

Washington



THE ESSENTIAL ACADEMIC

Provost Beverly Wendland discusses the lessons from COVID-19, plans for the university's future, what your brain cells have in common with yeast and more, pg. 20.

Something's Up

Rajan Chakrabarty and Randall Martin work on myriad challenges of fine particulate matter, the leading cause of environment-related diseases around the world, pg. 26.

Can You Be More Creative?

The course "Designing Creativity: Innovation Across Disciplines" teaches students that creativity is not just for artists, pg. 12.

An Empowering Brew

Veronica Swanson, EMBA '03, teams up with basketball superstar Dikembe Mutombo to empower marginalized female coffee farmers in the Democratic Republic of the Congo, pg. 42.

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C o n t e n t s

ON THE COVER

Provost Beverly Wendland sat down with Rosalind Early, deputy editor, to discuss what it's been like to lead WashU's academic enterprise, what prepared her for this essential leadership role and more, pg. 20.

ON THIS SPREAD

On Saturday, Aug. 28, WashU's Class of 2025 — more than 1,900 vaccinated students — gathered in Brookings Quadrangle for Convocation. Pictured here are students from Brookings Residential College.

Cover and table of contents photos: James Byard

“Commit tonight to doing your part to make this a safe place for others to explore new ideas and take intellectual risks. ... That’s how your classmates will reach their potential. That’s how you will reach yours.”

— CHANCELLOR ANDREW D. MARTIN to the Class of 2025 during Convocation

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Photo: James Byard

A once-in-a-lifetime opportunity

Chancellor Andrew D. Martin and university leadership welcome the Class of 2025 to Washington University during Convocation, Aug. 28.

Greetings, *Washington Magazine* readers! I'm writing to you from a bustling campus full of students, faculty and staff working together and partaking in some of our treasured traditions. While I'm proud of our community's compassionate resilience during the ongoing pandemic, I'm grateful that we're spending less energy on keeping people apart and more on being together and cultivating an authentically supportive community of discovery — a hallmark of Washington University.

When I took the helm of WashU in October 2019, I promised to increase access to Washington University for talented students regardless of their backgrounds or previous opportunities. I shared my commitment to ensuring each student has everything they need to thrive while they're here (and beyond!). And I pledged to work toward joining other top-tier institutions in offering need-blind admissions — that is, an admissions model that does not factor in an applicant's ability to pay. I firmly believe that these values are moral imperatives, as well as essential to attracting the brightest students with a wonderful diversity of experiences to share.

Building on the momentum that began with the visionary leadership of our previous administration, I could not be more proud to share that earlier this fall, we announced our "Gateway to Success," a historic investment in financial aid and student support at Washington University.

Gateway to Success is a \$1 billion commitment to advancing our distinction in academics and student success through investing heavily in financial aid and student support. It will allow us to ensure that all qualified students have access to the world-class experience of a Washington University education. It's a historic investment in undergraduate, graduate and professional students across all seven schools. And it fully funds need-blind admissions effective immediately;

our admissions process currently underway for incoming Fall 2022 students is completely need-blind.

So how did we do it, and how can we keep up this very worthwhile investment?

First, we have long benefited from a proud tradition of loyal and generous scholarship support from alumni and friends who share our values and wholeheartedly believe in our mission — including many of you reading this letter. For decades, you have heeded the call to help us open our doors more widely to deserving students regardless of their socioeconomic background. In fact, as this issue goes to print, we're winding down the Danforth memorial fundraising efforts in support of student aid, a touching tribute to Chancellor William Danforth's legacy of scholarship support. And I continue to be astounded at the incredible generosity of our community.

Second, we benefited from a lot of brilliance (and a little luck) on the part of our finance and investment teams, which led to an unprecedented, trajectory-altering endowment return for the most recent fiscal year. With this windfall, we will create new endowments to help fund these priorities, ensuring that our commitment to educational access and holistic student support will remain a top priority for generations to come.

I cannot overstate how fortunate we are to have such strong financial leaders, as well as dedicated professionals across all units of the university. These include two outstanding new leaders who are first-generation college graduates themselves: Anna Gonzalez, vice chancellor for student affairs, and Provost Beverly Wendland. Both of them will be a major force in implementing the Gateway to Success initiative.

