”

“The images of a mother waving from a window at Great Brook Valley after receiving a package of three masks for her family,” Bilotta says, “the smile from a nurse at a local nursing home when a box of masks was being delivered to the reception desk, the security guard opening the door for me at Family Health Center for its monthly delivery of masks to disseminate to their patients ... they’ll be forever emblazoned in my mind.”

The urgent need for personal protective equipment (PPE) didn’t stop there, and neither did the WPI community. **Mitra Anand**, makerspace advanced technology and prototyping specialist in the Department of Innovation and Entrepreneurship, and **Adam Sears**, director of Innovation Studio technical operations, felt the same drive to help as did Boudreau and her team.

After speaking with **Donna Levin**, then the executive director of innovation and entrepreneurship, and with encouragement and support from **Erica Stults**, application scientist in Academic and Research Computing, Anand and Sears set to prototyping 3D-printed face shields. They worked with local groups of physicians, doctors, and nurses to get their input on requirements and feedback before focusing on a specific design, one approved by the National Institutes of Health.

Then, in true WPI fashion, they hit the ground running. Together with other members of the Innovation and Entrepreneurship and Information Technology teams, they crafted more than 1,200 face shields for local hospitals, nursing homes, and clinics, as well as more

than 300 for WPI faculty, TAs, police officers, and other support staff on campus. Bilotta says her office distributed 1,000 of the 3-D face shields to local organizations.

EMPOWERING OTHERS GLOBALLY

Once mass manufacturers caught up to the demand around June 2020, Anand and Sears pivoted their efforts to helping others gain the skills needed to supply their own communities with face shields. Through the COVID Response for Africa program, hosted through the Provost’s Office, WPI sent 3D printers to university partners in Africa, and Anand and Sears hosted virtual workshops focusing on a range of design and project consultations.

“Since there wasn’t a demand locally,” Anand says, “the best thing we could do going forward was to empower others and help them make a difference in their communities.”

The team followed up on these global efforts in March 2021, with new partners and faculty from across Africa attending advanced workshops where Anand and Sears demonstrated how to reduce print times and use fewer materials while creating the same impact, and sharing other cost-cutting measures across similar initiatives.

“It felt good to use our resources to help our community and others in need,” Sears says, adding the team felt lucky to have had access to such equipment and resources. “It seemed a shame to leave [the printers] sitting by not helping. It felt really good to give back and make an impact outside our lab walls.”

Anand agrees, adding, “It was a challenging journey for us, with lots of learning on the fly and going from there, but every bit of effort we put in was worth it to see our work in the hands of people who needed it.”

In addition to the virtual efforts made by Anand and Sears, WPI expanded its longtime Math and Science for Sub-Saharan Africa initiative in April 2020. This expansion arranged for 3D printers and

other materials to be sent to Nigeria, Rwanda, Niger, The Gambia, Mauritius, and Ghana, facilitating the manufacturing of masks, face shields, and parts for simple automated ventilators. Teams in those countries also had access to online training modules and other open-source design plans.

“It is wonderful to see African institutions and WPI working together to use and adapt technology to meet African needs,” said **Sajitha Bashir**, World Bank adviser to the education global director on science, technology, and innovation, in a 2020 press release. “The impact of this program to address timely and critical issues speaks to the strong motivation to build the technical-scientific capability of Africa.”

**GENERATING SMILES**

While many in the WPI community were putting PPE in the hands of those on the front lines, others focused on a different kind of necessity: care packages and handwritten notes and cards. These efforts provided a much-needed touch of humanity during a time when touch itself was scarce.

Members of the InterVarsity Christian Fellowship kicked things off by partnering with Grace Presbyterian Church to create care packages for their peers who were in isolation and quarantine due to COVID-19. InterVarsity members came up with a list of items for students—from puzzles and stuffed animals to bags of tea and jars of homemade honey. Members of the congregation pitched in to purchase items before the care packages were assembled and dropped off at the Student Development and Counseling Center, where they were then safely distributed to affected students.

“We wanted to be a blessing to those around us, and with the recent increase in cases, we saw that there was an immediate opportunity to help and encourage our isolated peers,” InterVarsity Christian Fellowship member **Joseph Yuen ’21** said in a December 2020 interview in *The Herd*, WPI’s digital news platform.

A March 2021 card-writing campaign led by Bilotta and **Matt Foster**, associate director of residential services, in partnership with Elder Services of the Worcester Area (ESWA), was aimed at letting local Meals on Wheels recipients know they were not alone. Inspired by a past ESWA campaign in which she and her husband participated, Bilotta brought the project to Foster, who shared it with residential students, the Student Activities Office, and the entire WPI community. All in all, about 130 participants made over 800 cards.

“It’s about giving to give,” says Bilotta, who used her coordination skills not only for mask orders and delivery, but for the notes and cards as well, “and hoping that what you do brings a smile to somebody’s face on the other side.”

Whether someone received a face mask, a face shield, a care package, or a card from a member of the WPI community, it’s safe to say that those smiles were wide.

—Allison Racicot



<b>JAN. 27</b> CDC issues a Level Three Travel Advisory urging travelers to avoid	all nonessential travel between the United States and China	<b>JAN. 30</b> WHO declares COVID-19 a public health emergency of	international concern; U.S. State Department issues a Level Four Travel	Advisory, urging Americans to avoid all travel to China	<b>FEB. 1</b> Massachusetts is the fifth U.S. state to report a case
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<b>MARCH 2</b> Second confirmed case of COVID-19 is reported in Massachusetts	<b>MARCH 3</b> WPI suspends university-sponsored international travel	<b>MARCH 6</b> New \$8.3 billion COVID-19 bill signed, providing funds for non-Department of Defense relief	<b>MARCH 8</b> Massachusetts now has 28 confirmed cases of COVID-19	<b>MARCH 10</b> Massachusetts cases at 92; state of emergency declared in the commonwealth	<b>MARCH 11</b> WHO declares COVID-19 outbreak a global pandemic; 118,000 cases now in 114 countries; WPI
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## BUILDING A RESPONSE

SPACES, EQUIPMENT, SUPPLIES TAKE ON A NEW SIGNIFICANCE DURING A PANDEMIC

From the start, work on guidelines and plans for keeping the campus and its nearly 7,000 students and more than 1,700 faculty and staff members as safe as possible was one of the highest priorities for CERT (the Coronavirus Emergency Response Team).

To achieve that goal, **Eric Beattie**, vice president for campus planning and facilities management, turned to his 102-member campus operations team, which includes grounds, custodial, the trades and power plant, design and construction, environmental health and safety, campus events, and campus planning. Each of these experts in their respective fields contributed in many ways.

While most of the WPI community left campus in March 2020 after Governor Baker's decision to shut down the state, some students could not go home. For Beattie's team, "Job one was to help keep those who remained safe, following guidance from the CERT experts, which, in turn, were based on federal and state guidelines."

Beattie found confidence in the experts the university had at its disposal. "The fact that WPI is a technical school definitely had an impact on the success of our efforts," he says. "Its leadership, academic and research staff, and Board of Trustees are scientists, engineers, and problem solvers who worked hard to make the best decisions regarding the safety of our campus community."

### FIRST THINGS FIRST

What is usually a behind-the-scenes operation took center stage as the campus response to the pandemic quickly rallied to implement a variety of safety measures.

Driven by directives from CERT, Beattie, as the department's lead on the team, helped set the parameters for an on-campus experience. "Our initial goal was to de-densify the campus by removing tables, chairs, and other furniture items," he says. "We also installed signage

to inform those who remained on campus about pandemic protocols, and added protective barriers in places where face-to-face interaction was necessary."

The signage consisted of more than 2,000 floor stickers, wall signs, and banners designed and produced in conjunction with the Marketing Communications Department. Between 200 and 300 clear plastic Lexan barriers were installed, including at the front desks in Gordon Library and the Sports and Recreation Center.

Also among those first steps was getting PPE (personal protective equipment) and cleaning supplies in place. But with a worldwide shortage of face coverings, disinfecting wipes, hand sanitizer, cleaning products, and other important supplies, that proved challenging. At the height of the shortage, Facilities purchased products from wherever they could be found to piece together a small cache as a disrupted supply chain was caught short-handed. As PPE supplies became more available, the department maintained a three-month supply with a plan to draw down those reserves when the pandemic began to wane.

As a result of the initial shortage, employees were responsible for their own PPE in the early months of the pandemic. But by autumn, the university was able to supply employees and students with the products they needed. The Facilities team also created supply stations in each of the 91 buildings under its management. Thousands of items had to be ordered to stock these stations, which were located in entry ways, in every classroom, and on every floor of nearly every building.

For the most part, this work required the Facilities management

delays start of D-Term, will offer classes remotely; all large events, meetings, and athletics are cancelled;	students who are living on or near campus are asked to return home	<b>MARCH 12</b> WPI's Coronavirus Emergency Response Team meets for the first time	<b>MARCH 13</b> COVID-19 outbreak declared a national emergency; Massachusetts prohibits gatherings of more	than 250 people; WPI urges employees who can work from home to do so; campus is open with restrictions	<b>MARCH 14</b> Worcester reports its first confirmed case of COVID-19
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**"We are a team of doers and we will always figure out a way. I am extremely proud of all that our team accomplished." —Ron O'Brien**

team to be on campus. To do so safely, the team developed a rotating work schedule that allowed for appropriate social distancing between co-workers even as the team completed an increased number of work responsibilities.

### SCIENCE, DATA, AND KNOW-HOW

From March to May 2020, Beattie worked from home while **Ron O'Brien**, director of facilities, whose work focused on the physical plant, was stationed on campus. Over the summer, when the university decided to bring students back for the start of A-Term, with all students having the option of attending classes in person, remotely, or with a hybrid of the two, the work of preparing the physical campus became intense, and the Facilities team employed external contractors during the summer to ensure that everything would be ready in time.

"HVAC systems were modified to increase fresh air intake and high-efficiency filters were installed to enhance air quality," O'Brien says. "Sanitation protocols underwent changes to make them more robust, and bathrooms, elevators, and other small spaces were operated at reduced capacities with intensive regular cleaning."

In addition, pedestrian patterns were altered to create one-way traffic. Doors were marked as entry- or exit-only, and stairways and elevators were adapted with code compliance and safety considerations at the forefront of the planning. Floor stickers reminded people to stay six feet apart and provided directional instructions for pedestrians.

With students scheduled to return the third week of August 2020, and classes slated to begin on the 28th, the team needed to downsize classrooms to no more than 40 percent of capacity to comply with the recommended six feet of distance. For very large classes, instruction would happen remotely, with small working groups able to meet in person on campus.

To create the requisite six feet of distance inside classrooms, desks and chairs were removed, a massive effort accomplished by Facilities staff. O'Brien converted a WPI building on Sagamore Road into a storage space for the desks, chairs, and other furniture removed from campus buildings. "Hundreds of pieces of classroom furniture were removed to create enough space to allow for social distancing," he says, "Because of its extensive array of buildings, we were able to use space that the university already owned."

### NEW HOUSING OPTIONS

The Facilities team worked closely with Residential Services to find ways to create more student housing in order prepare isolation spaces for students who tested positive for COVID-19 and quarantine spaces for those who had been exposed to the virus.

<b>MARCH 15</b> Gov. Charlie Baker orders all Massachusetts schools to close; gatherings over 25 are	prohibited; restaurants are ordered to switch to take-out and delivery only	<b>MARCH 16</b> Major hospitals in Massachusetts in need of PPE; ask public for donations of masks	<b>MARCH 17</b> All 50 U.S. states have confirmed COVID-19 cases	<b>MARCH 18</b> All WPI spring classes will be remote; all events through D-Term cancelled; no visitors on	campus; all active hiring paused; residential students who traveled home will not return
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They turned to the WPI townhouses, a complex of 108 units, about 60 percent of which were slated to be removed to make way for a new residence hall. With that project on hold, 65 units were quickly prepared for use as isolation and quarantine spaces. Students who needed to use these units were tended to and supplied with clean linens and food delivered to their doors by the university's health and residential services teams.

Using data and determining the capacity at which they could safely care for ailing or exposed students, CERT established a threshold of 75 percent of the quarantine and isolation units. In other words, if roughly 48 units became occupied, it would trigger a different protocol for the campus community, one requiring a lockdown, among other restrictions. Fortunately, that threshold was never reached.

Anticipating the need to treat students with COVID-19-related symptoms, and wanting to keep those cases separated from students seeking routine medical care, WPI's Health Services facility became a dedicated COVID-19 treatment center. Another location was identified and quickly renovated to create an annex where providers could care for non-COVID-19 cases. This separation, combined with intensive contact tracing, helped mitigate the spread of COVID-19 on campus.

### COMMUNITY SAFETY IS PRICELESS

The cost of renovations, signage, PPE supplies, cleaning equipment, and overtime were significant, but judging by the results, it was worth it. No member of the on-campus community was lost to the pandemic, and for that, the entire team is breathing a sigh of relief (though music professor Joe Policelli was infected while off-campus and passed away in April 2020). A safe and enriching academic experience was the outcome of the hard work of the Facilities staff, who labored side-by-side with many other departments to create a united team. WPI, known for its project-based, immersive style of learning, stepped up to the challenge and tackled the coronavirus project as if lives depended on it—which they did.

O'Brien says there were positive outcomes of the pandemic, not the least of which was the discovery of just how nimble the WPI workforce can be. "Our ability to work from home was enhanced by the IT department's rerouting of our phone calls," he says. "Because we could take calls on our laptops, we could address issues with little to no delay. It was amazing to watch how WPI leadership made rational, bold decisions, such as holding in-person classes, which were backed by science.

"Some members of the community will continue to work remotely," O'Brien adds. "So this option will help keep some of our staff at home during off hours, when possible, but still get the job done. We are a team of doers and we will always figure out a way. I am extremely proud of all that our team accomplished."

—Sharyn Williams



HEALTH ON THE LINE

HOW WPI BUILT A HEALTH INFRASTRUCTURE TO HELP MANAGE A GLOBAL PANDEMIC

As the world faced down the highly contagious and sometimes lethal SARS-CoV-2 virus, which causes COVID-19, WPI had a singular goal in mind—its North Star—keeping the community as safe and as healthy as possible. But with a mobile, global population and an invisible disease, how could it even begin to do that?

At a university known for project-based learning, it’s no surprise that tackling this problem in a very WPI way was the key to its success.

EVERYTHING CHANGED

Long before widespread closures, skyrocketing cases and fatalities, and deep fear settled in, WPI’s Health Services staff members had a simple routine; they took care of sick students. And while the conditions they helped manage and treat were varied, and some were quite serious, they had never seen anything like COVID-19.

In early spring 2020, in what seemed like the blink of an eye, everything changed. Health Services morphed into a pandemic response team focused on protecting the health and well-being of thousands of students and employees against a virus the world knew little about.

“In following the university’s Emergency Response Team design, because COVID-19 posed a health threat, WPI’s Health Services leader has served as the incident commander since we started meeting to track the progress of the virus back in January 2020,” says **Ron Bashista**, director of emergency management. “With community lives and safety at risk, and in the midst of a growing and evolving public health crisis with a lot of moving parts, this has turned out to be a massive, long-term, and critically important job. There were also significant personnel changes that posed challenges.”

As COVID-19 picked up speed in June 2020, the university’s health services director retired, taking advantage of a special early retirement incentive program. Upon her departure, **Charlie Morse**, associate dean and director of counseling in the Student Development and Counseling Center (SDCC), stepped in to lead (“Q & A with Charlie Morse,” *WPI Journal*, Spring 2021); he spent the summer building a public health office from the ground up—assembling a health team, establishing COVID protocols and policies, and collaborating with others on

campus to develop a plan for technical systems and dashboards, testing, tracking, and cleaning.

Thanks to his efforts, **Lisa Pearlman**, director of health services, came on board late in the summer of 2020 to take over the new Health Services team and continue building an infrastructure in time to welcome thousands of students back to campus. (“Conversation with the President,” *WPI Journal*, Winter 2020.)

“Everyone was learning; it was trial by fire,” she says. “And the pandemic response was all encompassing. We were trying to be prepared for every worst-case scenario.” With an immediate need to prepare for the campus reopening, the university also needed to have plans at the ready should an immediate shutdown be necessary. Those plans would be developed in concert with the Coronavirus Emergency Response Team (CERT); in fact, the team’s expertise was critical to directing the university’s rapid-fire response to health-related decisions. And in a pandemic, virtually every decision connects with health.

NEW TEAM, COMMON GOAL

But merging health expertise and operational planning required additional competencies. **Rachel (Bowers) LeBlanc ‘02**, associate vice president for strategic initiatives, joined the health team’s efforts in July 2020 when many structures were in place but many more were needed.

“When I came to the health team, we knew we were going to do COVID testing with the Broad Institute, and we knew we were going to need space for that,” she says. “We realized pretty quickly that we didn’t have the staffing to do this by ourselves.” New hires came on board, including **Chloe Green** as testing coordinator and **Jen Hapgood-White** as isolation and quarantine coordinator. A bit later, **Emily Burke** joined the team to bolster its contact tracing capabilities.

In true WPI fashion, LeBlanc says the team began with a broad assessment of the problems and possible solutions. They looked at what other schools were doing, remained looped into the state’s constant stream of policies and guidance, and became anchored to endless spreadsheets for any imaginable detail. Through all of this they worked closely with **Emily Perlow**, associate dean of students, and teams from the Facilities Office.

**Dan Sarachick**, director of the Office of Environmental Health and Safety (EHS), helped design the physical layout of the testing center in Harrington Auditorium (where tests would be collected and processed, and how traffic would flow, for example). He also developed and trained the Deep Clean Team, critical to the success of the testing program and many other aspects of WPI’s efforts to protect the health of the community. To reduce the risk of spreading the virus, the team cleaned areas in campus buildings where people who tested positive had been, including the isolation and quarantine spaces in the WPI townhouses, which ensured that these spaces would be ready should a surge occur. Later, he trained the Deep Clean Team to run the testing program after contracted observers had finished their assignment. The team took full control of the program in summer 2021, a considerable savings for the university.

“I have done a fair amount of systems engineering and that was helpful in determining the requirements, process, and definitions,” LeBlanc says, adding that the team approach made all the difference. “We all worked really closely, and the idea of no independent action [a CERT guiding principle] was important.”



ALL ABOUT THE DETAILS

The level of detail in the COVID-related health work is astounding, and one question invariably led to another.

“We started with a baseline for the testing, for example,” LeBlanc says, and then the scope broadened. “How often should people be tested: once or twice a week? What would the stations look like? How will individuals move through the testing site? How will we handle materials safety? What about testing people in residence halls or in fraternity or sorority houses?”

Every day brought new variables. Health team members had to identify any positive cases each day and find and notify all of their close contacts. They needed to figure out who needed to be moved into isolation or quarantine, and then set in motion all the cleaning that needed to take place.

The team’s boots-on-the-ground tenacity to mitigate the virus meant everyone did what was needed. For example, if a student did not answer a call or return a message from the health team about a test result, the team moved quickly.

“We did whatever it took to isolate a positive case or quarantine a close contact quickly to make certain that no other community members were put at risk,” Pearlman says. “While it never proved necessary, we were prepared to station people in the hall outside a classroom to make sure an affected student didn’t go in, while also keeping the information private. We learned we couldn’t rely on outside organizations to do contact tracing. To keep this campus safe, we had to do it very quickly, and that meant we had to do it ourselves.”

LeBlanc agrees. “We had a good system for detecting new cases,” she says. “We paid attention to the data really closely and responded to it quickly, and that made all the difference.”