While this historic investment is certainly a cause for celebration, it's just the beginning of the next phase of our commitment to student access and support. If these are to remain our foundational principles, we must continue doing what brought us to this exciting place: investing wisely, giving generously, paying forward the support we've received on our journeys, and always challenging our assumptions of what people can achieve if given the opportunity.

It is my dream that as long as there is a Washington University in St. Louis, it will be known as a place where students from all backgrounds can receive a world-class education, while also being welcomed and cared for. Further, it will be known as a place that prepares them to take their place among the world's most supportive and successful network of alumni and friends who are leaving the world better than they found it. We've already made great strides, and I believe we can do even more, by doing it together.

Andrew D. Martin
Chancellor



@WashUChancellor

FEEDBACK



“I really liked the cover of the August issue of *Washington*. Please give my compliments to the illustrator.

Flipping through I felt like I was back on campus.”

PAUL A. KOZAK, AB '03

“At this point in time, I need to unsubscribe from your very wonderful magazine. At 86, the print is too small, and I am far from St. Louis.

“However, I still have nothing but praise for your school, and a friend’s granddaughter is attending there now. I credit the business school for my job at IBM and much of my ability to make wise investments.

“After marriage, I held a variety of jobs while raising three children. During retirement, I was very active in Hillsborough County, Florida, with the environment, transportation, Smart Growth and New Urbanism. I took paralegal courses at Hillsborough Community College and the Growth Management online program at U. of Miami. So Washington U. prepared me for life! I appreciate it so much.”

LYNN MCGARVEY, BSBA '57

From the editors: Dear Ms. McGarvey, Thank you for your kind and thoughtful note. We invite you to join us online where you can adjust the type size to your liking! In the digital edition, you’ll find content from the print edition, as well as videos and other Web exclusives. Please join us at magazine.wustl.edu.

THE AUGUST 2021 ISSUE

“I have always enjoyed receiving the alumni magazine, and the August issue was especially engaging from beginning to end. The new format provides many different types of stories to be smartly told, and even I, at 95, can follow them! I also thought the cover feature was so much fun, with colorful illustrations and anecdotes from fellow alumni. Keep up the great work!”

ELLEN JUNE HARTER, BS '67

[Clarification] The editors regret that the illustration of our alumnus Kevin Johnson, who helped ensure the Negro Leagues received Major League Baseball recognition, may have implied that he was a member of the Negro Leagues in general and the St. Louis Stars specifically. We have removed the illustration from our digital publication and added appropriate imagery. We apologize for any distress this may have caused. Please see an updated version of the article, “Preserving the Negro Leagues”: source.wustl.edu/2021/08/preserving-the-negro-leagues/.

[Clarification] The editors are deeply sorry for the incongruent use of the passive and active voice in the article “An Unfinished Ending,” about Sayed Kashua’s novel, *Track Changes*. We try very hard to be judicious in our use of language, and we’ll be even more mindful of the use of the passive voice — especially when it comes to difficult topics like this — in the future. Please see source.wustl.edu/2021/08/an-unfinished-ending/ for a corrected article.

We want to hear from you!

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IN CASE YOU MISSED IT For additional news, features, videos and more, visit the digital magazine at magazine.wustl.edu.





ST. LOUIS *In*

Built for bicycles

In 2020, Washington University earned a Gold Bicycle Friendly University (BFU) designation. The League of American Bicyclists gives the award to institutions of higher education for creating a bicycle-friendly campus. The university is the first in Missouri to receive the BFU designation at gold or platinum level. WashU makes its campus safe and accessible for bikers with bike paths, alternative transportation programs, partnerships with public transit, rentable lockers and shower facilities.



Photo: James Byard



Photo: Jerry Naunheim

CALEB DURBIN Atlanta Braves



TWO BEARS GO TO THE BIG LEAGUES

This summer, **Caleb Durbin**, a rising senior and shortstop on the WashU Bears baseball team, was the 14th round draft pick by the Atlanta Braves. Meanwhile, pitcher **Ryan Loutos**, BS '21, joined the St. Louis Cardinals as an undrafted free agent. In the previous 50 years, only two current or former Bears athletes signed professional baseball contracts. In July, the number doubled.

"It's so cool — and so humbling," Loutos says. His 11-1 record led the Bears to their first NCAA Division III World Series last June. "You realize how much you value those people who supported you along the way."