“Everyone was learning; it was trial by fire. And the pandemic response was all encompassing. We were trying to be prepared for every worst-case scenario.” —Lisa Pearlman

<b>MARCH 19</b> With 328 cases, Massachusetts activates the National Guard; WPI’s Gordon Library fully online	<b>MARCH 20</b> 87-year-old man is first person in Massachusetts to die of COVID-19	<b>MARCH 23</b> Massachusetts orders non-essential businesses closed; state surpasses 1,000 cases	<b>MARCH 25</b> WPI announces its first two positive cases; both community members are self-isolating at home	<b>MARCH 26</b> WPI establishes Emergency Assistance Fund for community members experiencing financial impact	<b>MARCH 30</b> Massachusetts has conducted nearly 43,000 COVID-19 tests
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<b>MARCH 31</b> WPI postpones 2020 Commencement indefinitely; earned degrees will be awarded in May	<b>APRIL 2</b> Boston Convention and Exhibition Center to be turned into a field hospital	<b>APRIL 5</b> All Boston residents must wear face coverings in public	<b>APRIL 11</b> For the first time in U.S. history, a major disaster declaration has been issued in all 50 states	<b>APRIL 12</b> With 25,475, Massachusetts has the third-most COVID-19 cases of any state	<b>APRIL 15</b> Massachusetts surpasses 1,000 COVID-19–related deaths
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WPI COMMUNITY MEMBERS WAIT IN LINE IN HARRINGTON AUDITORIUM TO BE TESTED FOR COVID-19

## ELECTRONIC SYSTEMS

The behind-the-scenes work required the same approach. For example, creating technology to help the testing process flow smoothly was a learning experience in the pandemic’s early days, but the higher ed community collaborated to make it work, LeBlanc says. For example, the Broad Institute’s technology did not allow WPI community members to sign in by swiping their ID cards. Code provided by Tufts University made that possible. In the end WPI built, from the ground up, a cohesive testing and tracking system that was responsive to WPI’s specific needs and processes.

“Over a few short weeks,” says **Patty Patria**, vice president for information technology and CIO, “a small, dedicated team deployed symptom tracking technology, scheduling technology, and testing technology, which all fed into a centralized dashboard that allowed WPI to have its pulse on COVID in the community. Without these advancements, it would have been difficult to manage COVID last year.”

“WPI was on the leading edge,” Pearlman says. “Other health service directors were taking notes when I told them what WPI was doing.” Much of that progressive action, she says, was a direct reflection of CERT. “What’s unique about WPI’s response to COVID is CERT,” she says. “CERT is a constructive way to stay on top of the current situation and make decisions to respond. It’s an informed and collaborative way of making pandemic decisions. I’ve been unbelievably impressed by the knowledge and work ethic of CERT members. I’ve never met a harder working group in my life.”

LeBlanc says the need for quick decisions left no room for error. “Everyone was putting bricks down as people stepped on them and that’s how the path was made. We made it through the whole year. We didn’t close. The students were asked to make personal sacrifices, such as taking some classes in person and some online, wearing masks, and

limiting group sizes, but it was in a safe environment. They felt safe and stayed healthy, and we never had major outbreaks.”

The amount and variety of pandemic-related questions directed at the health team occasionally boggled them. “Even now, we get questions I never thought of,” Pearlman says. “I will get a question and think, ‘How is it possible this has never come up before? How is it possible I am still seeing something new?’” Everything from how to handle a test that was dropped on the floor and came back positive to discrepancies in close contacts’ recollections to how student athletes could sit safely on a bus—the health team was the go-to resource for information.

## A SILVER LINING

The team implemented increasingly complex structures, plans, case management, and processes, and some of these COVID-inspired changes will serve the university well in the long term. The health clinic branched into a well clinic and a respiratory clinic to separate healthy and sick students; Pearlman says that’s a feature worth keeping. Incorporating some telehealth visits for students could be helpful for flexibility as well.

“This showed all of us just how resilient this community is and just how much talent we have in this community,” says LeBlanc. Pearlman agrees. “I didn’t feel alone in making decisions,” she says, “and that’s why I appreciated having the health team and all the areas of expertise they brought. I’ve found this work to be the most challenging and interesting of my career. It’s incredibly valuable and important for people to be here on campus. And watching that happen made it very clear to me that the effort was worth it.”

—Julia Quinn-Szcesuil

<b>APRIL 20</b> Massachusetts bans residential and small business evictions and foreclosures for four months	(the ban is later extended to October); United States suspends immigration for 60 days	<b>APRIL 21</b> Massachusetts schools will not return to in-person learning this academic year	<b>APRIL 28</b> The U.S. reports more than 1 million confirmed cases of COVID-19, one-third of the global total;	Massachusetts stay-at-home advisory is extended to May 18	<b>MAY 1</b> With 64,311 cases, Massachusetts requires residents to wear face masks if they can’t socially distance
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## BUDGETING FOR THE UNKNOWN

**IN A YEAR WHEN NO ONE COULD CONFIDENTLY PROJECT REVENUES OR EXPENSES, WPI BUDGETED CONSERVATIVELY AND WEATHERED A FINANCIAL STORM.**

Anyone who’s ever created a budget—for a home, a business, a project—knows that making it balance is an exacting endeavor. Too little money coming in or too much money going out can wreck the entire plan.

But what happens when it’s not even clear how much money will be coming in or going out?

That’s the dilemma WPI faced in spring 2020 as COVID-19 swept around the world. The university sent students, faculty, and staff home, shifted to (mostly) remote operations, and refunded about \$7 million in student room and board payments. As financial administrators—most of them working remotely—started developing a budget for the 2020–21 academic year, they could not even be certain if or when students would return to campus.

“Our business is generally predictable, but we had absolutely no idea what we were going to face once we sent almost everybody home,” says **Jeff Solomon**, WPI’s former chief financial officer. “What turn would the virus take? Things were well outside of our control, and there wasn’t a ‘right’ budget.”

It was a challenge that colleges and universities across the country confronted in 2020. Some responded by laying off or furloughing employees, deferring capital projects, cutting programs, and halting admissions.

WPI officials hoped to avoid the most drastic measures, but they had to prepare for lower enrollment revenue from students and increased spending on measures to detect and mitigate the spread of COVID-19 on campus, to support students whose families encountered pandemic-related financial problems, and to de-densify residence halls.

**Mary Calarese**, associate vice president of finance, put together budget projections for a variety of scenarios, including one in which a 15 percent drop in undergraduate enrollment revenue and a 35 percent drop in graduate enrollment revenue would leave the university with a \$60 million loss.

“We looked at scenarios ranging from mild impacts to drastic impacts,” Calarese says.

Solomon also met regularly with a group of WPI trustees, who recommended that the university balance the budget without dipping into reserves. It helped that he and his team had been working with WPI’s board for several years to understand the institution’s potential resiliency in a crisis.

“We knew what reserves were available and how our debt was structured,” Solomon says. “We knew how spending could be cut back. We felt we could manage through this, so we didn’t panic.”

The resulting 2020–21 academic year budget totaled \$233 million,

**“We knew how spending could be cut back. We felt we could manage through this, so we didn’t panic.”—Jeff Solomon**

<b>MAY 15</b> White House announces Operation Warp Speed to speed vaccine development and distribution	<b>MAY 18</b> Massachusetts begins four-phase plan to reopen the economy	<b>MAY 28</b> 2020 Boston Marathon (previously postponed to September) is cancelled	<b>JUNE 1</b> Massachusetts becomes the fifth U.S. state to surpass 100,000 cases	<b>JUNE 8</b> Phase two of Massachusetts reopening plan begins	<b>JUNE 10</b> U.S. COVID-19 cases reach 2 million; models forecast spikes in death toll in the fall
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down from about \$248 million from 2019–20. It was assumed that revenue from undergraduates would be down 5 percent over the previous year and revenue from graduate students would be down 20 percent. The budget also included \$10 million in new COVID-19 spending to run a testing program, support students financially if necessary, and rent a Worcester hotel for undergraduate student housing.

During the months that followed, there were surprises. Instead of dropping 5 percent, full-time undergraduate enrollment grew 3 percent over 2019–20. Total COVID-19 spending, originally projected at \$10 million, totaled closer to \$13.5 million because of testing, protective equipment for workers, overtime for cleaners who were sanitizing spaces, renovations that allowed the WPI townhouses to be used as quarantine and isolation space, and classroom technology to accommodate remote learners.

Another positive surprise was \$11 million in federal funding that WPI received under higher education provisions of the CARES (Coronavirus Aid, Relief, and Economic Security) Act of 2020, which provided support for students and the university.

“Usually, we establish a budget plan—everyone who has a role in implementing it does their work—and then we check the results against the plan,” Calarese says. “This past year, open communication and flexibility were more important than ever as we managed within an unpredictable environment.”

WPI did not need to use reserves for operations, according to Solomon, and remained on course to end the academic year projecting a modest operating budget surplus.

“We remained vigilant and we managed to our budget, but we knew we had the financial ability to withstand a crisis,” he says. “We’ve always managed conservatively, and that gave us the opportunity to be thoughtful in our response to the pandemic.”

And while the pandemic meant that WPI’s financial team had to remain constantly attuned to revenue, spending, and the budget, Calarese says it also revealed opportunities to collaborate with partners across campus, to institute new work policies for employees, and to evaluate how operations might be different in a post-pandemic world.

“We think 2021–22 will be a transitional budget year,” Calarese says. “We’re not returning to pre-pandemic budgets. Instead, we’re looking at how COVID-19 has changed the way people do business and trying to learn how that might impact budgets in 2022–23.”

—Lisa Eckelbecker



## NEW MODES OF TEACHING

GETTING STUDENTS AND FACULTY MEMBERS BACK IN CLASSROOMS REQUIRED TECHNOLOGY, TRANSPARENCY, COLLABORATION, AND A HEALTHY DOSE OF COMMUNITY.

In March 2020, when the COVID-19 pandemic forced the campus to close and instruction to move online, a team of staff and faculty members set out to plan for what a WPI education might look like in the fall. With no way to predict the pandemic’s track or when it would be safe for people to gather again, the challenge was formidable.

Without a playbook to follow, the members of the Academic Program Delivery (APD) subcommittee of the Coronavirus Emergency Response Team (CERT) started writing their own. The team sifted through possible pandemic scenarios and evaluated the merits of 15 different higher-education delivery models. Team members monitored COVID-19 infection rates here and abroad, tracked state and federal guidance, looked at what other colleges and universities were doing, and consulted with WPI department heads, program directors, and faculty members.

They also coordinated with seven other CERT subcommittees doing similar planning in the areas of labs and research, facilities, services, student life, and events. On May 1, 2020, CERT held a Zoom meeting to update the faculty on its efforts. **John McNeill**, dean of engineering, who co-chaired CERT’s recovery and reopening group, devoted 20 minutes to the presentation, then spent the next hour and a half answering questions.

“There was so much uncertainty, and that naturally led to fear,” McNeill remembers. Faculty were concerned that students would be short-changed in an all-virtual environment, but they also worried about infecting themselves or their loved ones if they were to return to campus in the fall.

Their unease confirmed to McNeill that CERT’s job was as much about reassuring the WPI community as it was about devising a reopening plan for the fall. The path forward, he says, was through continued transparency and collaboration while providing faculty the tools they needed to feel confident in delivering the kind of education students demand—whether in-person, fully remote, or a combination of the two.

They had one summer to do that.

### THE TECHFLEX SOLUTION

The university’s IT staff and the team at the Academic Technology Center (ATC) had made it possible for faculty to pivot successfully from in-person to remote teaching when the campus shut down in March. But adapting lessons for the full year would require a greater level of planning, expertise, and guidance.

The ATC, the Morgan Teaching and Learning Center, and Undergraduate Studies sprang into action, putting together a menu of intensive workshops and trainings in online teaching. Instructional designers queued up to help faculty build remote courses and IT staff was on hand for support.

Faculty responded to the offerings overwhelmingly; 75 percent completed an online pedagogy workshop before summer’s end and immediately put their training and ideas to the test, teaching 150 summer courses to 2,400 students. A typical summer session has 90 courses and an enrollment of 1,000.

“Faculty members took the opportunity to use the summer programs as a laboratory and a training ground, a place where they could experiment and learn,” says **Art Heinricher**, dean of undergraduate studies, who co-chaired the APD. “The faculty response was nothing short of phenomenal.”

In July, CERT unveiled its recommendations for the fall reopening. Graduate courses would be delivered fully online while undergraduate offerings would include in-person, online, and hybrid teaching and learning. The “TechFlex” approach called for shifting the academic calendar and reconfiguring classrooms and lecture halls to allow for social distancing during in-person learning. Students and faculty who felt unsafe on campus could choose fully remote instruction.

The APD team honed its reopening plan throughout the summer by surveying department heads every two weeks. They kept tabs on the



**“Faculty members took the opportunity to use the summer programs as a laboratory and a training ground, a place where they could experiment and learn.” —Art Heinricher**

number of faculty members who expected to return to campus in the fall and solicited feedback about measures that would ease concerns about infection and the quality of instruction.

Undergraduate Studies, in collaboration with the Morgan Center, kept the information flowing to students, faculty, and staff with weekly newsletters that shared tips and best practices for online learning. **Katie Elmes**, former director of expanded learning opportunities, made check-in calls to students and reached out to them in other ways, including through a weekly survey. Elmes shared student feedback with faculty and staff and passed along information about specific tools, ideas to fix things that weren’t working smoothly, and online teaching strategies that resonated with students, based on what they were sharing in the weekly survey.

“Everyone was managing such a heavy load, people didn’t necessarily have the time individually to do certain things,” Elmes says of the newsletter and other outreach efforts to students and faculty. “We could step in and act as a hub of information, helping ideas and feedback to flow between community members and offer that wraparound support.”

As the weeks passed, anxiety among faculty began to diminish and confidence in the reopening grew. McNeill attributed this to President **Laurie Leshin**’s leadership and Provost **Winston (Wole) Soboyejo**’s assurance to faculty that no one would be forced to teach in person, though everyone was expected to deliver the quality education students deserve.

The collaborative approach among CERT, faculty, staff, and students was another important factor in inspiring trust among members of the WPI community, McNeill says.

“WPI has always been a place where people are willing to help,” he says, “Our students have the spirit of teamwork and seeing our faculty and staff respond that way, too—that was really heartening. Whenever we on CERT asked someone to do something, their reaction was, ‘Where do you want me to grab hold and lift? How can I help? What do we need to do?’ People knew how important it was to give our students the best, and they were willing to help.”

### LESSONS LEARNED

By summer’s end, faculty were equipped with confidence both in the reopening plan and in their own ability to teach students in brand-new ways, whether that was from their homes or in reduced-capacity classrooms and lecture halls. A-Term saw the WPI education morph into a rich blend of in-person and virtual learning as guest experts dropped in on Zoom classes, lab work entered the realm of virtual reality, and robotics kits were mailed to students at home, among countless other innovations. Staff in offices across campus found new ways to support students regardless of where they were in the world through ideas like virtual study halls and peer mentoring programs.

“If anything amazed me,” Heinricher says, “it’s the range of ideas that came out of this, the creative problem-solving that happened very rapidly and on the fly.”

Now, with the 2020–21 academic year behind it, CERT is looking back on the lessons learned. One theme that emerged over the year and a half of social isolation is the importance of community. WPI faculty, staff, and students navigated an unprecedented crisis by relying on and supporting one another.

“I’ve always known academically, theoretically, that education is a fundamentally social activity,” Heinricher says. “COVID just drove that home over and over again.”

—Sharron Kahn Luttrell

<b>JUNE 22</b> Massachusetts has nation’s lowest COVID-19 transmission rate, highest unemployment rate	<b>JULY 1</b> U.S. records more than 50,000 new daily cases; WPI campus to reopen in the fall with	classes to begin Aug. 31; ban on global project center travel to continue at least to end of 2020	<b>JULY 6</b> Phase three of Massachusetts reopening plan begins	<b>JULY 9</b> WPI will house 185 first-year students and 8 RAs at nearby Worcester Hampton Inn	<b>JULY 16</b> Massachusetts State Collegiate Athletic Conference suspends fall 2020 sports season
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<b>AUG. 1</b> Most visitors and returning Massachusetts residents must quarantine for two weeks	<b>AUG. 7</b> Massachusetts postpones phase three of reopening plan	<b>AUG. 9</b> U.S. has now had 5 million confirmed cases of COVID-19	<b>AUG. 23</b> At WPI, phased move-in begins for residential students	<b>AUG. 24</b> Those working or studying on WPI campus must use the Symptom Tracker app daily	<b>AUG. 31</b> A-Term classes begin with TechFlex (in-person, remote, hybrid) model
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## CONFRONTING THE OTHER VIRUS

WPI OFFERS A CLEAR, COMPASSIONATE, AND IMMEDIATE RESPONSE TO A NATIONAL RECKONING AROUND RACISM

While the COVID-19 pandemic was winding its invisible and destructive path across the globe in the summer of 2020, another insidious virus, this one carrying centuries of a different kind of anguish, became front and center.

With the murders of Ahmad Arby, Breonna Taylor, George Floyd, and others, the nation exploded into an upheaval of pain, fear, and rage (although woven through with a fragile thread of hope for justice) at the systemic racism that has been an unwelcome, constant presence in the nation's history.

From Black Lives Matter protests in response to ongoing police brutality to anti-Asian racism, the events of the past year laid bare a stark reality of social, health, and economic inequities fueled by racism. In the midst of this turmoil, WPI students, faculty, and staff sought answers, action, and a sense of community—which itself posed challenges in a COVID-19 environment.

In messages to the WPI community, President **Laurie Leshin** and then Chairman of the Board of Trustees **Jack Mollen** made it clear the university condemns all forms of racism and bias. They also called for action, because supporting underrepresented community members in a sustainable, effective, and empathetic way requires a multilayered, collaborative approach that starts at the board level and is infused through the entire community.

The work of building a more inclusive campus began before the pandemic hit, but in the span of a few short months, and in an all-virtual environment, WPI implemented new policies, brought together groups, welcomed outside speakers, introduced anti-racism

resources, and—most important—heard each other in listening sessions and casual conversations. The most important first step was the university's immediate commitment to embedding diversity, equity, and inclusion (DEI) into the core beliefs of the university.

### LONG-TERM, SUSTAINABLE CHANGE

Stating a commitment is one thing; putting it into action is where the real work begins. According to **Rame Hanna**, director of diversity and inclusive excellence, the need for an ongoing university commitment was clear. "It's always important to make sure we are in dialogue and conversation with the community," Hanna says. "We didn't want to have two or three dialogues; rather we strive to be in constant, ongoing conversation with the community. People who work in DEI intentionally keep an ear to the ground so they can hear what's important and incorporate that into critical programming and education."

Emotions were particularly immediate, intense, and raw following the death of George Floyd. In a widely recognized shift, a profound sense of injustice united all sectors of the population, and Hanna says that's pivotal. "Changing any culture isn't something that happens immediately. Effective and sustainable change—especially involving social justice—requires a shift in thinking and an enhanced approach to working with each other and within an organization's practices. As DEI practitioners, we must sow the seeds for change to occur in creating more just institutions."

"When building equitable and inclusive organizational structures for longevity, it is so important to have institutional social support and a community culture willing and ready to change," says **Tiffany Butler**, former director of the Office of Multicultural Affairs (OMA). "In order for the change to take root and make a real long-lasting impact, we must approach the work strategically."

"Both community buy-in and commitment to the work of building the systemic structures for the organization to be successful must happen simultaneously," Butler adds. "To ask a community to embark on this kind of journey is a big ask, even in a 'normal' year. As we think about doing the work of inclusion, where inequities are exacerbated during a heightened time of crisis, and do this on top of the ever-present and changing challenges of a pandemic, is almost an impossible task. And the stakes are incredibly high."

With so much on the line, the approach to diversity, equity, and inclusion that WPI had been building for several years—with a bottom-up and top-down pledge—ensured that a campuswide commitment permeated every level and area of the university and allowed for necessary pivots.

"The path to meaningful change requires our institution to remain steadfast in its responsibility to providing opportunities that advance and promote inclusion and equity," says **Alicia Mills**, vice president for talent and inclusion and chief diversity officer ad interim. "Guided by our values, we are creating an environment that assesses our commitments and adjusts our direction as needed."

**"The feedback through the open line of communication to alumni has been invaluable. Ultimately, this relationship allows us to work together for inclusion, and that is the kind of relationship we want."** —Tiffany Butler

Recognizing that people would benefit from different approaches, WPI's DEI team and OMA collaborated to offer diverse and plentiful opportunities to learn and connect. "Reaffirming WPI's commitment to change is vital," Hanna says. "It's critical for folks to feel heard and to be able to take action. It's about building self-awareness and dismantling the longstanding oppression and harm in these spaces."

Butler met frequently with students in virtual meeting spaces. A believer in active listening, she says her priority remained crossing the virtual divide to make a needed personal connection. "Listening, listening, and more listening was critical to give people the space to begin to heal," she says.

Sometimes, community members simply wanted to gather. OMA introduced virtual Conscious Coffeehouses and Herd Huddles to provide space and time to not only speak to the issues of the times, but also to provide support and a socially distanced listening ear. With the campus operating under strict social distancing measures, people felt isolated, needing social connection. The DEI team introduced "Cooking with WPI," where the community could share recipes and stories, and "Zooming with Pets," where they could gather and share a common bond.

### FACING THE UNEASE

"To create change, the university community had to continue becoming comfortable with being uncomfortable, and they were glad to see people taking the steps to do that," Hanna says. "As an institution of higher learning, it's important to make sure we are centering power, privilege, and oppression in creating structural change. We have to understand not only the issues, but also the role we need to play in these efforts. To come up with the solution, you have to understand the problem."

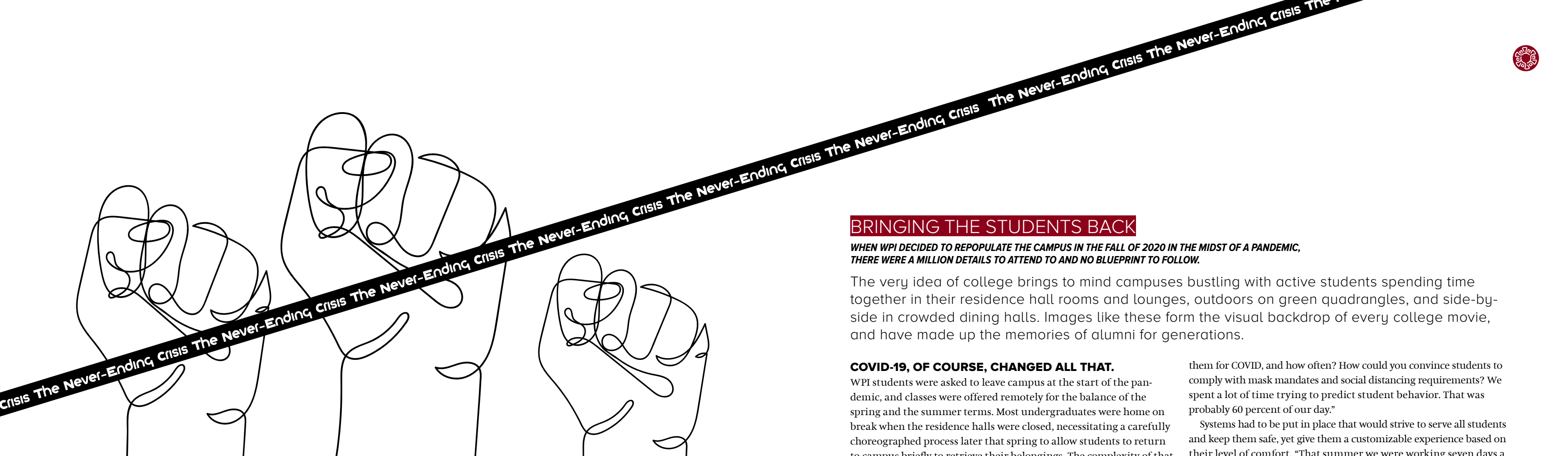
People often avoid engaging in dialogue on race and racism, says Hanna, so creating an environment where it's safe to do so is crucial. "We're all breathing the air of systemic racism and haven't had to engage in topics like this. We are even taught to avoid them, so when asked to talk about them, people don't know what to do."

Mills agrees, acknowledging the past year forced people to examine their core beliefs and actions. "We've done important work as an institution," she says, "yet we have a continuing opportunity to remain proactive and engage in the difficult and sometimes uncomfortable work required in creating an inclusive environment."

<b>SEPT. 8</b> U.S. reports fewer than 25,000 daily cases for the first time since June	<b>OCT. 8</b> WPI urges students in testing program to remain on campus for Thanksgiving break to protect campus	<b>OCT. 16</b> U.S. surpasses 8 million coronavirus cases; cases are rising countrywide	<b>OCT. 22</b> COVID-19 cases rise sharply in Massachusetts; 13 communities return to phase one of reopening plan	<b>NOV. 2</b> New England Women's and Men's Athletic Conference cancels winter conference competition	<b>NOV. 4</b> U.S. reports an unprecedented 100,000 new cases in one day
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<b>NOV. 6</b> New Massachusetts guidance includes 10 p.m. to 5 a.m. curfew and mask wearing in public	<b>NOV. 12</b> Confirmed COVID-19 deaths in Massachusetts surpass 10,000	<b>NOV. 13</b> WPI President Laurie Leshin appeals for greater vigilance as cases rise on campus	<b>NOV. 17</b> WPI moves to more restrictive alert level; students to leave residence halls only under limited conditions	<b>DEC. 2</b> U.S. COVID-19-related hospitalizations surpass 100,000	<b>DEC. 3</b> Massachusetts' average positivity rate exceeds 4.9% for first time since June
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### CHANGE TAKES TIME

The sense of urgency people felt around all that was happening was palpable, says Butler. “People feel fatigued by their experiences with microaggressions in a typical year,” she says. “When you factor in this magnitude of emotional heaviness, folks are exhausted and want change to happen *right now*. But change takes time.”

And with an accumulated sense of weariness, people start to look at historical change, or lack thereof. “In different ways, people are truly articulating the need for accountability,” Butler says. “As in, ‘You said this is what you were going to do, but did you do it? Are you going to do what you said you would do? If so, when?’”

When a community is energized by the university’s efforts, she adds, the capacity for change is quicker. Alumni of color have been vocal and active in the process as well. They may be raising points of dissatisfaction, but they are also involved enough to want to continue to make WPI better as a part of their own legacy.

“At WPI, we speak of alumni and think, ‘Have we taught them how to think, how to pivot if necessary, and how to critically think outside the context of a textbook?’” Butler says. “They can, and they *are* doing all of those things. Alumni ask if we have done the work and they challenge us with new perspectives and passion to work for greater equity and inclusion. The feedback through the open line of communication to alumni has been invaluable. Ultimately, this relationship allows us to work together for inclusion, and that is the kind of relationship we

want. Sometimes constructive criticism is hard to hear. But tough love is still love. This kind of constant evaluation of where we are and where we are going allows for all of us to learn and grow to move forward in pursuit of inclusion together.”

### THE WORK CONTINUES

“What we’re hearing is that we need to increase diverse representation at all levels to have an environment where all community members can thrive,” Hanna says. “We have to celebrate diversity and also how to recognize the power, privilege, and oppression manifest in our environment.

“The university’s commitment is essential. As we have moved into a strategic place, it is a catalyst for us to move together as a collective. It is not just the work of certain folks but of *all* folks.”

Even with so much momentum, Hanna says the work continues. “I’m so proud WPI is intentionally committing to intentional diversity as a core commitment and infusing it into the core vision and mission. We need to work as a community to not revert to business as usual.”

—Julia Quinn-Szcesuil

*Editor’s Note: Read about the development of WPI’s new Sustainable Inclusive Excellence Action Plan in the online version of the Summer 2021 Journal at [wpi.edu/+journal](https://wpi.edu/+journal).*

### BRINGING THE STUDENTS BACK

**WHEN WPI DECIDED TO REPOPULATE THE CAMPUS IN THE FALL OF 2020 IN THE MIDST OF A PANDEMIC, THERE WERE A MILLION DETAILS TO ATTEND TO AND NO BLUEPRINT TO FOLLOW.**

The very idea of college brings to mind campuses bustling with active students spending time together in their residence hall rooms and lounges, outdoors on green quadrangles, and side-by-side in crowded dining halls. Images like these form the visual backdrop of every college movie, and have made up the memories of alumni for generations.

### COVID-19, OF COURSE, CHANGED ALL THAT.

WPI students were asked to leave campus at the start of the pandemic, and classes were offered remotely for the balance of the spring and the summer terms. Most undergraduates were home on break when the residence halls were closed, necessitating a carefully choreographed process later that spring to allow students to return to campus briefly to retrieve their belongings. The complexity of that move-out would be dwarfed by what was to come, for on July 1, 2020, the announcement went out that students would return in time for the start of A-Term and the fall semester.

The task of determining how to do that safely fell to the Coronavirus Emergency Response Team (CERT). Within CERT, a team led by **Emily Perlow**, associate dean of students, and **Casey Wall**, assistant dean and director of residential services, focused on the student life experience. It was a job that no one at WPI had ever attempted before, one that would include repopulating residence halls while maintaining social distancing (the term “de-densified” entered everyone’s vocabulary that summer). It also included helping students manage the stress of uncertainty and isolation during a global health crisis. Somehow it happened, marking one of the most significant success stories of WPI’s responses to the pandemic.

### VISUALIZING A NEW NORMAL

When it was announced that students would be back on campus, with the university offering them three options for taking classes—in-person, remote, and a hybrid—Perlow said the first step was visualizing a new campus environment with coronavirus precautions in place.

“Casey and I began considering what life would look like outside the classrooms,” she says. “Could students live together? Could we test

them for COVID, and how often? How could you convince students to comply with mask mandates and social distancing requirements? We spent a lot of time trying to predict student behavior. That was probably 60 percent of our day.”

Systems had to be put in place that would strive to serve all students and keep them safe, yet give them a customizable experience based on their level of comfort. “That summer we were working seven days a week,” Wall says, planning students’ return in collaboration with their partners on CERT.

“They put their heads down and did a ton of incredible work to bring us back to campus,” says **Ryan Candy ’21**, a community advisor who helped 20 first-year students get acclimated to WPI over the summer.

### STRATEGIZE-AS-YOU-GO

Starting in July 2020, each student planning to live and study on campus in A-Term/fall semester filled out a form that spelled out their preferences for housing and classes; students could choose to be on campus, remain remote, or pursue a hybrid version. Students’ intentions and WPI’s responses would undergo modifications as the summer progressed and the plans for housing and classes evolved. The goal was to meet students’ expectations as closely as possible, within the limitations imposed by the pandemic. “It may have made more work for us in the background,” Wall says, “but we were constantly advocating for what was best for the students.”

“At WPI, we have always relied on the orientation and welcome process to help socialize students to the ‘ways of WPI’ and to build community,” Perlow says. “With the pandemic, we couldn’t rely on our typical mechanisms.”

So they found themselves creating new systems for once well-oiled routines like residence hall move-in, always with guidance from CERT, which was, itself, evolving as the effects of the pandemic

<b>DEC. 11</b> Pfizer’s COVID-19 vaccine receives emergency use authorization from the FDA	<b>DEC. 14</b> COVID-19 vaccine distribution begins in the U.S.; Massachusetts receives its first doses	<b>DEC. 18</b> FDA gives Moderna emergency use authorization for its COVID-19 vaccine	<b>DEC. 27</b> \$900 billion federal coronavirus relief and government funding package signed	<b>DEC. 29</b> First U.S. case reported of a highly contagious U.K. variant of the COVID-19 virus	<b>2021 JAN. 1</b> U.S. COVID-19 cases have jumped from 10 million to over 20 million in	less than eight weeks; some 14 million vaccine doses have been distributed in the U.S.	<b>JAN. 11</b> For two weeks in a row, U.S. sets records for deaths and new cases with more than 313,000 new	cases recorded on Jan. 8 alone; vaccination of Massachusetts first responders begins	<b>JAN. 14</b> U.S. nearing 1 million vaccine doses per day	<b>JAN. 21</b> First case of more contagious U.K. COVID-19 variant confirmed in Massachusetts
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changed. “We had no idea if the plans we put in place were going to work,” she says. “We were asking ourselves, ‘If we mess this up—if we can’t keep COVID from spreading on campus—what will the impact on the institution be?’”

“It was a lot to think about, and we weren’t the only ones in that position,” Wall says.

As part of the reopening plans, CERT established a color-coded guide to campus life based on the current rate of positive COVID-19 tests. The scale ranged from Red/Severely Limited, with fully remote operations, to Green/TechFlex On-Campus, with in-person, hybrid, and remote learning, de-densified residence halls and classrooms, and open research labs.

A-Term began with the campus in the TechFlex state. The fall and winter saw periods of rising infection rates, nationally and locally, which triggered the Yellow/Stay in Place alert level, with virtually all classes offered remotely and most students required to stay in their residence hall rooms with limited exceptions (for example, to pick up food, seek medical care, get a COVID-19 test, or engage in socially distanced exercise). It was never necessary to invoke the Orange or Red alert levels, which called for sending students home once again.

Concern about students’ mental health grew during the Yellow alert periods. Wall and Perlow note that the usual ways of checking up on students who might need help were not possible. It wasn’t feasible to send resident advisors (RAs) to their rooms or invite students to lunch. “We couldn’t rely on those things we’d normally do,” Perlow says. “That was really hard, especially in supporting first-year students. We were missing those first-year connection points last year. RA check-ins were harder to do. There were fewer in-person club activities. There was no going out to eat.”

“Normally, you can do homework together,” Candy says. “That’s difficult to do in ‘COVID world.’ There weren’t parties. You couldn’t



<b>JAN. 22</b> New U.S. COVID-19 cases decline by 16 percent over two-week period	<b>JAN. 25</b> The first U.S. case confirmed of a highly transmissible Brazil coronavirus variant	<b>JAN. 28</b> First U.S. case confirmed of dangerous South Africa variant; at WPI, C-Term starts, delayed	two weeks to avoid worst of cold and flu season; all undergrads to be tested twice a week	<b>FEB. 1</b> Massachusetts residents 75 and older eligible for vaccine; mass-vaccination sites open	<b>FEB. 11</b> WPI lifts some restrictions; resumes in-person research and lab courses when social
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be in a residence hall unless you lived there. We kept comparing it to the loss of water-cooler conversations: on Zoom, you can send private messages, but it’s not the same. It was tough.”

**KEEPING ACTIVE AND FIT**

The Department of Physical Education, Recreation and Athletics (PERA) was tasked with trying to provide healthy and safe sport and fitness activities for the WPI community within explicit state COVID guidelines for gyms and recreational facilities. In the spring of 2020, working with Health Services and CERT to ensure that the WPI community stayed safe, PERA set about the daunting task of providing engaging health and wellness activities when it was not yet known how the virus was transmitted (contact? surfaces? breath?).

“This past year was one of the most challenging for my group as we had to navigate what we *wanted* to do versus what we *could* do to keep our community safe in the areas of sport and recreation” says PERA director **Dana Harmon**. “The Health Services team were amazing partners, and my entire team put in extraordinary efforts for classes, sports, fitness, and recreation. It took a village to figure out this great unknown together.”

Within a week of the university’s shutting down in the spring of 2020, PERA developed online PE course offerings for D-Term so students could continue to fill their PE requirements for graduation. Spring sports were cancelled along with several winter sport championships, and students who’d traveled to NCAA championships had to come home immediately.

“Having those winter NCAA championships cancelled on the brink of participation, along with the spring season for club and varsity sports, was devastating,” Harmon says. “We had to pick up the pieces and continue to provide meaningful engagement to help all of our groups support each other during those early days as COVID was changing all of our lives.”

When the campus reopened in the fall of 2020, the Sports and Recreation Center reopened for students under tight COVID-19 protocols and with enhanced cleaning routines. Community members using the facility had to be in the campus testing program, they had to make reservations, and they had to wear masks and maintain social distancing. Fall and winter sports competitions were cancelled, but teams were able to participate in strength and conditioning activities and skills workouts.

“Although losing fall and winter competitions was extremely difficult,” Harmon says, “I was impressed with and grateful to our student-athletes, coaches, and PERA staff, who all showed great resilience in carrying on to the best of their abilities so that we could continue with our sports in still meaningful ways without competition.”

A brightening picture in the spring of 2021 brought increased hours and offerings in the Sports and Recreation Center, sport activities, and in-person PE courses (with continued COVID-19 guidelines). Student-

**“We had no idea if the plans we put in place were going to work. We were asking ourselves, ‘If we mess this up—if we can’t keep COVID from spreading on campus—what will the impact on the institution be?’”** —Emily Perlow

athletes and coaches welcomed the return of limited varsity sports competition in baseball, softball, men’s and women’s track and field, and men’s and women’s rowing, along with expanded practice opportunities for all of the other sports. Student-athletes were tested twice a week; two negative test results for all team members and coaches were a requirement for competition.

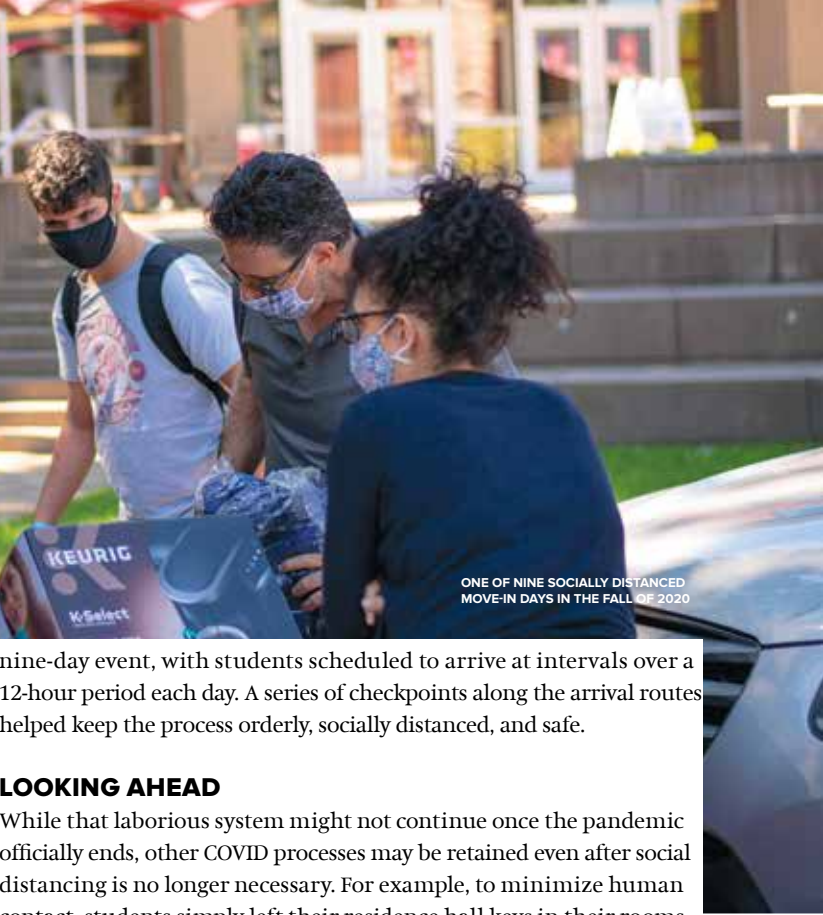
“Our coaches and student-athletes showed a great deal of determination in keeping themselves healthy on a daily basis as they did not want to be the individual that kept their team from competing,” Harmon says. “Their commitment and discipline were amazing. Although none of us wants to go through anything like this again, we learned a great deal about ourselves as individuals and as a group, having to turn lemons into lemonade. We are and will continue to be stronger for this experience now and into the future.”