Durbin was watching the draft in the home of the family hosting him for the summer. "The 11th round went by, then the 12th, then the 13th," he says. "But then the Braves called and said they wanted to take me in the 14th or 15th round. That's when it got real."

Loutos had an even longer wait. The Cardinals called saying they wanted to sign him after the draft. Both players, who are already friends, traveled to Florida for their physicals and to sign their contracts. After the off-season, the players will return to Florida for spring training.

Durbin, who is a student in Olin Business School, is committed to finishing his degree. And Loutos, who studied in the McKelvey School of Engineering, thinks that the university was the right fit, despite Division III schools not being a typical recruiting ground for MLB teams. "WashU was a place where I could win and grow," Loutos says. "The coaches, the players — the experience has been great."

WASHU JOINS UNIVERSITIES STUDYING SLAVERY CONSORTIUM

Many universities across the U.S. have complicated links to slavery that they have not taken great pains to acknowledge or come to terms with. To combat this, 80 universities have joined the Universities Studying Slavery consortium. At WashU, the initiative is based in the newly established Center for the Study of Race, Ethnicity and Equity (CRE²), which will support the research, classes and programs. **Geoff Ward**, professor of African and African American studies in Arts & Sciences and CRE² faculty affiliate, is leading the effort. "The truth is we know very little about who physically built the early campuses of our university and how slavery relates to financing and organization of the institution," Ward says. "Joining the consortium aids our honest reassessment of [our] foundation story."

GREEN BUILDS

The four new buildings on the east end of the Danforth Campus were designed to be 30% more efficient than standard buildings, and heat-recovery chillers harvest wasted heat for much of their climate-control needs. The buildings' efficiency earned WashU one of the U.S. Green Building Council's 2021 Leadership Awards for excellence in its West North Central Region.

\$1B

An unprecedented commitment

In October, the university announced Gateway to Success, a \$1 billion commitment to students that fulfills the promise **Chancellor Andrew D. Martin** made on his inauguration day in 2019: for the university to practice need-blind undergraduate admissions.

Gateway to Success includes \$800 million in endowed funding to support need-blind undergraduate admissions, which means that the university will not consider an applicant's financial situation when making admissions decisions, while still meeting 100% of demonstrated financial need for admitted undergraduates. An additional \$200 million will be designated for financial aid for graduate and professional students. Need-blind admissions have already gone into effect, starting with the class entering in fall 2022.

"This is a proud moment for us as an institution, and I'm grateful to all who have contributed along the way," Chancellor Martin says. "Since I became chancellor nearly two years ago, becoming need-blind has been a top priority. Building on the momentum that began with our previous administration, we're finally making it happen. However, our work is far from done. We must redouble our efforts to provide all of our students with the tools they need to thrive and participate fully in our world-class educational experience while on campus." For more, see pg. 2.

FEDERAL STATISTICAL RESEARCH DATA CENTER TO OPEN

The U.S. Census Bureau approved plans for a Federal Statistical Research Data Center branch at WashU, which should open in the 2022-23 academic year. The data center will prove a boon to professors in need of important government data in economics, demography, urban and regional development, health care and other fields. The center will be run in partnership with three other local research institutions: the Federal Reserve Bank of St. Louis, Saint Louis University and the University of Missouri-St. Louis.



Photo: Getty Images

A PHOTO FINISH

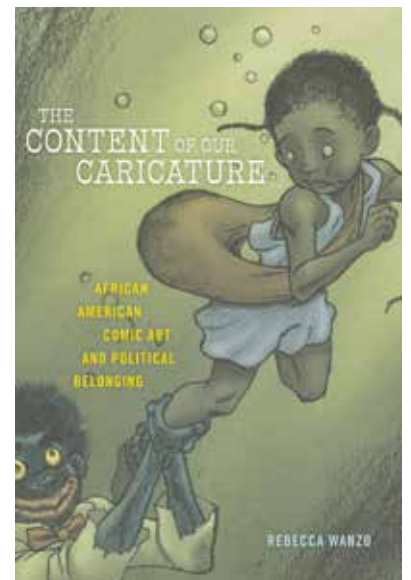
While the Summer Olympics and Paralympics may be over, we're still cheering for **Kendall Gretsch, BS '14**, Olympian and paratriathlon competitor. Kendall (right), who was born with spina bifida, grew up an athlete, competing on her high school's swim team. Now, she competes in cross-country skiing and biathlon during the Winter Olympics and the paratriathlon in the summer. In Tokyo, Gretsch clinched the gold after pulling ahead in the final moments of the triathlon. She is one of only five Americans to win gold in both the summer and winter Olympics.

KEEPING ON TOP OF COVID-19

The WashU community has a new weapon in the battle against COVID-19 — smartphones. Well, a smartphone system that allows university faculty, staff and students to use COVID-19 Exposure Notifications. The university is piloting the system, MO/Notify, which can alert users when they have been near another user who has tested positive for the virus that causes COVID-19. Sharing the news in the system is done voluntarily by the infected person. If the app proves successful in stemming the transmission of COVID-19, the university will look to potentially expand it.

FACULTY MEMBER WINS EISNER AWARD AND HATFIELD BOOK PRIZE

Rebecca Wanzo, professor and chair of women, gender and sexuality studies in Arts & Sciences, has won two major awards in the field of comic book studies. Her book, *The Content of Our Caricature: African American Comic Art and Political Belonging*, won the 2021 Eisner Award for Best Academic/Scholarly Work. The Eisner Awards are among the comic book industry's most prestigious honors, sometimes called "the Oscars of comics." Wanzo also won the 2021 Charles Hatfield Book Prize from the Comics Studies Society, the first professional society of comics scholars in the United States.



Andean forests provide extra set of lungs

New research co-authored by investigators at WashU's Living Earth Collaborative highlights the role of the forests in the Andes mountain range in South America in regulating the atmosphere's carbon emissions. The study found that the forests act as a carbon sink, capturing more carbon than they emit.

"Carbon storage is one of the most important ecosystem services that helps to mitigate the effects of rising carbon dioxide levels under climate change and temperature warming," says **Jonathan Myers**, associate professor of biology and a co-author of the study.

PANDEMIC REVEALED WEAKNESSES IN PHARMA SUPPLY CHAINS

In a new paper, researchers at Olin Business School concluded that the best way to alleviate domestic drug shortages is by re-incentivizing American manufacturing. The study, led by adjunct Olin lecturer **Tony Sardella**, illustrated the devastating impacts of the shortages and outlined policy solutions, like tax credits and forgivable loans, to lure drug manufacturers back to U.S. shores.

PHYSICAL ACTIVITY ASSOCIATED WITH BETTER COGNITION IN BREAST CANCER PATIENTS

A new study out of the School of Medicine has found a strong association between high levels of physical activity and the ability to maintain cognitive function among breast cancer patients treated with chemotherapy. The findings were published in the *Journal of Clinical Oncology*.

"Cognitive decline related to cancer treatment is a growing concern," says first author **Elizabeth A. Salerno**, assistant professor of surgery in the Division of Public Health Sciences. "Some patients with cancer experience memory lapses, difficulty concentrating or trouble finding the right word to finish a sentence."

The research team hopes that better understanding of the dynamic relationship between physical activity and cognition before, during and after chemotherapy will help inform early, cost-effective prevention strategies.

The researchers point out that their study doesn't demonstrate that physical activity definitively protects against cognitive decline. It does, however, set the stage for further clinical trials investigating the link.

WASHU ANTHROPOLOGIST SAYS CLIMATE CHANGE DOESN'T GUARANTEE POPULATION DECLINE

Four millennia ago, in the Henan province of China, the weather changed. A warm, wet climate turned cool and dry. But according to new research from **Tristram Kidder**, the Edward S. and Tedi Macias Professor of Anthropology in Arts & Sciences, local populations didn't wither under the new conditions; they adapted by diversifying crops and perfecting new irrigation techniques. Kidder thinks this experience in Bronze Age China can soothe the nerves of those warning of a climate apocalypse. "We have remarkable capacity to adapt," Kidder says. "But part of the lesson here is that our social, political and technological systems have to be flexible."

WEALTH, STATUS COULD NOT SHIELD 19TH-CENTURY FAMILIES FROM PARASITIC INFECTION

After digging through centuries-old latrines, **Theresa Gildner**, assistant professor of biological archaeology in Arts & Sciences, found evidence that well-heeled New Hampshire families in the 19th century suffered from parasitic diseases, busting the myth that tapeworm and its cousins were solely a lower-class affliction. "I view these findings as a reminder to be grateful for all the amenities we have today that help prevent parasitic infection, which we often take for granted," Gildner says.