**RETHINKING RITUALS**

One annual ritual of student life, the fall residence hall move-in and orientation kick-off, had to be completely rethought. In pre-pandemic days, Move-In Day was a frenetic, joyous swirl of activity as lines of cars loaded with clothes, computers, microwaves, and other necessities of residential life waited for their turn to pull up in front of their students’ new home away from home, where teams from Greek life, student athletes, and other volunteers waited to grab those belonging and whisk them away to the students’ rooms. It was a carefully planned and executed welcome to new students that conveyed the unmistakable message that this was a community that cared about them.

But nearly everything about that tried-and-true process went against the health and safety rules imposed by the COVID-19 pandemic. What would the all-new move-in look like? To begin with, students needed to be tested before they could even set foot on campus. Then, their arrival had to be staggered; in fact, the traditional move-in day morphed into a

distancing possible; Sports & Recreation Center to reopen, reservations and social distancing required	<b>FEB. 22</b> U.S. surpasses 500,000 COVID-19-related deaths	<b>FEB. 25</b> Global COVID-19 death toll surpasses 2.5 million	<b>FEB. 27</b> FDA issues emergency use authorization for Johnson & Johnson vaccine	<b>MARCH 1</b> WPI moves fully into TechFlex on Campus/Alert Level Green status	<b>MARCH 2</b> U.S. expected to achieve a vaccine supply for all adults by May
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ONE OF NINE SOCIALLY DISTANCED MOVE-IN DAYS IN THE FALL OF 2020

nine-day event, with students scheduled to arrive at intervals over a 12-hour period each day. A series of checkpoints along the arrival routes helped keep the process orderly, socially distanced, and safe.

**LOOKING AHEAD**

While that laborious system might not continue once the pandemic officially ends, other COVID processes may be retained even after social distancing is no longer necessary. For example, to minimize human contact, students simply left their residence hall keys in their rooms when they moved out, instead of taking them to a central collection point. More convenient for students, the new procedure also yielded a higher rate of key returns, Wall says.

Changes made to the campus to encourage students to head outdoors to get some fresh air may also endure. For example, Adirondack chairs placed here and there proved popular for people-watching, as well as for reading and doing homework. Candy says Perlow came up with the idea of placing portable whiteboards by outdoor tables to encourage students to gather for academic work and informal chats while still staying six feet apart. Some students found creative ways to break the ice and get to know new people by posting topics on the whiteboards and inviting passersby to stop and join a conversation, making up for the hurdles the pandemic placed in the way of socializing.

Efforts to break through the isolation and build a sense of community on campus also helped with another goal: encouraging students to take seriously their role in keeping themselves and others around them safe and healthy. Perlow and Wall say they were pleased to see that WPI students were wearing masks and holding one another accountable. They were partners in the effort to create a safe campus amid COVID.

“I think our WPI culture of peer-to-peer relationships was a secret to our success,” Perlow says. “Students were saying to one another, ‘I want to be here and I will ask you, as my peer, to follow safe practices.’ Now, that is pretty powerful.”

—By Susan Shalhoub



A STEADY DRUMBEAT OF INFORMATION

WPI TAKES ON “TLDR” AND OTHER REALITIES OF COMMUNICATING WITH A DIVERSE COMMUNITY DURING A PANDEMIC

Crisis communications is nothing new to the university’s Marketing Communications team. Following established protocols, the senior public relations professional is the “comms” lead when crises arise, and cross-functional teams of subject matter experts and decision makers align based on the situation. Team members drew on all of their crisis management experience as they became among the earliest and longest-serving members of WPI’s Coronavirus Emergency Response Team (CERT).

The scale and scope of the global pandemic was unlike any crisis even the most experienced communicator had managed before. Accordingly, it required the collective effort of the team’s diverse talents to create and distribute meaningful and relevant content about a rapidly changing situation in a variety of modes on a variety of platforms for a variety of audiences for more than a year.

“Nothing about COVID comms has been one and done, but we’re a stronger team—and better at our craft—for having worked our way through it,” says **Maureen Deiana**, vice president and chief marketing officer. “From a crisis communications perspective, we’ve had to clearly and steadily communicate need-to-know information and provide ways to learn more and to get questions answered. And everything else we created or promoted needed to weave in COVID messaging to reflect the realities of living and learning during a pandemic. The visuals and stories we published connected those working from home to a still-productive campus—and showed the public the same, which was essential to instilling confidence that WPI was prepared and performing despite the pandemic.”

Effective communication always requires knowing the key messages, and central to WPI messaging was its North Star: to keep the community safe and healthy. Equally important was keeping the community together—whether virtually or on campus (with faces covered and socially distanced)—in service to students and each other with care and respect, and, as much as possible, to serve the broader community.

A GREAT COMMUNICATOR

That tone was set by President **Laurie Leshin** and repeated at each of the 17 employee virtual town halls she led from the spring of 2020 through the summer of 2021—a critical communication platform that consistently engaged hundreds of faculty, staff, and students to tune in as the president shared what she knew, explained the university’s actions, and grounded everything in science and data. The meetings were recorded, were available online, and were generally followed by an email communication to document decisions and share information. Across the university, other offices hosted town halls for targeted audiences; President Leshin also connected directly with families and alumni.

“In her role as WPI’s president, Laurie Leshin is distinctive—and especially relatable to this community—because she is also a scientist with remarkable communications skills,” says **Eileen Brangan Mell**, assistant vice president of public relations and strategic communications and the MarComm team’s constant presence on CERT. “Throughout the pandemic, the WPI community benefited from President Leshin’s leadership, authenticity, humanity, and her ability to inspire confidence by reinforcing that WPI was managing this crisis guided by science, data, and a deep commitment to doing the right things.

“She’s always done fall and spring meetings in person—moving the town halls to virtual on a monthly basis gave the community a critical and consistent touchpoint. When she spoke to the community, her depth of knowledge and context was both stunning and assuring. When watching her, there could be no question that she was deeply involved—both on our campus and beyond—and she was as forthcoming as possible, acknowledging the fear, uncertainty, and loss even as she’d reinforce ‘We’ve got this, we are WPI’ in her remarks.”

WE ARE WPI

It became a sort of rallying cry: *We Are WPI* was the name of the COVID website, a hashtag, and the email address for asking questions. A small but mighty group of WPI employees (among them **Alison Duffy**, director of strategic communications, **Adam Epstein**, director of undergraduate enrollment services, **Matthew Foster**, associate director of residential education, **Jen Parissi-Forti**, events planner, **Stephanie Pasha**, associate vice president for strategic volunteer engagement, **Emily Perlow**, associate dean of students, **Sue Sontgerath**, former director of pre-collegiate outreach programs, and **Casey Wall**, assistant dean of students and director of residential services), searched for answers, responded, and often developed new content for the FAQ (frequently asked questions) section of the *We Are WPI* website. By the end of the 2020–21 academic year, the team had answered nearly 6,000 individual emails—more than a dozen every day—many asking multiple questions.

In the spring of 2020, with the infection rate soaring and travel bans in place, there would be no off-campus travel, no events, no access to research labs, no summer classes or activities, and no in-person



“Between being copied on emails, online resources, town hall meetings, and social media, there was never a lack of information.” —Ann McGregor

Commencement. It was never easy to send or receive these difficult announcements, nor to relay details about alternate plans and virtual events, but in those first few months a structure was put in place for regular and measurable outreach across platforms that would serve the community well into the next full academic year.

Meeting various audiences where they were—with the information they needed, in ways they would consume—required the entire marketing communications team, in partnerships with virtually every university department. Several small, focused MarComm teams would meet regularly with professionals from Health Services, Student Affairs, Academic Operations, Business Operations, Talent and Inclusion, and any other part of the university with a message to share and an audience to reach.

Emails from the president or other offices were written and scheduled to assure a steady drumbeat of coordinated information. The team adapted processes and systems normally used for email marketing for external audiences to centrally manage outreach to key community stakeholders across the pandemic. The marketing, creative, and content teams came up with icons, slogans, pledges, social posts, videos, photo galleries, content for a mobile app, and building posters to keep the community informed. To avoid TLDR (too long; didn’t read) long-form narratives, emails would be summarized in easy-to-digest bullets, and key web pages led off with a “What you need to know now” preface.

WPI’s social media platforms were also important communication channels, particularly for students. “Don’t be that goat”—one of the themes that emerged from and was tested with student focus groups—encouraged the community to follow protocols to stay together on campus. When this theme and others that the MarComm team crafted were widely reposted (or replicated on residence hall windows), it was a

sure sign of messaging that resonated with students. MarComm staff also monitored social channels for misinformation and to respond to questions and comments.

Media coverage and public interest in President Leshin’s work establishing and leading the commonwealth’s Higher Education Working Group—and research and innovation stories that shared how WPI faculty and staff were doing amazing things to support local and global public health efforts—were instrumental in positioning WPI as an institution that was managing well in trying times.

Deiana credits her dynamic and dedicated team. “With different backgrounds and expertise in a variety of specialties, they came together to do whatever had to be done,” she says, “learning new skills along the way. Everyone rolled up their sleeves and figured it out.”

THE PARENT PERSPECTIVE

For many parents, the pandemic added more stress as their students navigated what was likely the most stressful year of their young lives. For those whose students were living through the pandemic hundreds or even thousands of miles away, communication from the university was vital. Typically, students and parents received the same information, but the communications were tailored to each. Keeping parents attuned to what their students were hearing helped them reinforce those messages.

Ann McGregor’s son, an aerospace engineering major in the Class of 2023, was 1,500 miles from their Florida home. “I thought WPI did a really good job of keeping us informed,” she says. “Between being copied on emails, online resources, town hall meetings, and social media, there was never a lack of information. At critical points, such as transitions between terms and after breaks, outreach came more frequently, which provided parents with a sense of what was to come.”

Heather Wailes, mother of a member of the Class of 2022, concurs. “WPI did a great job of communicating with us,” she says. Wailes, a mechanical engineer whose daughter is studying psychological science with a concentration in psychobiology, says she “appreciated the consistent, data-based, factual nature of the communications. I was impressed with the responsiveness of the university. When some parents were concerned about their student’s mental health, and expressed that on social media, WPI was quick to address them by adding even more outreach efforts and incorporating additional activities to keep them connected.”

McGregor says she appreciated the care with which the university made decisions, as well as the explanations behind them. “Some parents were concerned about the time it took to make decisions,” she says. “As a science-based person, I understood the need to have all of the information before the university could move forward. This helped it avoid pitfalls encountered by some other schools who made decisions too quickly.”

—Sharyn Williams

<b>MARCH 4</b> U.S. has administered 82.6 million vaccine doses	<b>MARCH 11</b> American Rescue Plan Act of 2021 signed, providing additional COVID-19 relief	<b>MARCH 22</b> Britain bans travel from outside United Kingdom to curb spread of virus	<b>MARCH 24</b> WPI announces plan for full in-person learning, teaching, and working in the fall	<b>APRIL 19</b> U.S. has administered 200 million vaccine doses; entire WPI community is now eligible for COVID-19 vaccination under Massachusetts rules
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<b>MAY 6</b> U.S. reports lowest number of daily COVID-19 cases since early October; WPI says students	enrolled in on-campus classes or conducting research in the fall must be fully vaccinated	<b>MAY 13</b> CDC says fully vaccinated people no longer need to wear masks indoors or outdoors	<b>MAY 19</b> Commencement week begins for Class of 2021; U.S. surpasses 33 million COVID-19 cases	<b>MAY 28</b> U.S. COVID-19 seven-day average cases and deaths at lowest levels in nearly a year	<b>MAY 29</b> Massachusetts lifts all COVID-19 related restrictions
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LESSONS LEARNED AND A BETTER NORMAL

By Laurie Leshin, WPI President

As I write this, WPI is preparing to welcome students back to campus for the start of another academic year. Assuming positive trends continue, the fall of 2021 will look a lot more like the fall of 2019 than that of 2020. One year ago, a host of safety requirements (mask wearing, social distancing) and strict protocols (regular COVID testing, limits on social interaction) formed an uneasy backdrop to campus life. As we strove to keep the campus open, keep our community together and safe, and keep the university on a firm financial footing, we endured a roller coaster ride of rising and receding COVID-19 cases and fluctuating alert levels.

Thankfully, the beginning of 2021 brought highly effective and safe COVID-19 vaccines—created in record time, a triumph for science. Of course, the global health emergency is not over and the need for monitoring and vigilance will be with us for some time to come. Still, the new academic year will see the relaxation or elimination of many of our health and safety restrictions and the restoration of such hallmarks of the WPI experience as bustling classrooms, active clubs and activities, and a full slate of athletic competitions.

In my communications to the WPI community I have said that our hope is to get back to normal, though in many ways it will be a different normal—indeed, a better normal. The experience of navigating a pandemic has taught us some important lessons that we can carry forward into the post-pandemic world.

How might WPI be different post-COVID? One change is already coming into focus, and that is how we work at this university. After the majority of employees were asked to work from home beginning in March 2020, we learned how to stay productive without setting foot in an office—attending virtual meetings and events and using email, texts, phone calls, and productivity apps to collaborate. Working from home can be challenging, particularly for parents of young children, but it also provides a degree of flexibility that many employees welcomed.

This experience accelerated our creative thinking about work arrangements. Accordingly, going forward employees and their supervisors may negotiate flexible schedules and remote working arrangements, as long as those arrangements do not hinder our ability to meet the needs of our students. Not every job will qualify, but we plan to support employees who can do their jobs remotely and flexibly.

Employees are not the only ones who appreciate flexibility; students do, too. The pandemic has served to accelerate existing trends in education, particularly in the ways students want to consume their education and the modes of learning they prefer. Early in the pandemic we were forced to switch abruptly to all-remote teaching. This necessity served as a crash course in online learning for many of our faculty members. And since necessity is the mother of invention, it was also a spur to a remarkable burst of innovation that showed that things we once thought impossible to do remotely, including some science and engineering lab work, can in fact be done from a distance.

We will likely continue to offer students some flexible options and to use technology in creative ways to enable them to engage in their education in ways that fit their learning styles. A good example of this is lecture capture, where professors record their lectures so students can go back and review them at their convenience. That was already happening at WPI, but I think we will see it become much more common.

I also think we will see more online options for undergraduates. That certainly will not become the dominant mode of undergraduate education here, nor would most of our students want to study remotely. But we need to be responsive to the ways our students are comfortable learning, while also doubling down on what WPI does best: student-facing, in-person, hands-on learning.

While we were able to bring students back to the classroom in 2020–21, our renowned Global Projects Program (GPP) remained grounded due to the ongoing restrictions on global travel. As with coursework, creativity on the part of our faculty and students enabled our Interactive Qualifying Project and Major Qualifying



“The experience of navigating a pandemic has taught us some important lessons that we can carry forward into the post-pandemic world.” —Laurie Leshin

Project teams to have valuable and satisfying project experiences remotely, including a number of teams that were still able to work with global partners. It will be interesting to see how this experience might be integrated into the GPP in the longer term. Still, the embedded, in-country experience we offer students through the GPP is an invaluable learning opportunity, one I don’t think we will ever get away from.

While we explore new options for current students, we will also ramp up our efforts to stay connected with our learners throughout their careers. The world and the workforce are changing rapidly, and STEM skills have always been the most perishable—a trend that will only accelerate. We need to continue to find ways to build long-term relationships with our students. During the pandemic, we began offering our alumni significant discounts on graduate education from individual courses to full degree programs, delivered in-person or online. In the future, we should see further efforts, including certificate programs, short courses, and just-in-time learning, to help

alumni renew aging skills and become more valuable in the workforce.

Becoming more comfortable in the virtual world has benefits beyond education, as we’ve learned over the past 18 months. I held monthly town halls to share the latest information with employees during the pandemic—these routinely drew up to 600 attendees, more than would attend in-person town halls in the past; and hundreds of students and parents joined virtual town halls we held for them. Virtual gatherings with alumni drew attendees from across the country, something that would never have been possible before. Technology can help us build deeper connections; we just need to build that into our thinking and planning.

As we look to the future, the experiences of the past 18 months will figure prominently, in many ways, in WPI’s thinking and planning. With all of the sacrifice, stress, and challenge the COVID-19 pandemic brought to the university and its people, it would be a shame if we did not take from it some wisdom. At WPI, we have always learned from experience. In our more than a century and half we have never come face-to-face with an experience like one we have just endured. I think WPI will be a better and wiser place because of it. 1

<b>JUNE 1</b> At WPI, masks no longer required outdoors, nor indoors for fully vaccinated people able to socially distance	<b>JUNE 15</b> U.S. has recorded 600,000 COVID-19 deaths; WPI indoor spaces return to 100% capacity; no limits on events, visitors/vendors need not register	<b>JUNE 27</b> Delta variant now accounts for about 40% of positive COVID-19 test samples in the U.S.	<b>AUG. 1</b> All WPI students enrolled in on-campus courses or conducting research must now be fully vaccinated; all students and employees, even if vaccinated, will still participate in weekly testing
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<b>AUG. 7</b> Commencement celebration for Class of 2020 held on Quad	<b>AUG. 25</b> A-Terms begins for the 2021–22 academic year
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# ALUMNI NEWS



"WPI WAS A GREAT ENGINEERING SCHOOL DURING MY STUDENT DAYS IN THE 1950s AS IT HAD BEEN WHEN MY FATHER WAS A WPI STUDENT IN THE 1920s. DOTTI AND I HAVE HAD THE PLEASURE OF WATCHING THE SCHOOL EVOLVE INTO ITS PRESENT LEADING POSITION AMONG TECHNICAL SCHOOLS. WE BELIEVE THAT OUR COLLEGE EDUCATIONS MADE OUR STANDARD OF LIVING POSSIBLE, SO WE'RE HAPPY TO BE ABLE TO INCLUDE WPI IN OUR ESTATE PLANS AS WE CELEBRATE MY 65TH REUNION."