For more on university research and faculty achievement, visit source.wustl.edu/news.

SNACKS THAT SATISFY YOUR CRAVINGS AND YOUR GUT HEALTH

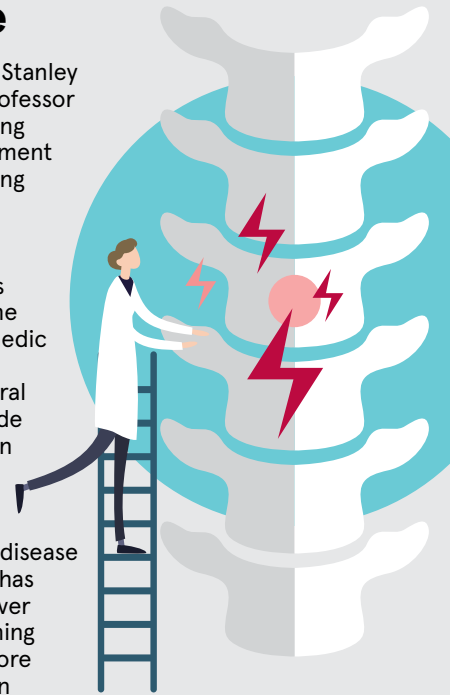
Snack foods have often been a guilty pleasure, but research from **Jeffrey Gordon, MD**, the Dr. Robert J. Glaser Distinguished University Professor and director of the Edison Family Center for the Genome Sciences & Systems Biology at the School of Medicine, could change that. Gordon's team created snack prototypes made with healthy fibers from peas, inulin (found in wheat, onions, bananas, asparagus and other foods), orange pulp and barley bran in order to counteract the high-fat, low-fiber composition of most Western diets. "Since snacks are a popular part of Western diets, we are working to help develop a new generation of snack food formulations that people will like to eat and that will support a healthy gut microbiome, which affects many aspects of wellness," Gordon says.

NEW CANCER TREATMENT COULD SAVE LIVES WITHOUT DAMAGING CHILDREN'S ABILITIES

Radioactive treatment for medulloblastoma, an aggressive form of childhood brain cancer, can stunt the growth of patients. But researchers at the School of Medicine have found a promising new approach that reduces the dose of chemotherapy to children's brains while maintaining survival rates. "There's a balance between effectively treating the tumor without damaging children's abilities to move, think and learn," says first author **Jeff M. Michalski, MD**, the Carlos A. Perez Distinguished Professor of Radiation Oncology.

Discovering potential treatments for intervertebral disc disease

Lori Setton, the Lucy & Stanley Lopata Distinguished Professor of Biomedical Engineering and chair of the Department of Biomedical Engineering in the McKelvey School of Engineering, led a team of biomedical engineering researchers and researchers from the Department of Orthopaedic Surgery in developing a way to treat intervertebral discs. These discs provide load support and motion between vertebrae in the spine, but they can break down and compress due to aging, disease or injury. Setton's team has developed a way to deliver new cells to the cushioning material that could restore their height, reduce pain and improve mobility.



NEW STUDY SHOWS DSRNA STANDS APART FROM SINGLE-STRANDED RNA

The nucleic acid mRNA (made famous by the COVID-19 vaccines) looks like a strand of DNA that has been cut in half lengthwise. This single-stranded RNA (ssRNA) is much more common than double-stranded RNA (dsRNA) that resembles the DNA's double helix. Recently, **Kimberly Parker**, assistant professor of energy, environmental & chemical engineering in the McKelvey School of Engineering, upended many assumptions about the two types of RNA. "Fundamentally, we are challenging a pervasive assumption that what we know about ssRNA behavior predicts dsRNA behavior," Parker says. One finding was that while ssRNA is less stable than DNA, dsRNA is substantially more chemically stable than its single-stranded counterpart. Another finding was that dsRNA is more stable in a higher pH. The results were published in the journal *Environmental Science and Technology*.

BROWN SCHOOL HELPS FURTHER HOUSING EQUITY IN WEBSTER GROVES

Molly Metzger, a fair housing expert and faculty director at the Brown School's Center for Social Development, recruited students from her policy course to help St. Louis suburb Webster Groves create a community land trust, a nonprofit organization that will help abate the negative effects of gentrification. "The model emerged out of the civil rights movement as one means by which historically oppressed communities could reclaim control of housing and land-use decisions, in order to create more equitable opportunities and realize housing justice," Metzger says.



U.S. drug prices are costing us more than we think

Aduhelm, the first new Alzheimer’s drug in 18 years, could easily become the best-selling drug in Medicare, despite its potential massive cost and tremendous uncertainty about whether the drug even works, says **Rachel Sachs**, the Treiman Professor of Law and nationally renowned expert on drug pricing and health policy.

Biogen, which created the drug, halted its Aduhelm clinical trials in 2019 when an examination of early trial data suggested that the drug did not work. But Biogen researchers later analyzed the trial results further and argued that high-dose patients in one of the two trials had benefited from the drug, experiencing a 22% reduction in clinical decline. Given the uncertain results and that similar drugs have proven ineffective in the past, no member of the U.S. Food and Drug Administration’s advisory board voted in favor of approving the drug. It was approved nonetheless in June 2021.

Aduhelm, which will be priced at \$56,000 per year, is expected to become a multibillion-dollar expense for Medicare, which covers most of the nearly 6 million Americans with an Alzheimer’s diagnosis. Some experts have claimed that spending on the drug for Medicare patients could end up being higher than the annual budgets for the EPA or NASA, somewhere between \$6 billion and \$29 billion per year.

In June, Sachs called Aduhelm the “drug that could break American health care” in a co-authored column in *The Atlantic*.

“Because of the way it’s administered, Aduhelm will be paid for by part of the Medicare program that’s funded by both general revenues and seniors’ premiums,” Sachs says. “So not only will taxpayers be funding most of the drug’s cost, but all seniors’ premiums may also rise — possibly significantly — to

cover the price. Seniors taking the drug may have even higher out-of-pocket costs.”

Aduhelm is part of a larger problem in the U.S., namely, drug costs. In a 2019 RAND Review article, “Why are drug prices so high in the United States?” Ezekiel J. Emanuel, one of the architects of the Affordable Care Act, stated: “Every other country in the world regulates drug prices, typically through some formal process of negotiation. Only the United States doesn’t.”

Sachs has testified before Congress about the problem of high drug costs in the United States, explaining why prescription-drug-pricing reform should include three particular types of policy solutions: Congress should (1) seek to lower patients’ out-of-pocket costs, (2) strive to fix misaligned incentives in the existing pharmaceutical pricing and payment system, and (3) address the underlying problem of high prescription drug prices.

It’s pretty clear Aduhelm does none of that. “Because of how we’ve structured our health-care system, the FDA’s decision will effectively transfer many billions of dollars of government and patient money to a single drug manufacturer,” wrote Sachs and Nicholas Bagley, a law professor at the University of Michigan, in their co-authored column for *The Atlantic*. “Whether that’s a good use of our collective resources is not a question the FDA considered. But it’s a question that may haunt the health-care system for years to come.”

■ NEIL SCHOENHERR

QUOTED

NATIVE FUTURES, NATIVE VOICES

Earlier in 2021, the Kathryn M. Buder Center for American Indian Studies at WashU and the Alliance for Native Programs and Initiatives, with help from the Gephardt Institute for Civic and Community Engagement, sponsored “Native Futures, Native Voices,” a three-part lecture series about the past, present and future of indigenous people in the United States.



“This is the first time that blue corn had been grown in our traditional homelands since 1872 when we were removed from Kansas and moved to Oklahoma in ‘73. So that’s a big win for us as a people.”

ED SMITH (TZI.SHO KI.HE.GA),
FROM HIS TALK “STRENGTHENING OUR RELATIONSHIP WITH THE PEOPLE’S FOOD” ABOUT HIS EFFORTS TO INCREASE FOOD SOVEREIGNTY FOR HIS NATION

“I see a trend where a lot of our indigenous native communities are going back to their cultures and their values to sustain themselves during this time.”

ALASTAIR LEE BITSÓI (DINÉ),
A FREELANCE JOURNALIST, FROM HIS TALK “HEALING THROUGH THE LAND”

“Schools for a long time were intended to homogenize and Americanize [indigenous] students. In Navajo, New Mexico, there is an [indigenous] school [that] actually changed the format of their day. They do community service regularly. They get out onto the land multiple times a week, because they reimagined what it looked like for a school to do something within their community.”