ALAN G. (AND DOTTI) LARSSON '56

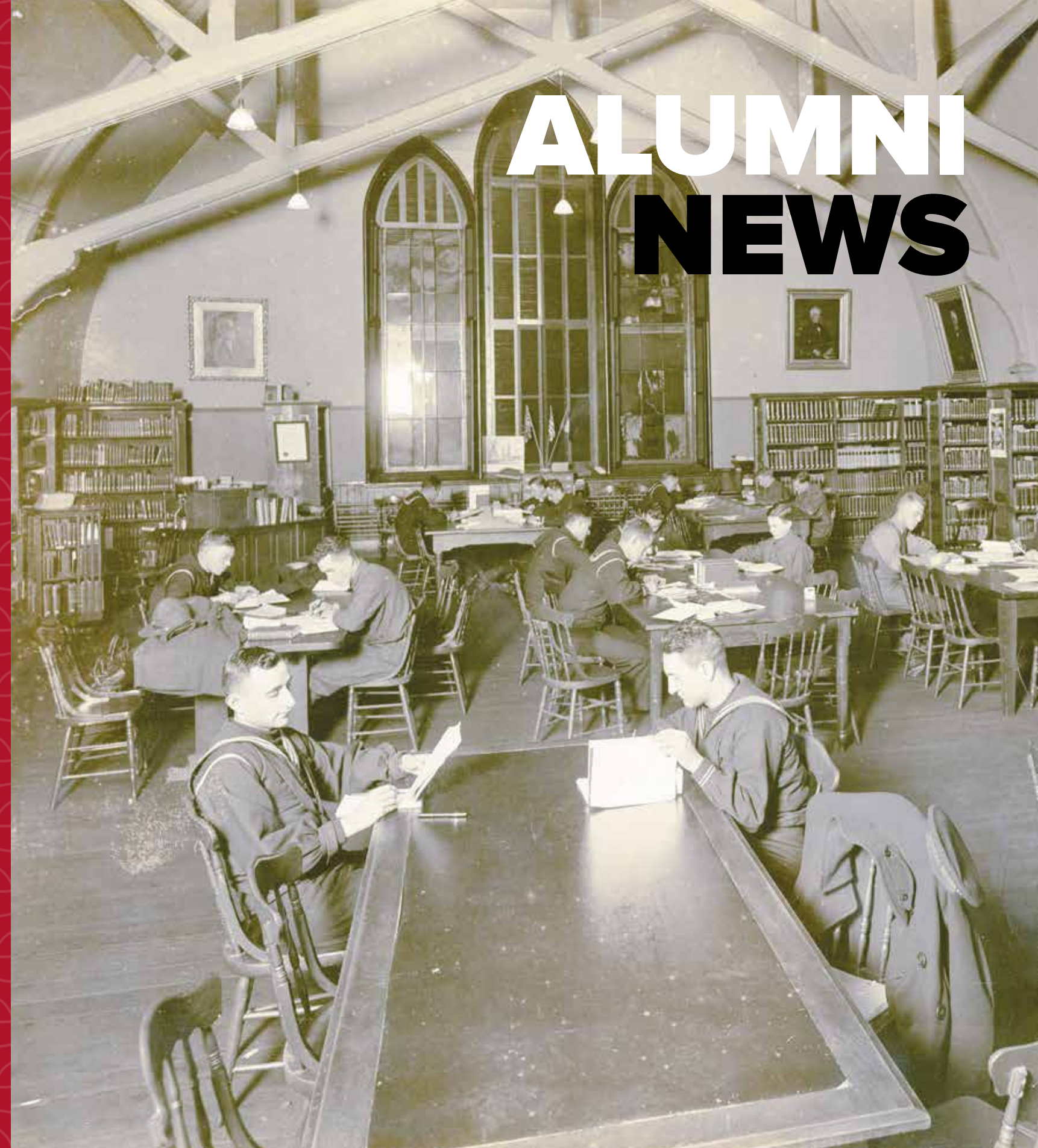
Through their estate the Larssons will provide critical funding to WPI's areas of greatest need, giving leadership the financial flexibility it needs to strategically address the university's most pressing initiatives.



#### HAVE YOU INCLUDED WPI

*in a will or trust? In a life income gift? As a beneficiary of life insurance, IRA, or other retirement account? Membership is about giving you recognition NOW for your plans to support WPI in the FUTURE. To join, visit [plannedgiving.wpi.edu](https://plannedgiving.wpi.edu).*

**FOR MORE INFORMATION** Contact Lynne Feraco, Executive Director of Gift Planning 888-974-4438 | [lferaco@wpi.edu](mailto:lferaco@wpi.edu)





# From the Desk of

**PAULA (FRAGASSI) DELANEY '75**  
PRESIDENT, WPI ALUMNI ASSOCIATION

## GOAT NATION GOING STRONG

As I begin my leadership of the WPI Alumni Association, I am so proud of our alma mater and our worldwide alumni community for how we have overcome the challenges of the past year and kept Goat Nation going strong. Now we can see and welcome the brighter days ahead of us. I hope you are having a great summer and that you will join me in participating in the alumni engagement opportunities in the months ahead.



# 160+

Alumni who participated in the Alumni Association Annual Meeting on June 3

# 700+

Alumni, parents, and friends who supported WPI student-athletes through the Goat Nation Giving Challenge in March, raising more than \$172,000 to support varsity athletics

# 1

WPI community standing strong, connected, and resilient in the face of great problems, thanks to your gifts of time, talent, and treasure

# 200

Alumni from classes ending in 0s, 5s, 1s, and 6s who gathered for virtual reunions on June 3, 2021

# 1,800+

New members welcomed into our global Alumni Association during Commencement Week festivities at the end of May

# 3

Number of things all great alumni do

- GO TO WPI VIRTUAL EVENTS
- GET INVOLVED WITH WPI
- GIVE TO WPI

Another number that matters: students seeking financial aid. Your gift to WPI, of any amount, helps these students close the gap between their dream of a WPI education and making it a reality. Consider also a gift to the WPI Emergency Assistance Fund, which helps students and WPI community members experiencing negative financial impacts from the pandemic.

[wpi.edu/+alumni](http://wpi.edu/+alumni) | [wpi.edu/+give](http://wpi.edu/+give)

# A LITTLE HELP FROM THEIR FRIENDS

The WPI Emergency Assistance Fund helped students affected financially by the pandemic.

The COVID-19 pandemic did not just disrupt a school year; it also upended the lives of WPI students and faculty and staff members. In the winter of 2020, as decisions were made about the fate of in-person classes, global projects, athletics, and more, it became clear that some community members were facing unforeseen expenses due to everything from last-minute travel to return home to acquiring the equipment needed to finish up the term remotely.

Stemming from a desire to not only address these challenges and needs, but to also provide a bit of stability and support in a time of uncertainty, the offices of Advancement, Student Aid and Financial Literacy, Talent and Inclusion, Dean of Students, and Payroll came together to establish the WPI Emergency Assistance Fund, a specialized fund focused on mitigating unforeseen financial hardships faced by students (and other members of the community) due to the pandemic.

"The idea was to come up with a solution to make sure students were able to continue their education uninterrupted and keep their education a priority without having to focus on unexpected financial difficulties," says **Monica Ellis**, assistant vice president, lifetime engagement.

Unlike some federal funding, which requires that recipients be domestic students who have filed a FAFSA (Free Application for Federal Student Aid), the Emergency Assistance Fund is open to all students—domestic and international, undergraduate and graduate—who need

assistance with living essentials like rent, utilities, and food. (Since the Emergency Assistance Fund's inception, a smaller fund focused entirely on food insecurity has also become available.) Students may apply for grants of up to \$1,000 with no expectation of repayment.

"I feel very grateful that we came together as a community to create this additional opportunity to help our students in a time of need," says **Jessica Sabourin**, director, student aid and financial literacy, who works with associate dean of students **Emily Perlow** and assistant vice president and dean of students **Gregory Snoddy** to review applications and determine the most effective way to help each student with their individual situations.

Ellis agrees, saying, "I was thrilled with how quickly we were able to get this mobilized. It speaks to the WPI community and what we're all about—we're a community of problem solvers and people who want to make a difference. We see a problem and want to figure out what we can do to help solve it."

Once the fund was established, the WPI community worked quickly, with alumni, friends, and even some student groups on campus, making almost 200 gifts totaling more than \$87,000 to help close to 100 recipients. Donations ranged from \$50 to thousands of dollars.

"Alumni from all over wanted to step up and help in whatever way they could," Ellis says, adding that many alumni who had depended on financial aid and alumni

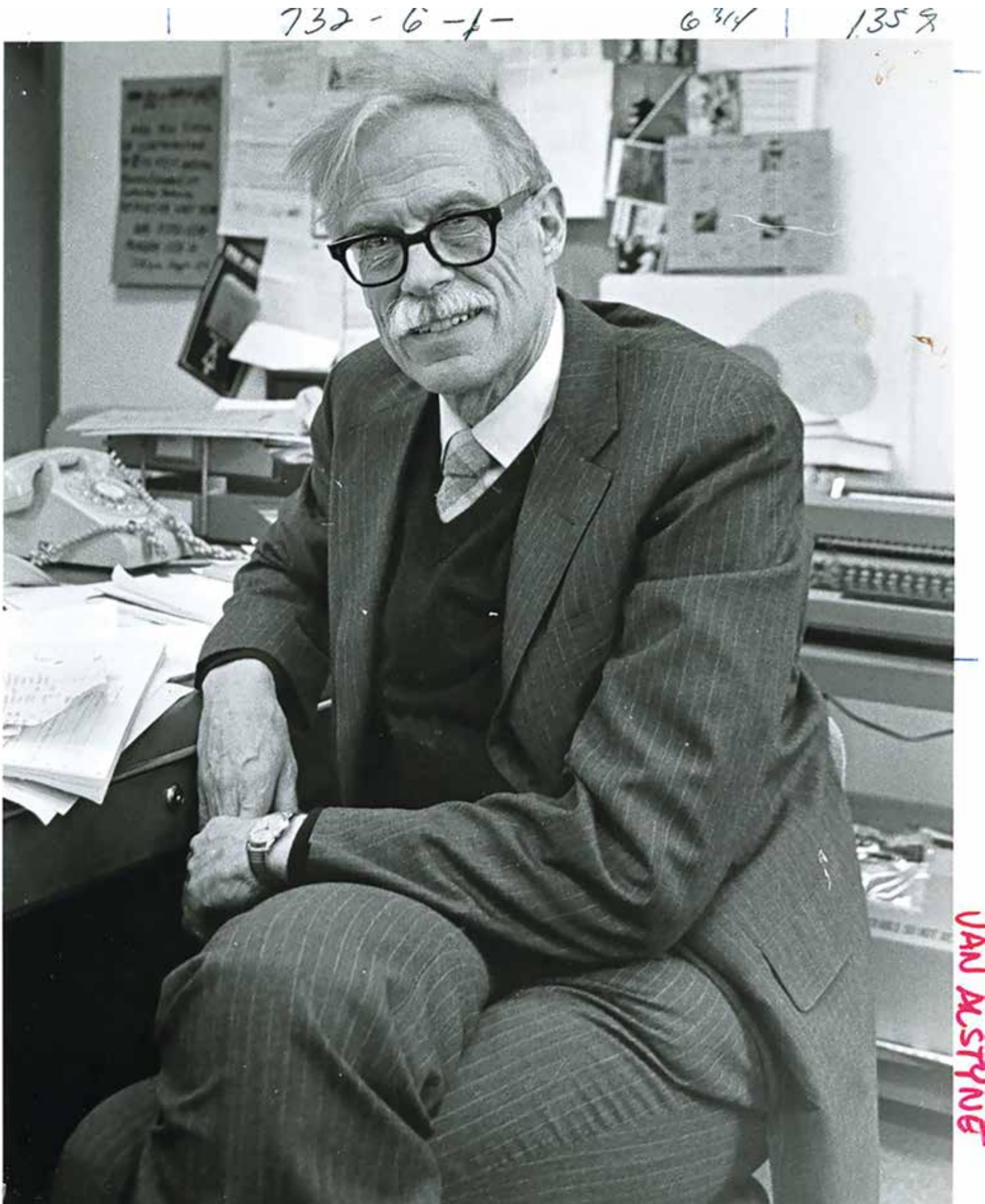
support during their own time at WPI were happy to step in and pay it forward for current students. "For those who had the means to continue to provide that support, it meant a lot to all of us that they would think of our students during this difficult time and do what they could to help them continue their education."

Sabourin shares a similar sentiment. "When you get a thank-you email back from a student who received a grant, it means the world," she says. "You might just think you're helping pay a utility bill, but that could've been a great source of stress for a student, something that had been taking their attention away from studying for a final. To be able to lessen that burden for them has meant a great deal."

While requests for aid slowed down when the academic year came to a close, the fund is still open and available for any students facing urgent financial hardship, an option Sabourin hopes will be sustainable as WPI and the world as a whole move forward. "There's been such a positive outcome from this, and that's a testament to the WPI community. I hope it continues as a resource for students who may have nowhere else to turn."

—Allison Racicot





# The Boundless Spirit of van A

## Philanthropy honors a legendary WPI educator

A polymath is defined as a person of wide-ranging knowledge or learning; a person whose expertise spans a significant number of subject areas, and who is known to draw on complex bodies of knowledge to solve specific problems. It was John van Alstyne's love for learning, teaching, encouraging, facilitating, and connecting that brought him to his innumerable interests, passions, and accomplishments. And the fact that he brought them all to WPI for his extended tenure is something for which many of us will be forever grateful.

The many generations of WPI students affectionately called "van A" was renowned for his concern for students. He went above and beyond to ensure students survived and thrived in WPI's challenging academic environment. He was known for his honest and enthusiastic efforts to understand and mitigate students' problems, academic and non-academic. And when he said he provided extra help, he meant it in a way few other teachers or advisors ever could.

Van A's enthusiasm for understanding and helping to mitigate the challenges students faced seemed boundless. To honor his contributions to WPI and the special place he occupies in our hearts, the WPI community is raising funds to name a space and create a visual remembrance of him that will serve as a memorial to his work and benefit students for generations to come.

The WPI motto, *Lehr und Kunst* (theory and practice), expands the breadth of learning to include the practice of technology. Focusing on the practice moves us from learning what technology is to a broader focus on what technology can do in the world, how it can best be applied, and the ways we can give our scientific discoveries feet on the ground to change lives.

Among van A's major contributions to WPI was his work to help craft the WPI Plan. As a tireless advocate for improvements to WPI's educational plan, he worked to forge a WPI that would help drive accomplished students to excel and would encourage struggling students to persist and, eventually, succeed. He felt it was imperative that liberal arts courses and requirements at WPI grow to be more rigorous and extensive. His passion for the Institute and its students was already clear, reflected in his statement that, "Nowhere, however, have I seen students work as hard as you do at WPI."

Van A, himself, continued to excel in his work, to the point of national recognition. He appeared in the 1970 edition of *Outstanding Educators in America: A Look at Who's Who in American Education in the '70s*

based on his exceptional service, achievements, and leadership in education. And, as the Institute's transformation to the WPI Plan began, he continued to engage, as he always had and always would, with students.

In early 1971 he was appointed dean of academic advising. A March 1971 article in the student newspaper, *Tech News*, noted that his goal was to reshape the WPI curriculum requirements, reorient the role of advising, and, most important, to reform general attitudes toward education at WPI. He advocated for academic advisors adopting a totally different role. He felt advising was "haphazard" at the time and needed to change significantly to support the new WPI Plan.

During his tenure at WPI he became best known and highly regarded as a superb teacher whose concern for students went far beyond the mere offering of extra help. He particularly enjoyed teaching freshmen, and once remarked that "working with students has kept me from thinking old." By his retirement in 1989, after 28 years at WPI, he had become more or less accustomed to having himself described as "legendary."

To be able to name an advising space in WPI's newest academic building, we are working to raise \$500,000, and we are more than halfway there. I invite anyone whose life van A touched to contribute if they feel moved to do so. If you are interested, you can learn more about this initiative and donate here: [support.wpi.edu/campaigns/tribute-to-van-a-memorial-fund](https://support.wpi.edu/campaigns/tribute-to-van-a-memorial-fund).

**NOTE:** Since this article was written, the campaign to name the academic advising suite in the new academic building in memory of van A has surpassed the goal of \$500,000. We thank the 325+ donors who made this possible. You can still support this fundraising campaign or choose to donate to the Dean John P. van Alstyne Memorial Scholarship, which provides financial assistance to offset any additional costs to a student or students as they complete an off-campus project. If you would like more information, please contact Bri Ross, director of alumni and student philanthropy, at [bsross2@wpi.edu](mailto:bsross2@wpi.edu).

Read an extended version of this article in the digital WPI Journal, [wpi.edu/+journal](https://wpi.edu/+journal).

—Jody Zolli '87



## Advancing the Learning Sciences and WPI Students

June and Bernie Dodge '70 support new building and scholarships

As soon as **Bernie Dodge** arrived on the Hill in 1966, he knew he'd made the right choice. "Right away I felt embraced by WPI," the electrical engineering major recalls.

Dean John van Alstyne (or van A, as so many alumni remember him) taught him calculus. The effort van A took to convey material clearly in his lectures and the care he took with his students stands out vividly in Dodge's memory, as does the way Charles Heventhal, his first-year English professor, brought literature to life.

By his junior year, Dodge had decided that engineering was not for him, but since his WPI education was made possible by a scholarship from the Bristol Company, which required that he major in engineering, he soldiered on. Still, he found community in his fraternity, Sigma Pi Epsilon, and a new passion.

In the summer before his senior year, Professor Heventhal recruited him to help lead a program for incoming first-year students who needed extra preparation for the rigors of a WPI education. As the English tutor, Dodge lived with and taught these students for a month. "That's when I discovered that teaching is something I loved."

After graduation, he spent two years with the Peace Corps teaching math in Sierra Leone. The experience helped him realize that teaching was an excellent fit for him and cemented his belief that "if you're going to devote your life to something, it should be something that makes the world better."

Upon his return to the United States, he was hired as an associate project administrator in WPI's IQP Center. He searched for housing for faculty members and students who would inaugurate WPI's first off-campus project center, in Washington, D.C., and helped faculty members develop experiences that went beyond engineering.

What resonated most with Dodge was WPI's focus on the impact of technology on society, which helped him see the connection between his commitment to education and his background in engineering. Looking for a field that would allow him to marry those two domains, he found educational technology. "I recognized that educational technology was as much about human systems as it was about technology," he says. "It was about using the engineering thought process to solve educational problems. That seemed like the perfect match for me."

He earned a PhD in instructional design development at Syracuse University and joined San Diego State University as an assistant professor of educational technology in 1980. Since then he has

developed courses on online teaching, educational games, and virtual reality. A sought-after expert who has spoken and taught in 32 states and 16 countries, he has served on several national educational advisory boards, was named an Apple Distinguished Educator in 2003, and received awards from the Multimedia Educational Resource for Learning and Online Teaching in 2004 and 2007. He is most widely recognized as the creator of WebQuest, an inquiry-oriented lesson format that enables elementary and secondary school teachers to design project-based lessons using web-based resources with the goal of developing problem-solving and critical-thinking skills. The WebQuest model is used by tens of thousands of teachers around the world. In China, for example, teachers compete in WebQuest contests. "People would come up to Bernie there like he was a rock star," says his wife, **June**.

Dodge retired from San Diego State in 2020, and he and June continue to run their company, which supports educators in the use of WebQuest. June says she feels as much a part of the WPI community as her husband; she belongs to his fraternity's alumni community and has visited WPI many times. "It's been impressive to see all the great changes on campus," she says.

He credits his success to his WPI education and experiences, and he and June have always wanted to give back to the university in a meaningful way. When they learned of WPI's new academic building, currently under construction, and its inclusion of a facility for the learning sciences, they couldn't pass up the opportunity. Because of their generosity, the facility, on the building's third floor, will be known as the Dodge Family Learning Sciences and Technologies Research Lab. "It's just perfect for us to be involved in," June says.

Bernie agrees, praising the collaboration space, which will bring people together to advance the learning sciences and educational technology.

Through their philanthropy, the couple is also establishing the Dodge Family Waterbury Scholarship for students from Waterbury, Conn., Bernie's hometown, and the Sigma Pi Endowed Scholarship for students in his fraternity.

Dodge says he has never forgotten the Bristol Company Scholarship that enabled his WPI education and everything that has followed. "The Dodge Family Scholarship," he says, "will let some other kids like me have a different life than they would have had otherwise."

—Judith Jaeger



PHOTO BY MATT FURMAN



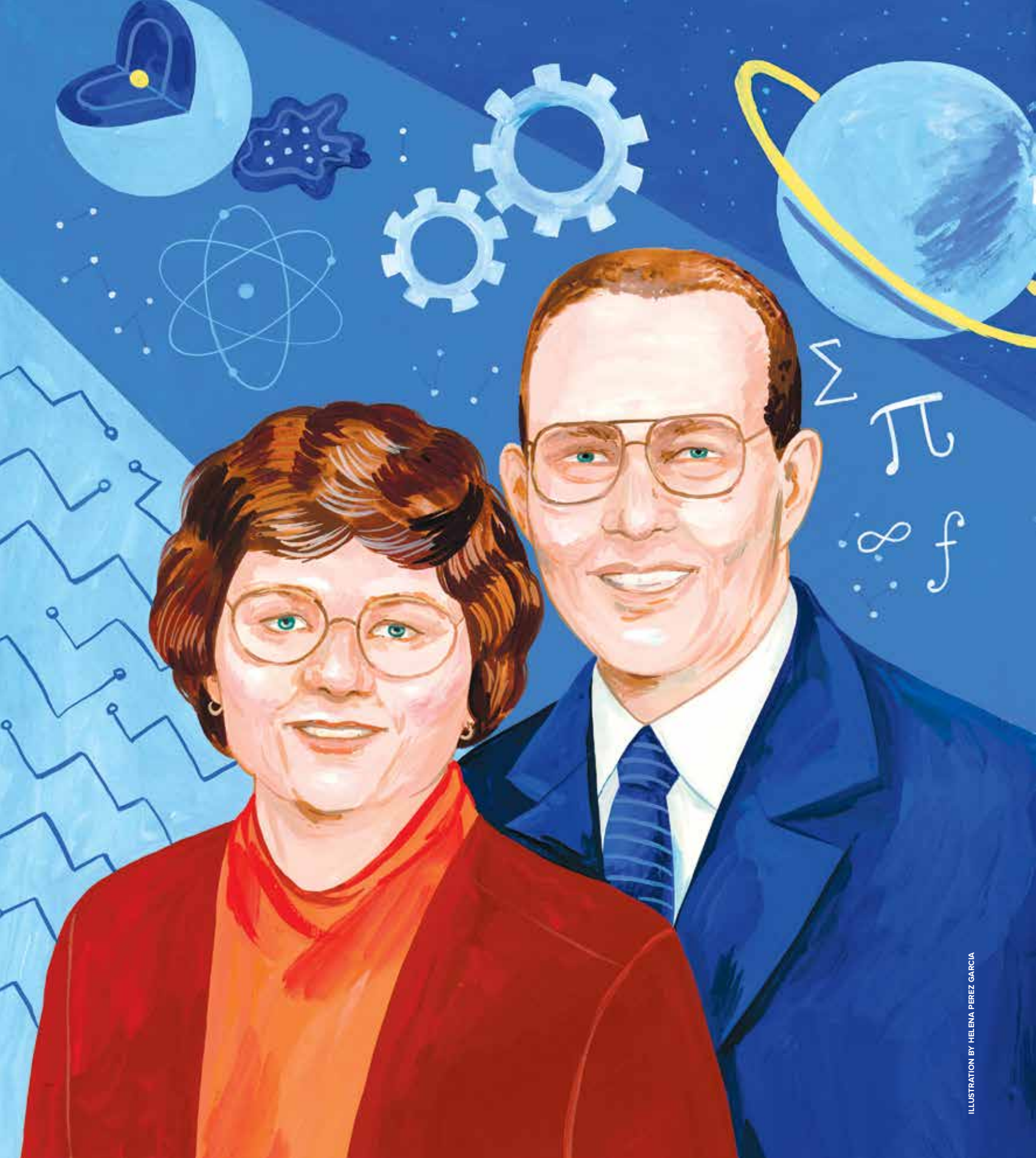


ILLUSTRATION BY HELENA PEREZ GARCIA

## Supporting Young Women in STEM

Carol Ann and Gordon Cook '62 Support the Award-Winning Camp Reach

Alison Frederick says her father, **Gordon Cook '62**, was a modest and reserved man who lived his life with the simple values of honesty, steadfastness, the importance of meaningful work, and the acceptance of responsibility. “He was a person who did not talk much about himself; however, there was one thing he did emphasize, and that was the value of education,” she says.

Cook, who earned a BS in mechanical engineering at WPI and an MS and a PhD at Purdue University, and his wife, **Carol Ann**, a chemist by education, instilled the importance of education in their children from very young ages.

“Both of our parents were science-minded, and they saw firsthand the opportunities and security provided by a college education, particularly in the STEM fields,” Frederick says. “They were grateful for the opportunities they had to earn college degrees and they each considered those opportunities a great privilege.”

Like many parents, the Cooks worked hard to ensure that their children had the opportunity to earn a college-level education. While they encouraged them to explore a variety of fields, including STEM fields, they recognized that many young women didn’t have positive science experiences in their early school years or didn’t have opportunities to learn about STEM.

Frederick remembers her parents sharing stories from their own childhoods when the career choices for women were often limited to teaching, nursing, and secretarial roles. Not wanting their children to be limited professionally, they stressed—with their daughters, especially—that they could choose any career they wanted, and that education was a tool to give women both equality in the workplace and control of their life circumstances. Ultimately, all three Cook children chose careers that require technical knowledge and strong problem-solving abilities.

Forward-thinking Gordon Cook passed away in 2000, but equally progressive Carol Ann ensured that his legacy as an advocate for education would continue. The Cook children knew their father was happy at WPI and that it was a very special place to both their parents, so they were not surprised when their mother recently gave instructions to support the university.

“Dad loved learning,” Frederick says. “He read voraciously and traveled extensively. Even when faced with a deadly illness, he chose to

participate in a trial at Johns Hopkins, becoming part of a study that has benefited many patients since.”

The Cooks’ gift created the Carol Ann and Gordon Cook '62 Camp Reach Endowed Fund. Frederick says Camp Reach was such a natural fit for the values her parents held dear. It will help ensure that the couple’s lifelong passion for STEM education, especially for women, becomes their legacy.

Camp Reach, winner of a 2011 U.S. Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, was created in 1997 to generate interest in engineering and technology among rising seventh-grade girls and to enhance their self-confidence and motivation toward STEM education. The endowed fund will provide financial support to girls and families who would otherwise not be able to attend the program.

“The Carol Ann and Gordon '62 Cook Camp Reach Endowed Fund will be used to provide direct scholarships to campers, increasing the camp’s ability to provide an immersive engineering experience to middle school girls in need of financial assistance,” says Sarah Wodin-Schwartz, associate teaching professor of mechanical engineering and one of the directors of Camp Reach. “We are grateful that the Cook family decided to make the increase of women in STEM a part of its legacy through this endowment.”

“I love that Camp Reach provides campers with as many female role models as possible and strives to connect the participants with students and faculty who might help them start thinking about their future paths in STEM,” Frederick says. “WPI provided my dad the learning and confidence to know he could ‘swim with the big fish’ in a graduate program, and he ultimately enjoyed a 25-year career with E.I. Dupont. His career made him happy and enabled him to support his family; he never asked for much more. He was a man of deep faith and that drove his desire to give back. Our family is pleased to know the Carol Ann and Gordon Cook '62 Camp Reach Endowed Fund will give back in support of women in STEM for many generations to come.”

—Sira Naras Frongillo

For more information on Camp Reach, visit [wpi.edu/+reach](http://wpi.edu/+reach).





PHOTO BY PAIGE GARLAND

## Like Mother, Like Daughter

**Kristin (Kotopoulos) Garland '95** and her daughter **Paige Garland '24** recently joined the ranks of legacy families at WPI. Legacy families hold a special place in the university's collective heart. The Garland women took this proud tradition one step further as Paige followed her mother's footsteps to the WPI Women's Volleyball team, which finished the 2019 season with a 14-14 record, earning a spot in the New England Women's and Men's Athletic Conference (NEWMAC) tournament for the fifth time in six years.

When asked how it felt to have her daughter play on the team, Kristin, a senior industrial hygienist, says, "I am so proud of all she has accomplished to get to where she is. I just want her to have the same positive experiences I had at WPI and make the kind of lifelong friends I have been so fortunate to have in my life. I know that WPI will give her that opportunity."

"Following in my mom's footsteps, not only as a student but as an athlete, is very humbling," Paige says. "I have admired her as a person for as long as I can remember, and it is very rewarding knowing that I have pushed myself to develop the best traits in her."

The WPI athletics program plays a major role in developing healthy, well-rounded students. It contributes to physical development, self-confidence, the spirit of teamwork, and the opportunity for leadership and high achievement beyond WPI's rigorous academic programs. But these benefits don't come easy. Adding athletic training, practices, and games to an already packed schedule trains students to focus and produce under pressure.

The junior Garland, an environmental and sustainability studies major, says being on the volleyball team is an important part of her

WPI experience. "My mom signed me up for volleyball when I was in middle school, and I've loved it ever since," she says. "It's great exercise, and I love the competitiveness of the game and the way the team needs to be united and connected to perform well. Yes, playing a team sport at WPI forces you to work hard on time management and leadership skills, but it also offers you the opportunity to connect with your teammates in meaningful ways."

"Being a WPI student-athlete gave me an opportunity to be a leader," Kristin Garland says, "and as someone who was initially very shy, the bonds that grew from volleyball really helped me find my voice and my leadership skills. The WPI athletics program taught me to balance work and personal goals and to take care of my mental and physical health—and without the connections I made at WPI I would not be half the person I am today."

Although the COVID-19 pandemic added significant restrictions to the WPI athletics program, the women's volleyball team made it a priority to connect when they could over the school year. And until they can be physically together again, they are taking the time to grow individually as players and to strengthen their physical and mental endurance levels.

—Sira Naras Frongillo

To learn more about the WPI Women's Volleyball team, visit [athletics.wpi.edu/sports/wvball](https://athletics.wpi.edu/sports/wvball).



# CLASSNOTES

submit yours to [CLASSNOTES@WPI.EDU](mailto:CLASSNOTES@WPI.EDU)



**EDITOR'S NOTE:** This special edition of Class Notes includes stories of WPI graduates who contributed to the response to the COVID-19 pandemic—locally, regionally, and nationally. Links to longer versions of many of these stories may be found in the digital version of the Summer 2021 Class Notes at [wpi.edu/+Journal](http://wpi.edu/+Journal).

## 1957

**Donald Rising** writes, “Marcia and I went on an antique car tour with four other couples—four days of mostly back roads in New Hampshire and Vermont. The cars were Fords: our 1911 Model T, a 1910 Model T, a 1913 Model T, and 1933 and 1939 V-8 Roadsters. We covered about 400 miles. I didn’t realize my old T could do 45 mph!”

## 1958

**Joe Ribeiro** writes, “I’m now “pushin’ 86, having enjoyed CFOing at several public and private organizations, after first practicing engineering in a local company. My memories of working for WPI always remind me that it is a classy institution of serious values, and worthy people. And, its students deserve the very best that can be done for them.”

## 1959

**Edwin Tenney** passed away on May 8, 2021. He is survived by his wife, Bonnie, son Douglas Tenney (WPI ’86) and daughter-in-law Gail Anderson Tenney (WPI ’85), daughters Laura Tenney and Karin Tenney-Helfrich, and five grandchildren.

## 1960

A paper by **Richard Brewster**, “Re-Creating the First Flip-Flop,” was published in the June 2018 edition of *IEEE Spectrum*. The article recounts his efforts to reproduce a device invented by William Eccles and F.W. Jordan, who applied for a patent for the flip-flop a century earlier, in June 1918. “The flip-flop,” Brewster writes,



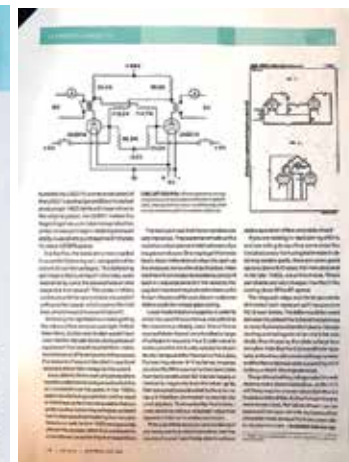
▶ RICHARD BREWSTER'S ARTICLE, “RE-CREATING THE FIRST FLIP-FLOP”

is a crucial building block of digital circuits: It acts as an electronic toggle switch that can be set to stay on or off even after an initial electrical control signal has ceased. This allows circuits to remember and synchronize their states, and thus allows them to perform sequential logic.

“The flip-flop was created in the predigital age as a trigger relay for radio designs. Its existence was popularized by an article in the December 1919 issue of *The Radio Review*, and two decades later, the flip-flop would find its way into the Colossus computer, used in England to break German wartime ciphers, and into the ENIAC in the United States.

“Modern flip-flops are built in countless numbers out of transistors in integrated circuits, but, as the centenary of the flip-flop approached, I decided to replicate Eccles and Jordan’s original circuit as closely as possible.”

Brewster says the equipment he built is now in the Computer History Museum in Mountain View, Calif.



## 1962

**Bill Krein** writes, “In addition to being an adjunct instructor with The Business School at WPI, I have started to row with the Duxbury Bay Maritime School—began last fall in the tanks and graduated to a quad in June. Since I started sailing in 2019, I’ve now become a ‘water man.’”

## 1964

A note from the daughter of **Walter Gonía (SIM)** says her dad passed away on Dec. 24, 2020, at the age of 90. He lived at Friendship Village in Schaumburg, Ill., for the last 11 years. He is survived by his wife of 67 years, Mildred, two children and spouses, Joan and David New of New Jersey, and Jim and Kim Gonía of Colorado, six grandchildren, three great-grandchildren, and other extended family.

## 1967

**Ron Gordon** writes, “Kate and I have 3 kids and 6 grandkids. We live in Williamsburg, Va., and Bozeman,


Mont., depending on the season. Enjoying our new puppy, Daisy, a GoldenDoodle. Kate is still active and I enjoy skiing, golfing, fly fishing, and soccer refereeing (still).”

## 1969

**Steve Rogers** has joined Gamma Aerospace as vice president of business development. With more than 35 years of broad jet engine and rotocraft industry experience, he will partner with customers to provide unique, industry-leading solutions that will support mutual long-term growth and profitability. Headquartered in Mansfield, Texas, Gamma Aerospace is a specialized, end-to-end provider of engineered airframe and flight components for leading original equipment manufacturers and Tier I suppliers in the aerospace and defense industries.

## 1978

**Lalit Sudan (MS MG)** has been elected president of Vision-Aid, a nonprofit organization based in Lexington, Mass., for a five-year term. He is a managing director of Market Data Group LLC. For the past two decades he has been an advisor to senior management teams at several leading global information technology and networking companies. In these consulting roles, he guided their entry into several new global business initiatives to create profitable growth.

 **Wes Wheeler** (“Sailing Mirrors Life,” *WPI Journal*, Winter 2020) was named president of UPS Healthcare, a new vertical business unit of UPS, in December 2019. As an experienced pharmaceutical industry leader, he was focused on running a new unit



NAME: **MATTHEW**

CLASS YEAR: **2021**

MAJOR: **MANAGEMENT AND AEROSPACE ENGINEERING**

“Thank you for providing opportunities to thousands of students. Whether you donate time or financial support, I can truthfully say that my character and education have been enhanced due to your generosity. I can’t wait to follow in your footsteps!”

Thanks to the generosity of WPI’s alumni, parents, and friends, students like Matthew were able to face the challenge of this academic year head-on! Your support provided WPI the ability to pivot using the TechFlex model and to help ensure that a new generation of humanist engineers and problem-solvers are ready to face whatever global challenges come their way!

**wpi.edu/+give**



▶ WES WHEELER '78

with more than 100 global locations, 6,000 employees, and a continued devotion to improving healthcare on a global scale.

Then came COVID-19. “I started in January,” he said, “and then the whole world went crazy.”

Wheeler held Zoom calls all day to figure out the logistics of getting supplies around the world. As part a presidential task force called Project Airbridge, UPS Healthcare moved 20,000 tons of PPE from China and Asia on 230 chartered 747 freighter flights with the Federal Emergency Management Agency. Later, he focused on the efficient and safe global transport of tests, test kits, vaccines, and treatments. In fact, in December 2020, UPS Healthcare was charged with helping distribute the Pfizer-BioNTech COVID-19 vaccine, the first vaccine approved for use in the United States, a job that put Wheeler in the national media spotlight. In an interview with Michel Martin, host of NPR’s *All Things Considered*, Wheeler said, “I think we’re so caught up with doing this work right now and so excited about it and so anxious about it, making it work for this country and the world, that we haven’t even thought about the impact yet to ourselves personally. We’re ready. We’re very confident. We’re very, very pleased and proud to be part of this—all the UPSers here working very hard to make this work.”

**1979**

▶ **Steve Rusckowski** (“Stephen Rusckowski Leads Quest Diagnosis Through the COVID-19 Pandemic,”



▶ STEVE RUSCKOWSKI '79

*WPI Journal*, Fall 2020) is chairman, CEO, and president of Quest Diagnostics, the world’s leading provider of diagnostic information services. Quest began testing for COVID-19 in March 2020, and within three months was conducting 750,000 tests a week. Around that time, Rusckowski was tapped to advise the White House Coronavirus Task Force about how to work together to ramp up testing to help address the emerging global health crisis. “It’s been a wild ride,” he told the *WPI Journal* at the time, noting that his company’s response to the pandemic is an outgrowth of Quest’s commitment, under his leadership, to providing low-cost, high-accuracy diagnostic tests.

“What we do at Quest Diagnostics represents a very small portion of healthcare costs, but a very large portion of the information that doctors or clinicians need to determine the next steps in people’s care,” Rusckowski said in April 2020, when he participated in a news conference with Massachusetts Governor Charlie Baker at Quest’s Marlboro, Mass., headquarters. At that conference, he announced that Quest would be ramping up to process 30,000 tests per day at company facilities nationwide. “What we have said at Quest for years is that we’re in the business of empowering better health with diagnostic insights. This is just a glaring example of the importance of what we do.”

**1980**

▶ **Richard Childs** says, “The two most important things I learned at WPI

were chromatography and how to make beer. Many thanks to Professor Cheetham and especially Professor Crusberg for the impact they made in my life. Also thanks to Morgan Construction for their financial support.”

**1981**

▶ **Paul Mangaudis** writes, “I retired in February 2020 as Senior Engineer for Cathedral City, Calif. I took this position after working seven years for Public Storage in its Glendale HQ as Director of Construction, Access Compliance, where I developed its ADA Compliance Plan; trained facility managers in upgrading its hundreds of existing self-storage properties to ADA standards; and worked with hired civil engineers, architects, and construction managers to develop newly constructed buildings and upgrade acquired properties to comply with company, engineering, and ADA standards.

“Prior to these positions, I worked for three local, regional, and national civil engineering firms in Southern California (B & E Engineers, Psomas, and Kimley-Horn & Associates, respectively) for 25 years in project engineering and management positions. A few projects I am very proud of working on as the civil engineer of record were the Getty Center in Los Angeles, a \$1B hilltop fine arts museum, offices for the Getty Trust, and the art history library complex designed by Richard Meier & Partners; the Getty Villa Restoration and Expansion Project in Pacific Palisades, a recreation of a 1st century Herculaneum villa that was excavated near Pompeii that houses J. Paul Getty’s Roman and Greek antiquities collection; the DreamWorks Animation Studios in Glendale, a 7-building HQ campus for the company started by Steven Spielberg, Jeffrey Katzenburg, and David Geffen; the Sony Studios Expansion Project, which added new offices, movie sound

stages, and parking structure buildings in Culver City; and many other land development projects for national retail and residential firms.