KRISTIN KSIAZEK (SENECA),
FROM HER TALK “RECLAMATION: AN INDIGENOUS EDUCATION MOVEMENT”



“I love the future. I love science fiction. But it was only in my 20s when I realized there were no native people in the future, and I did not like that.”

SKAWENNATI (KANIEN’KEHÁ:KA),
FROM HER TALK “TOWARDS THRIVANCE.” SKAWENNATI IS PARTNERSHIP COORDINATOR FOR THE INITIATIVE FOR INDIGENOUS FUTURES, A GROUP OF ORGANIZATIONS THAT ENVISIONS INDIGENOUS PEOPLE’S TOMORROW IN ORDER TO BETTER UNDERSTAND TODAY.

“Land acknowledgements ... are hollow if nothing but a statement is offered. So it’s vital to create movement away from simply acknowledging the land and movement toward action.”

MELISSA HORNER (MÉTIS/ANISHINAABE),
FROM HER TALK “EXPLORING THE LAND ACKNOWLEDGEMENT: INTENTIONALITY IN ACKNOWLEDGING INDIGENOUS LANDS AND PLACES.” A LAND ACKNOWLEDGEMENT RECOGNIZES THE INDIGENOUS PEOPLE WHO WERE FORCIBLY REMOVED FROM A SPACE.



For more, visit bit.ly/3BmChRg.

160 175 Designing Creativity: Innovation Across Disciplines

Can you be more creative?

The course “Designing Creativity: Innovation Across Disciplines” teaches students that everyone is creative.

When you think about creative professions, painter and designer might come to mind, while engineer and network analyst might not. But creativity is actually inherent in nearly every type of problem solving.

“The creative process at its best seeks solutions to problems that improve the condition of the world and ourselves,” says **Bruce E. Lindsey**, the E. Desmond Lee Professor for Community Collaboration in the School of Architecture in the Sam Fox School of Design & Visual Arts.

Lindsey co-teaches the course “Designing Creativity: Innovation Across Disciplines” with **Robert Mark Morgan**, teaching professor of drama and director of the Beyond Boundaries Program. Morgan and Lindsey launched “Designing Creativity” in 2015.

How do Morgan and Lindsey teach creativity? Well, they don’t exactly. They provide students with the tools to understand the creative process better. One way they do that is by bringing in guest speakers, such as actors, comedians and writers, as well as anthropologists, real-estate developers, chefs, athletes and chancellors.

The class also emphasizes the importance of acting on your ideas. “You’re more apt to act yourself into thinking than think yourself into action,” Lindsey says.

Course projects change each year, but in the past students have designed stools out of cardboard; made an instrument and then written a 30-second jingle with it; created a device to protect an egg when dropped two stories; and built Rube Goldberg machines, complex machines that do a simple function, which they call WUbe Goldberg machines.

Almost all projects are done collaboratively. “Collaboration allows you to be creative in ways that you can’t be by yourself,” Lindsey says.

Collaboration is actually a course unit. And since the course is open to all first-year undergraduate students, regardless of school, it is a chance to hear really different perspectives.

“That diversity is one of the course’s greatest strengths,” Morgan says. “I’ve had students in their fourth year say, ‘Your class was one of the only ones I took that involved students from other divisions.’”

Lindsey and Morgan also teach a course unit called Play/Fail. It’s designed to get students comfortable with the idea of failing and with generating creativity through play.

“Failure is inherent in every aspect of life,” Morgan says, and it’s part of the creative process. Morgan’s favorite photographer, Norman Seef, wrote about his creative process. “His second of seven steps is fear and resistance,” Morgan says.

But as kids, it was different. To highlight this, Morgan asks students to draw their neighbor in class in one minute and then exchange portraits.

“More often than not, when they share that sketch, they apologize,” Morgan says. “But the underlying theme of the exercise is the fact that when they were third graders, they didn’t apologize. They said, ‘Look at this!’ They had this courage as children to be creative and share their creativity with others.”

“Play really gets to the beginner’s mind,” Lindsey says. “We forget how rewarding playing is as a way of exploring ideas.”

Students — who are invited to come back as TAs after they finish the course — are also asked a new question about themselves. Instead of, “How intelligent are you? (which is implied in traditional education’s constant testing), the course asks, “How are you intelligent?”

The question, Morgan says, “is really the crux of the class. What we want students to do is see themselves in a new light and understand what unique characteristics they bring forth.”