“Since retiring, I drove cross-country to move back to my home state of Massachusetts—to Cape Cod with my husband, Tom, and our 2-year-old Labs. I’m enjoying working on projects at home, golfing, taking daily walks on the beach or nature trails, and having four seasons again!”

▶ **Marc Trudeau** offered “In This Together,” a series of online Open Space gatherings around the question, “How will we, the WPI community, support each other through this difficult time?” Reporting that he experienced a roller coaster ride of emotions, he invited all those with a passion to connect with and learn from each other to participate.

**1982** ▶

▶ **Lauren (Stratouly) Baker ('85 MS, '88 PhD)** is the founder of Insight Medical Consulting and previously founded Avania, a contract research organization. Her career for the last 20 years has been focused on helping companies that are developing biotechnology bring a wide variety of products to market—from medical devices to biologics. With the onset of a global pandemic, that work shifted significantly. As enrollment in clinical trials slowed, clinical research in the U.S. was put on hold, and no elective procedures were taking place, Baker and her team began helping companies



▶ LAUREN (STRATOULY) BAKER '82



with products in a variety of areas including virus and antibody test kits, PPE, novel approaches to the shortage of ventilators, blood products, and filters used to remove toxins from the blood of patients with COVID-19.

The projects were being pursued via an FDA-initiated process under a government emergency bill put in place in February 2020 to allow medical devices to be placed into commercial distribution with a shortcut process. Under a provision termed an Emergency Use Authorization, companies can sell products with exceptions highlighted from the standard FDA review process. “If we can do our part to get a test kit out there or a new kind of ventilator,” Baker said at the time, “then good—maybe we can do something to move the needle. We all need to band together during this medical crisis in any way we can.”

🌱 **John F. Kelly**, vice president for quality operations and environment, health, and safety for Pfizer, was the keynote speaker at WPI’s 2021 annual Global Public Safety Industry Forum, which this year focused on pandemic response and readiness and featured experts from academia and industry. Speaking in front of a backdrop that read “Science Will Win,” Kelly stressed the important role that science played in Pfizer’s development of a COVID-19 vaccine. “We literally moved at the speed of science to make this happen,” he said. “Science is relentless. It never gives up. It keeps asking questions until it finds what it’s looking for. Science never rests. It has to reinvent itself every day, prove itself again and again.”

He began his remarks by discussing the vaccine and the steps the company took to make it possible. “By uniting transformational technology, cutting-edge science, and the indomitable human spirit, Pfizer has been able to develop, manufacture, and begin to supply one of the biggest medical advancements in the past 100

years,” he said. Kelly joined Pfizer in 1982 as plant services engineer in Brooklyn, N.Y., and has held a variety of positions in engineering and manufacturing over the years. He assumed his current position, in which he is responsible for leading the overall quality function for Pfizer and for leading global environmental health and safety across the company, in 2017.

The Center for Global Public Safety is an interdisciplinary research and innovation initiative established in 2016 by WPI in collaboration with Tsinghua University in Beijing to bring together industry leaders and universities from around the world to lead an integrated effort to improve global public safety.

**Ingrid Slembek** writes, “I’ve been in Switzerland for 15 years after having lived and worked in Germany, Australia, and Belgium since getting my MBA from WPI in 1989. I’d love to connect with fellow graduates in Switzerland—I am contactable at [slembek@gmail.com](mailto:slembek@gmail.com).”

## 1985

**Jay Cormier** has been inducted into Marquis Who’s Who Biographical Registry. Motivated by a desire to use his background in technology to help people with age-related macular degeneration, a desire inspired by his grandmother’s experience with the condition, he founded Eyedaptic in 2016. The company, which he serves as CEO, provides patented augmented reality visual aids for macular degeneration and other retinal diseases. His achievements have earned him the Audience Choice Award for Embedded Vision Technology, the Innovator of the Year Award from the *Orange County Business Journal*, and the High-Tech Company Award. Cormier, who also holds an MBA in strategy and finance from Northeastern University, is a member of WPI’s Tech Advisors Network.



▶ JAY CORMIER '85

## 1986

**Jim Pouliopoulos** is the 2021 recipient of the Dr. Dave Landers Faculty Mentor of the Year in the Northeast-10 Conference. He is the founding director of the Professional Sales Program at Bentley University and is a Senior Lecturer in Bentley’s Marketing Department. The nomination read, “Simply put, Pouli is the type of professor that goes the extra mile and utilizes the few minutes before and after class to get to know his students personally. This fact makes it so that his support is not only seen in the classroom, but rather outside the class and with our extracurriculars as well.”

## 1988

**Larry LaFreniere** has been named a member of the Federal Reserve Bank of Boston’s New England Advisory Council (NEAC). He is president of Electric Supply Center, which he acquired in 1998. Since then, he has transformed the local business into one of New England’s fastest-growing electrical suppliers, expanding the company from a single office to five locations and generating impressive revenue growth. “The pandemic has brought unique challenges to businesses and the economy in Massachusetts,” he says, “but with challenges comes opportunities for growth and change. I look forward to working with NEAC to help Massachusetts’ businesses identify opportunities going forward.”



▶ JEFFREY GOLDMEER '89

## 1989

**Lisa (Anderson) Barton** was named Chief Operating Officer of American Electric Power, headquartered in Columbus, Ohio. In this role she oversees operations in the company’s 11-state service territory. “I’ve had the pleasure of serving this industry for 33 years,” she says, “and I’m extremely proud of the progressive steps we are taking to advance a clean energy economy.”

**Jeffrey Goldmeier (MS '91)** writes, “I was promoted to the position of Emergent Technology Director at GE Gas Power. In this new role, I am responsible for developing and executing strategies to transition gas turbine-based power plants into low-or zero-carbon-emissions systems. I’m also proud to announce the launch of my new podcast, *Cutting Carbon*, which focuses on decarbonization through a series of conversations with industry experts. My work on hydrogen-fueled gas turbines was published in a new reference text, *Thermal, Mechanical, and Hybrid Chemical Energy Storage Systems*. In December 2020, in recognition of my work on decarbonizing gas power systems, I received a GE Gas Power CEO Excellence Award.”

## 1990

🌱 Wachusett Brewing Company in Westminster, Mass., founded in 1994 by classmates **Kevin Buckler**, **Ned LaFortune**, and **Peter Quinn**, together with Atlas Distributing, released a new beer in April 2020 to raise funds to support three COVID-19 response funds in the communities where they operate: the United Way of North



▶ NED LAFORTUNE '90

Central Massachusetts Stand United Fund, the United Way of Tri-County Community Response Fund, and Worcester Together, a joint effort between the United Way of Central Massachusetts and the Greater Worcester Community Foundation. The beer, Glory American IPA, is an approachable and modern expression of the IPA style that is double dry-hopped with Galaxy, Citra, and Azacca hops.

Wachusett Brewing, which has grown to become one of the largest breweries in Massachusetts, has used 100 percent of the proceeds from the sale of special six packs to support the community in meaningful ways. For example, in January 2020 it partnered with other local breweries to develop Worcester’s Bravest, which supported relief funds for the families of fallen Worcester firefighters. Glory American IPA was initially slated for release in summer 2020, but as the pandemic surged in the spring, LaFortune, Wachusett’s CEO, moved up the distribution date to keep his team employed, serve his customers, and once again generate charitable financial support for his community. “Wachusett exists today because of volunteer efforts of family and friends of the brewery in the ’90s,” LaFortune said. “We could not afford to pay for bottling or special event labor in the early days. This goodwill impressed upon us the impact of giving back. Wachusett has supported virtually every North Central Massachusetts charity possible over the past 26 years and COVID-19 has simply expanded our mindset on giving back.”

🌱 Kohl’s CEO **Michelle Gass** elected to not take a salary as thousands of the

retailer’s employees were put on furlough. “It is an incredibly difficult decision to extend our store closures and temporarily furlough some of our associates,” she said in an announcement. “We look forward to the day that we can reopen our stores to welcome our associates back and serve the millions of families across the country that shop Kohl’s.”

## 1992

🌱 Biochemistry major **Matthew Barrows** joined Massachusetts-based Moderna in 2017. As director of personalized cancer vaccine manufacturing, Barrows was building a high-quality manufacturing operation when Moderna shifted its focus to begin a search for a vaccine; the company developed one of the first two COVID-19 vaccines to be approved for use in the United States. In collaboration with the U.S. government and the Biomedical Advanced Research and Development Authority, that small-scale operation began manufacturing the new vaccine in record time while the company worked to scale up production. “Seeing the daily mortality rates, the impact on our health care system, the dramatic impact to the world’s economy and our way of life,” Barrows said, “it’s not hard to get motivated to work on a potential solution for the current public health crisis. Knowing that Moderna and its hardworking employees could be part of that solution is what drives me to keep pushing.”

**Michael Buckholt (PhD BBT)** has been promoted to teaching professor in the Department of Biology and Biotechnology at WPI. He teaches courses in environmental biology, anatomy and physiology, and ecology and animal behavior. His research focuses on the best application of technology to laboratory teaching, methods of teaching students how best to communicate, and the development

of research-based courses. He has served on the Undergraduate Curriculum Committee and the Institutional Animal Care and Use Committee, and he is an Insight Advisor to students who are transitioning to college.

**Andy Meschisen** has joined the executive management team of Asahi/America as vice president of operations and materials. With a broad range of skills and experience ranging from operations and manufacturing to quality and inventory management, he oversees the company’s operations and manufacturing, materials and supply chain, quality assurance, warehousing, and facility maintenance.

## 1994

**Dan Beauregard** has been named vice president of strategic alliances at ZeroNorth. His role is to build out the company’s ecosystem of go-to-market partners across AppSec and DevOps, leading efforts around the organization’s technology alliance and channel partner programs. He has over 15 years of DevOps and security experience.

## 1996

**John Crowley** has been named a director in Prescient’s Intelligence & Insight business. Previously, Crowley, who earned a PhD in neuroscience from UMass Medical School, led analyst teams at Decision Resources Group covering rare diseases in the neurology, immunology and hematology spaces, as well as infectious diseases.

**Joseph Maraia**, co-chair of the Intellectual Property group at Burns & Levinson, has been named an “IP Star” by Managing Intellectual Property. He has practiced law for over 20 years, handling U.S. and foreign patent prosecution and litigation matters in state and federal courts and before the Patent Trial and Appeal Board.



▶ MARNI HALL '97

**Jeff Stearns** has been named Director of Technical Practices for Water Infrastructure at Woodard & Curran. He says, “I will be working to improve the connections across practices and between the different functions within the SBU. It’s a challenge I’m very much looking forward to!”

## 1997

🌱 **Marni Hall** (“Science, Data, and the Pandemic,” *WPI Journal*, Fall 2020) is vice president of clinical evidence and head of U.S. regulatory science and strategy at IQVIA, which uses data, technology, and advanced analytics to help its clients advance medical research and healthcare. An advocate for employing a wider range of data in research and regulation (real-world data that can help predict and track the performance of medications and other products in the real world, and even augment and accelerate traditional clinical trials), she found in the COVID-19 pandemic a clear demonstration of the value of this new way of looking at medical research and regulation. Hall, who joined a national task force charged with developing infrastructures and methods for managing the pandemic and preparing for future disasters, said the global health emergency has shown that real-world data and evidence can help us understand a rapidly changing public health crisis and speed decisions about testing and treatments in ways that conventional research alone cannot.



The acceleration of learning made possible by the sharing of new approaches to using real-world data is one outcome of the COVID-19 emergency that Hall said she hopes to see continue beyond the crisis. Another is the collaboration of multiple stakeholders and multiple interests toward reaching a common public health goal. “There is so much that is tragic about COVID-19,” she said, “and this crisis has taken people away from other important activities, but it is also hopeful, in a way. It may prove to be a force function or an accelerant to advancing precision medicine and the use of real-world evidence, and it may teach us how to collaborate in new and different ways that will ultimately improve public health. To me, that is encouraging.”

## 1999

**Brendan Smith** has been appointed Chief Financial Officer & Corporate Strategy at Translate Bio, a clinical-stage messenger RNA (mRNA) therapeutics company in Lexington, Mass., which is developing a new class of potentially transformative medicines to treat or prevent debilitating or life-threatening diseases. An accomplished executive with more than two decades of experience within high-growth biopharma environments, Smith, who also holds an MBA from Harvard Business School, will be responsible for Translate Bio’s finance and accounting, information technology, investor relations, and corporate strategy functions.

## 2000

**Gregg Burnett** has been named vice president of DiPrete Engineering’s Dedham, Mass., office. With over 20 years of experience in the civil engineering industry integrating infrastructure needs and strategic permitting requirements on a

broad range and scale of projects, he previously worked as civil department manager for GreenbergFarrow and a project engineer for Brassard Design and Samiotes Consultants.

## 2001

**Narayanan Gangadhar (MS CS)** has been named Chief Executive Officer and Key Managerial Personnel of Angel Broking. He brings over two decades of global experience in leading technology businesses at top tier Silicon Valley companies, such as Google, Microsoft, Amazon, and Uber. As head of technology at Uber, he led the firm’s core infrastructure, data platform, machine learning, and data science teams. At Google, he led the launch of the first set of Google’s cloud infrastructure services and led large teams responsible for developing the overall application infrastructure that powers apps like Google Drive and Google Docs. As general manager and director at Amazon Web Services, he developed Amazon’s cloud database business. He has served on the boards of such technology companies as Madison Logic and Digital Asset and advises many early-stage start-ups looking to advance their teams and platforms.

**John LeBlanc (MS FPE)**, staff vice president and senior engineering technical specialist at FM Global, received the 2020 Special Achievement Award from the National Fire Protection Association, acknowledging his many years of service to the organization in contributing to the development of national fire codes and standards designed to protect commercial and industrial properties. A world-recognized fire protection expert, he serves on 10 NFPA technical committees related to explosion protection systems, aerosol products, and flammable liquids. He has worked for FM Global for 35 years in a wide variety of loss-prevention engineering and consulting roles.

**Mike Titus** is associate director of manufacturing sciences and technology at Moderna Therapeutics, which developed the mRNA-1273 vaccine for COVID-19. The company received an award from the Biomedical Advanced Research and Development Authority, a part of the U.S. Health and Human Services department, for up to \$483 million to accelerate development and FDA licensure and scale up manufacturing processes to enable large-scale production.

## 2002

**Cassandra Andersen** is chief of community health in Worcester’s Public Health Division, a position that has put her on the front lines of the battle with COVID-19. In partnership with a broad range of organizations, including clinics, hospitals, schools, universities, police coalitions, and neighborhood and community-based groups, she works to enhance the city’s health policy, program, and infrastructure. When the pandemic hit, her role quickly shifted as she and her team sought to protect the lives of those who live and work in Worcester. For example, she coordinated the clinical outreach of staff and volunteers to individuals who tested positive for the coronavirus and to those they may have exposed, ensuring that all parties understood isolation and quarantine measures and received the care and support they needed.

“As the pandemic spread across the city,” she said, “the situation evolved rapidly and created a need to change protocols and workflows at a moment’s notice. The ability to look at the big picture, apply analytical skills, and shift gears quickly between projects became invaluable. I needed to effectively communicate and translate messages across interdisciplinary teams of policy makers, managers, epidemiologists, doctors, nurses, and other clinical staff. These and so many other skills I developed



▶ CASSANDRA ANDERSEN '02

at WPI helped me find ways to support public health staff and interdepartmental partners in a fast-paced, high-pressure environment. I owe WPI a debt of gratitude for preparing me to help my home city fight this global health crisis.”

## 2004

**Tim Baird** recently completed his first illustrated children’s book, titled *Good Night Phobos, Good Night Deimos*. It is set on a slightly futuristic Mars and follows the nightly routine of a young man stationed at a scientific habitat cluster. He reports that “the book has delighted advanced readers and is sure to help your children dream of exploring the world around them (and beyond). It is currently available for pre-order through all major channels, as well as the indie bookstore of choice.”

When **Erin (Bliven) Sizemore**, an informatics health scientist at the U.S. Centers for Disease Control and Prevention (CDC), partnered with a team at the MIT Lincoln Laboratory as part of the CDC emergency response to COVID-19, she was glad to learn the partnering team included a fellow grad, **Adam Norige '03, '04 MS**, an associate group leader at Lincoln Lab. Sizemore, who had served as lead epidemiologist and data manager for the Tuberculosis Trials Consortium within the CDC’s Division of Tuberculosis Elimination, volunteered to support the COVID-19 emergency response. “During public health emergencies, the CDC provides emergency response efforts largely through volunteer deployments of CDC employees and the U.S. Public Health Service Commissioned Corps,”



▶ ADAM NORIGE '04

she said. “Taking time away from our ‘day jobs,’ CDC staff travel the globe in support of emergency health crisis situations. Since 2015, I have had multiple deployments, including to Sierra Leone and Rwanda. Most recently, however, I have deployed twice to the CDC’s Emergency Operations Center for COVID-19.”

Initially involved in building sensors and analytics to help strengthen the country’s ability to fight biological threats, Norige found that broader disaster relief technologies were needed. He cofounded a group to develop novel technologies to assist with some of the nation’s most complex disaster relief and humanitarian assistance challenges. “When it became clear that COVID-19 was going to become a pandemic,” he said, “we brought these two research fields together and focused much of our research activities on identifying and creating near-term technologies that could assist with the response.” Sizemore, Norige, and their respective teams worked together to understand how COVID-19 exposure notification technologies can help limit viral transmission. Their shared goal is to rapidly develop and evaluate a range of new technologies that will help control the spread of pandemics, including COVID-19. “The capabilities that we build now,” said Norige, “will help strengthen our ability to respond to future epidemics and similar events with less disruption to our daily lives.”

## 2005

**Paul Lieberman** is co-founder and president, global technology, of DraftKings Inc., which early in the pandemic announced a charity



▶ ERIN SIZEMORE '04

initiative to mobilize sports fans to band together “in the spirit of triumphing over adversity.” The fantasy sports company committed \$500,000 to the United Way and challenged fans to double it by posting pictures and videos of themselves “rockin’ your favorite rally cap” on Twitter, Facebook, and Instagram.

## 2006

**Chris Baker (BS FPE/MS ME)** currently serves as the program executive for NASA’s Space Technology Mission Directorate (STMD) Small Spacecraft Technology Program (SSTP), which seeks to expand the ability to execute unique missions through the rapid development and demonstration of capabilities for small spacecraft applicable to exploration, science, and the commercial space sector. He also serves as the program executive for NASA’s Flight Opportunities program that facilitates rapid demonstration of promising technologies for space exploration, discovery, and the expansion of space commerce through suborbital testing with industry flight providers. **Jeremiah Crocker ('08 MS FPE)** has been named vice president of business development at Telgian Engineering & Consulting, with a focus on fire, life safety and security technologies, requirements, and trends. With 13 years of industry experience, he is a member of the Society of Fire Protection Engineers, as well as the National Fire Protection Association.

**Tom Lashmit** in early 2016 found himself in the middle of a chain of goodwill that will make life a little easier for people with Parkinson’s disease. According to the Marlboro,



▶ TOM LASHMIT '06

Mass., *Community Advocate*, the chain began when Jimmy Choi, best known for his appearance on *American Ninja Warrior*, complained in a social media post about the difficulty he had getting the tiny pills he takes for his Parkinson’s out of the pill bottle. After seeing the post, Brian Aldridge, a country music video director, taught himself to use design software and developed a pill bottle that can dispense one tiny pill at a time. Aldridge contacted Lashmit, a high school friend, who used his new 3D printer to make a prototype, fine-tuning the design along the way. “The reports are that these work well for super tiny pills,” Lashmit says, “and that the lids are particularly easy to open, which is another issue for Parkinson’s patients.” Aldridge donated the patent for his design to the Michael J. Fox Foundation and makes the schematics available free online.

## 2007

**Sam Feller** writes, “My last day at Amazon was March 19, 2021. I’ve left to start a new venture. After spending close to two and a half years at Amazon, two as a technical program manager, I can confidently say that most project management tools are terrible and I want to fix that. “Deep down, I don’t think of myself as a program manager. When you peel back the layers, I still think of myself as an engineer, maker, product developer, entrepreneur, and problem solver. Technical program management just happened to be the thing that was necessary at the time to help my teams make stuff. At the core, I think most project management tools fail because they get caught up in documenting a plan—i.e., who’s

doing what and when. In fast paced, ambiguous environments, most plans are out of date the day they’re printed. It’s everything else outside those plan documentation tools, though, that a project manager does to keep a team humming, and that’s where I want to focus.”

**Rudra Kafle (MS PH, '12 PhD PH)** has been promoted to associate teaching professor in the Department of Physics at WPI. Kafle has developed studio physics courses for WPI and helped develop the astrophysics minor. His research interests focus on theoretical studies of atom interferometers and gyroscopes with Bose-Einstein condensates, DNA biophysics, and physics education research. Kafle has served as co-principal investigator on a project funded by the National Science Foundation to increase the number of physics teachers in U.S. high schools, and he has been involved in WPI summer programs and the Goddard Cup Water Rocket Competition for regional high schools.

## 2010

**Alejandro Solà (MS SD)** writes, “My daughter, Emilia Solà, will join WPI as an Aerospace Engineering undergraduate this fall.”

## 2012

**Stephen Cialdea ('14 MS ECE)** has been appointed director of engineering at Boston Solar’s Woburn, Mass., headquarters, where he oversees the company’s engineering team. A Massachusetts licensed Professional Engineer and a NETA Level 4 Certified Senior Technician, he was previously senior engineer and subject matter expert in the Westborough, Mass., office of CE Power of Cincinnati, Ohio. **Lizzy De Zulueta**, CEO of Zulubots Inc., joined The Ventilator Project, “a rapid and scalable solution to solve the global ventilator shortage.” The effort built an army of engineers recruited



to prototype a low-cost ventilator for global distribution, using alternative materials to circumvent the medical supply chain and rapidly mass-produce the ventilators.

## 2013

**Michal (Talmor) Tilley**, a PhD candidate in mechanical engineering, passed away suddenly on March 29, 2021. She graduated with a dual major in aerospace engineering and robotics engineering with a minor in astrophysics, before enrolling as a graduate student at WPI and working on research in electrohydrodynamics in the laboratory of Professor Jamal Yagoobi. Her work earned her a NASA fellowship and inclusion in *Aviation Week's* 20 Twenties program. She spent a summer at NASA's Goddard Space Flight Center and time at the NASA Glenn Research Center, and also traveled to France, Spain, and Japan, and spoke at numerous conferences in the United States. "Her PhD work dealt with pumping of dielectric fluids in micro- and macroscale in the presence and absence of phase change," Yagoobi said. "One of her major contributions to the field was to describe the impact of temperature on the performance of EHD conduction pumping, critical for the design of EHD pumps operating in the outer space environment." She had just joined Aurora Flight Sciences (a division of Boeing) at the time of her death. She leaves her husband, **Joseph Tilley '12**, her parents Ron and Shoshana (Rosie) Talmor, a sister, and a nephew.

## 2014

**Jesus Chung** is a senior embedded software engineer at Rockwell Automation.

## 2015

**Zoe Reidinger (PhD BE)** has been promoted to associate teaching

professor in the Department of Biomedical Engineering at WPI. She teaches a range of introductory and high-level courses and is an associate director of the Morgan Teaching and Learning Center. She has served as co-principal investigator on grants funded by the National Science Foundation to improve engineering education and research opportunities for WPI students, as well as students from around the country, from under-represented groups. In addition to improving engineering education, Reidinger's interests include engineering design for marginalized populations, biomaterials, and advocacy for LGBTQ+ students. Reidinger was also recently recognized as a Champion of Diversity by the American Society for Engineering Education Committee on Diversity, Equity & Inclusion.

## 2016

**Matt Dunster** is vice president at Special Technical Services in Hackettstown, N.J. The family-owned business makes static ground monitoring systems that stop static discharge around volatile materials, protecting individuals and communities from catastrophic events such as explosions. When the pandemic hit, he shifted the company's focus to help address a critical need for personal protective equipment in health care. Working with his Mount Olive High School engineering and industrial design teacher David Bodmer, volunteers from robotics teams, and others, he was able to produce 20,000 face shields in a week, which were donated to hospitals and first responders throughout New Jersey and around the country. "We're trying to meet the immediate demand," he said at the time. "There's such an immediate demand right now."

## 2019

**Zachary Caplin** developed the patent-pending CAPSCANN Temperature Screening Kiosk, which can screen people before they are allowed to enter a building. Users answer questions on a phone app, which generates a QR code that is read by the kiosk. The kiosk then takes the user's temperature in less than a second. Using facial recognition, the kiosk can monitor people as they move through the building. It can also be tied to pre-existing security features like two-way communication systems and Radio Frequency Identification (RFID) door locks. It can also share data with health service operations, triggering alerts for individuals to see a physician, for example. Caplin designed the kiosk with his brother, an electrical engineering student at RIT. "Like many others, my family experienced personal loss related to COVID-19," Caplin said. "This drove me to try to design something that would make a positive impact on the pandemic."

**Marc Printz**, community manager of the WorLab incubator, tapped the entrepreneur group's lab capabilities (along with volunteer help from member companies and partners), to 3D print face shield and N95 masks for local hospitals. The effort included **Nathan Rosenberg '19** and **Ethan Merrill '20**, a lab assistant in WPI's Rapid Prototyping Lab.

## 2020

The COVID-19 pandemic made it difficult for musicians and music students to gather and perform, which gave impetus to the creation of virtual music productions, including virtual choruses. For Alumni Weekend in April 2020, **Anthony Topper** used Zoom to produce a choral work, *To My Old Brown Earth*, that was performed by WPI's choral groups—students and alumni—under the direction of Professor Joshua Rohde. Realizing

the potential of virtual choirs, **Mike LaFleur '82** suggested to Topper that they collaborate on a way of automating the creation process. The result was Songalong, a platform that allows creators to direct an ensemble by recording themselves, and optionally section leaders, and inviting performers to record themselves. The software then automatically synchronizes all of the content. Songalong is designed for use by conductors, schools and colleges, churches, and independent artists. "The program was created by two WPI alumni who recognized the immense challenges needed to put together such collaborative projects during the pandemic," Rohde said, "and, combining their artistic and programming expertise, designed a way to streamline the process, making it more accessible for performers and producers." In April 2021, Rohde used Songalong to direct WPI's virtual spring concert. The result, five musical selections, was the culmination of over 300 videos recorded by students and alumni over a few months.

LaFleur has assisted leading organizations, including Emerson, Roper, AT&T, and BellSouth, with product development, market expansion, and strategic acquisitions. Drawn to the growth phase in the product lifecycle, he designed the coverage plan for the original BlackBerry and launched Internet services for AT&T. Topper, a full-stack software engineer, has won or placed in more than half a dozen software competitions and hackathons run by the likes of Comcast and MIT. LaFleur and Topper both sang in the WPI Men's Glee Club (Topper was president his senior year) and both received the Stephen J. Kahn Award for service to the organization. 🎵

### Richard Kennedy '65, Former President of the WPI Alumni Association

**Richard Kennedy '65**, former president of the WPI Alumni Association, passed away on May 14, 2021. As a WPI student, he was member of Phi Kappa Theta fraternity and was active in baseball, *Newspeak*, the Newman Club, and Pi Delta Epsilon honor society. After earning his BS in mechanical engineering, he began his career at IBM and then joined Norton Company in Worcester (later a division of Saint-Gobain), retiring as vice president of its abrasives marketing group. He subsequently consulted for Frank Lynn & Associates of Chicago and later became president and CEO of the Worcester Regional Chamber of Commerce. He also consulted for the Worcester Business Development Corporation, the Benefits

### Gordon Lankton, Emeritus Trustee

**Gordon Lankton**, an emeritus trustee and generous supporter of the university, a plastics entrepreneur, and the founder of the Museum of Russian Icons in Clinton, Mass., died March 7, 2021, at the age of 89. Lankton served on WPI's Board of Trustees for more than two decades and generously shared his time, experience, and insights about people and education with the university. He and his wife, Janet, became dedicated WPI supporters, donating to the Rubin Campus Center and the Management Department, and supporting WPI's areas of greatest need. He was also instrumental in the establishment of WPI's Moscow Project Center in 2013. Based on the campus of Financial University, the center provides opportunities for students to be immersed in Russian life through interaction with local students and to learn the Russian language and experience Russian culture through visits to the circus, the theatre, museums, and religious sites as they also work on projects of consequence to local communities and organizations.

### George C. Messenger '51, Pioneer in Electrical Engineering

**George C. Messenger '51**, a pioneer in electrical engineering and a generous WPI benefactor, passed away on March 14, 2021. He was 90. He received a BS in physics from WPI, a master's in electrical engineering from the University of Pennsylvania, and a PhD in engineering from California Coast University. WPI awarded him an Honorary Doctor of Engineering degree in 2009. Messenger was widely known for his discovery of the Messenger-Spratt Equation, which describes the effects of neutron radiation on bipolar devices, and the Kirk Effect, an apparent increase in the width of the base of bipolar transistors that occurs at high injection levels and current densities. He also contributed to the development of the EKG and the hardening of circuits for the atomic clocks in GPS satellites. His achievements earned him the Alan Berman Research Publication Award for his cancer-fighting research at the Naval Research Laboratory and the Peter Haas Award for outstanding technical contributions to hardened military and

Development Group, and Sunshine Sign, in addition to serving on the board of the L. S. Starrett Company for over 25 years. A champion for the city of Worcester, he devoted his professional and personal energy to any effort that strengthened the city. He was also a loyal volunteer for WPI, serving as president of the WPI Alumni Association Board of Directors and an active member of the Class of 1965 Reunion Committee. His dedicated support for his alma mater earned him the Herbert F. Taylor Alumni Award for Distinguished Service to WPI. He leaves Mary Ann, his wife of 52 years, son Richard Kennedy II, daughter Elizabeth DeHoratius, a sister, and three brothers.

The Lanktons became members of WPI's Founders Society, recognizing those who achieve lifetime giving of \$100,000 or more, and the Alden Society, for those who have established planned or endowed gifts with the university. He was well known for his leadership of Nypro Inc. in Clinton, Mass, a manufacturer of precision injection-molded plastic components for a wide range of products. He grew the company to a billion-dollar global enterprise with tens of thousands of employees and plants all over the world. Lankton earned his undergraduate degree in engineering at Cornell University, where he served as student council president, was involved in Beta Theta Pi fraternity, and traveled to Japan for the Japanese-American Student Alliance. He served in the U.S. Army Intelligence Department in Frankfurt, Germany, for two years, followed by a nine-month motorcycle trip through Europe, the Middle East, Southeast Asia, and Japan. He leaves Janet; daughters Susan, Karen, and, Lauren; sister Janice; and seven grandchildren.

space systems. Co-author of *The Effects of Radiation on Electronic Systems*, considered the definitive work in the field, he was elected a life fellow by the Institute of Electrical and Electronics Engineers for his contributions to advances in semiconductor technology. With his wife, Priscilla, he generously supported several major WPI initiatives. In addition to establishing the George and Priscilla Messenger Endowed Scholarship, the couple consistently supported WPI's Areas of Greatest Need fund and WPI athletics. In 2018 the Messenger Residence Hall was named in honor of their lifelong giving. "WPI provided me with a scholarship that—combined with outside jobs—enabled me to complete my studies," he said during a 2014 visit to campus. "I got so much help from so many people, and I am trying to pay it back." Messenger is survived by Priscilla, his wife of 66 years, three children, six grandchildren, and eight great-grandchildren.



Harry W. Tenney Jr. ’56, WPI Alumni Association Board Member

**Harry W. Tenney Jr. ’56**, whose tenure on the WPI Alumni Association board coincided with the revitalization of the Student Alumni Society, the founding of the WPI Athletic Hall of Fame, and the first \$1 million year for alumni contributions, passed away on Jan. 22, 2021.

Tenney earned a BS in mechanical engineering at WPI, where he was a member of Sigma Phi Epsilon fraternity, lettered on the football and lacrosse teams, joined the Varsity Club and the Glee Club, and the student chapter of the American Society of Mechanical Engineers, and was tapped for Skull, the senior honorary society. He also held an MBA from Rutgers University.

After graduation, he served for two years as an engineer for the U.S. Army. In 1958, he began his long career in the plastics industry by joining Dow Chemical’s plastics division in Michigan. He moved on to Celanese Plastics before becoming

vice president for marketing at XCEL Corp. and manager of new product development for Allied Signal Corp.

An active alumni volunteer, his service in the WPI Alumni Association included a term as president in 1987-88. His support of his alma mater earned him the Herbert F. Taylor Alumni Award for Service to WPI in 1981. He also served as chairman of the New Jersey chapter of the Society for the Advancement of Materials and Process Engineers, president of the board of trustees of First Presbyterian Church in Long Branch, N.J., and a director of the YMCA in Asbury Park, N.J.

He leaves two daughters, Jena Anthony and Andrea Katz, and five grandchildren. He was predeceased by his wife, Marcia.

<p><b>George D’Hemecourt ’40</b>, Weslaco, Texas</p> <p><b>Michael Sadick ’40 ME</b>, ALPHA EPSILON PI, Key Biscayne, Fla.</p> <p><b>Glennon Hill ’43 ME</b>, ALPHA TAU OMEGA, Hudson, Ohio</p> <p><b>Richard Fitts ’45 ME</b>, SIGMA ALPHA EPSILON, Rochester, N.Y.</p> <p><b>Charles Morse ’45 CE</b>, SIGMA PHI EPSILON, Annapolis, Md.</p> <p><b>Raymond Chafin ’46 CE</b>, Edmond, Okla.</p> <p><b>Lawrence Garnett ’47 ME</b>, PHI SIGMA KAPPA, Ventura, Calif.</p> <p><b>David Brown ’49 ME</b>, PHI SIGMA KAPPA, Lancaster, Mass.</p> <p><b>Paul May ’50 EE</b>, ALPHA TAU OMEGA, Rockport, Mass.</p> <p><b>Clayton Roberts ’50 EE, MS EE</b>, THETA CHI, Syracuse, N.Y.</p> <p><b>Geneva Warner ’50</b>, Hobe Sound, Fla.</p> <p><b>Paul Radasch ’51 CE</b>, SIGMA PHI EPSILON, Midvale, Idaho</p> <p><b>Marden Seavey ’51</b>, THETA CHI, Brunswick, Maine</p> <p><b>Thomas Mahar ’55 EE</b>, PHI SIGMA KAPPA, Bethesda, Md.</p> <p><b>John Nash ’56 CHE</b>, PHI KAPPA THETA, Coldwater, Mich.</p> <p><b>Ronald Venezia ’56 CHE</b>, PHI KAPPA THETA, Cary, N.C.</p> <p><b>George Crosby ’57 EE</b>, PHI GAMMA DELTA, Linton, Utah</p> <p><b>Robert Agricola ’59 ME</b>, PHI SIGMA KAPPA, Bonita Springs, Fla.</p> <p><b>Norman Bolyea ’61 CE</b>, PHI SIGMA KAPPA, Sarasota, Fla.</p> <p><b>Michael Economou ’61 ME</b>, Shrewsbury, Mass.</p> <p><b>Anthony Carcieri ’62 MS NS</b>, Warwick, R.I.</p> <p><b>George Howatt ’62 SIM</b>, Worcester, Mass.</p> <p><b>Philip Keenan ’62 CHE</b>, PHI GAMMA DELTA, Easthampton, Mass.</p> <p><b>Arthur Goddard ’63 EE</b>, Costa Mesa, Calif.</p> <p><b>William Newhall ’63 ME</b>, Norfolk, Mass.</p> <p><b>John Lindquist ’64 CHE</b>, TAU KAPPA EPSILON, Greer, S.C.</p> <p><b>William Shanok ’64 CH</b>, New York, N.Y.</p> <p><b>Edward Falkowski ’65 CHE</b>, SIGMA ALPHA EPSILON, Mt. Pleasant, S.C.</p> <p><b>David Harris ’65 ME</b>, LAMBDA CHI ALPHA, North Brookfield, Mass.</p> <p><b>Antanas Liutkus ’65 ME</b>, PHI SIGMA KAPPA, Augusta, Ga.</p> <p><b>Peter Tallman ’67 MA</b>, Louisville, Colo.</p> <p><b>Jerry Jasinski ’68 MS NS</b>, Springfield, Vt.</p>	<p><b>Richard Cormier ’70 SIM</b>, Orwell, Vt.</p> <p><b>John Oscarson ’71 CHE</b>, Burnsville, N.C.</p> <p><b>John Chipman ’74 EE</b>, SIGMA PI EPSILON, Fernandina Beach, Fla.</p> <p><b>Patricia Salamone ’75 PHY</b>, Alexandria, Va.</p> <p><b>Michael Dabkowski ’76 CHE</b>, Mickleton, N.J.</p> <p><b>Francis Fountain ’76 SIM</b>, Gilmanton Iron Works, N.H.</p> <p><b>Diane Ferrara ’79 MG</b>, Johnston, R.I.</p> <p><b>John Haponik ’79 CHE</b>, ALPHA CHI RHO, Somerset, Ky.</p> <p><b>Clifton Jones ’81 CE</b>, Burlington, Mass.</p> <p><b>Lory Molesky ’81 CS</b>, Nashua, N.H.</p> <p><b>Mark Beckwith ’82 EE</b>, Auburn, Mass.</p> <p><b>Douglas Henderson ’84 ME</b>, Basking Ridge, N.J.</p> <p><b>Stephen Jencks ’84 EE</b>, Merrimack, N.H.</p> <p><b>David Pileggi ’84 MBA</b>, Whitinsville, Mass.</p> <p><b>Richard Waage ’85 CE</b>, Mesa, Ariz.</p> <p><b>Christopher Curtis ’86 ME</b>, Ashland, Mass.</p> <p><b>Peter Beale ’87 EE, MS EE</b>, Acton, Mass.</p> <p><b>John Shutt ’88 CS, MS CS, PhD CS</b>, Harvard, Mass.</p> <p><b>Dorothy Malone ’90 HUA</b>, Westborough, Mass.</p> <p><b>George Jussaume ’91 CE</b>, Northborough, Mass.</p> <p><b>Thomas Sheehan ’92 EE</b>, Andover, Mass.</p> <p><b>Joseph Hamel ’94 CE</b>, Auburn, Mass.</p> <p><b>Brian Dolph ’95 MS FPE</b>, Swansea, Mass.</p> <p><b>Daniel Watkins ’95 CHE</b>, Saint Johns, Fla.</p> <p><b>Jennifer Griffin-Driscoll ’02 MS OIT, MBA</b>, Millbury, Mass.</p>
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The WPI community also notes the passing of these friends of the university: **Daniel Backman**, **Karen Verprauskus**, and **James Wensley**. At the time of this issue’s printing, the WPI community also learned of the passing of **James Demetry ’58**, WPI electrical and computer engineering professor and dedicated alumnus; an obituary will appear in the Fall issue.

Complete obituaries can usually be found online by searching legacy.com or newspaper websites. *WPI Journal* will assist classmates in locating additional information. Contact [wpijournal@wpi.edu](mailto:wpijournal@wpi.edu).

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