■ ROSALIND EARLY, AB '03

The mechanics of *creativity*

Got an idea? Here are some elements from the course “Designing Creativity” that can help get your idea from your head into the world.

START HERE

IDEAS

THE IDEA CAN BE FOR ANYTHING: A NEW APP, A NEW PROCESS, A RESEARCH TOPIC OR A MOVIE SCRIPT.
ARE YOU READY TO ACT ON YOUR IDEA?

YES

NO

RETURN TO START.

(ACTING ON YOUR IDEA IS THE CRUX OF CREATIVITY.)

FEAR

THIS STEP IS OPTIONAL BUT QUITE COMMON. “THERE’S SO MANY IDEAS THAT NEVER SEE THE LIGHT OF DAY BECAUSE [PEOPLE ARE] AFRAID TO FAIL,” MORGAN SAYS.
ARE YOU AFRAID?

YES

NO

AWESOME! KEEP GOING!

PLAY/FAIL

MORGAN AND LINDSEY ENCOURAGE STUDENTS TO OVERCOME CREATIVE BLOCKS BY BRINGING A SENSE OF PLAY TO THE PROCESS.
CREATIVE JUICES FLOWING?

YES

NO

CREATE

MAKE IT! MORGAN AND LINDSEY AGREE: CREATIVITY COMES FROM DOING.
NEED SOME HELP?

YES

COLLABORATE

CREATIVITY IS COLLABORATIVE. BOUNCE IDEAS OFF PEOPLE, ASK FOR HELP, SHARE YOUR WORK. IT CAN ONLY HELP!
IS YOUR CREATIVITY UNLOCKED?

YES

NO

GIVE IT SOME HEART

ONE UNEXPECTED SOURCE OF CREATIVITY IS EMPATHY. CONNECT WITH OTHER PEOPLE’S CHALLENGES; IMAGINE A MORE EQUITABLE WORLD. IT MIGHT HELP.
IS IT WORKING?

YES

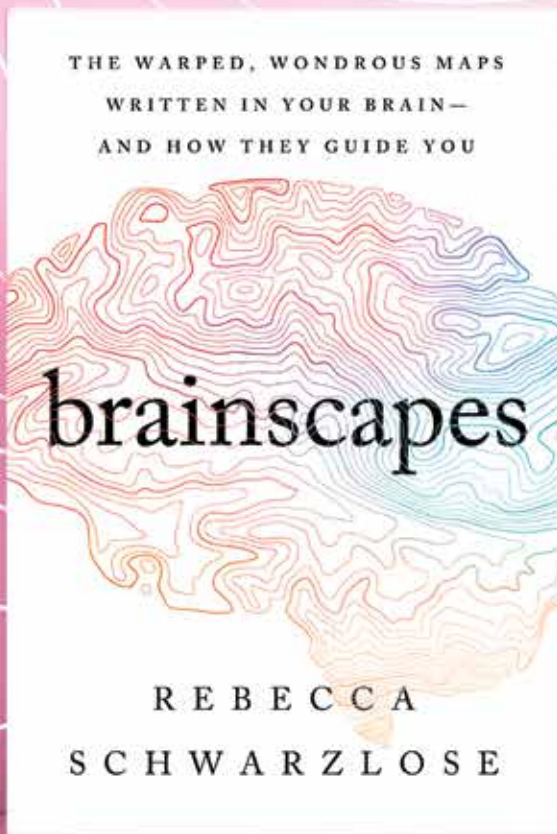
NO

RETURN TO PLAY/FAIL

FINISHED! TIME TO REFLECT

YOU FINISHED! WHAT DID YOU LEARN? HOW CAN YOU DO BETTER NEXT TIME? THIS IS AN IMPORTANT PART OF HOW YOU GROW STRONGER AT BEING CREATIVE AND COULD BRING ABOUT YOUR NEXT IDEA.

RETURN TO COLLABORATE



Mapping the brain

In her debut book, *Brainscapes: The Warped, Wondrous Maps Written in Your Brain — and How They Guide You*, **Rebecca Schwarzlose**, a postdoctoral research scholar in the Department of Psychiatry at the School of Medicine, describes how brains create maps: collections of neurons that together support your senses, move your body, understand abstract concepts, remember your past and more.

The maps exist because the brain doesn't have limitless space. Neurons that often interact need to be close together, and they are not equally distributed. If you were to look at the brain map of the body, you'd think our biggest appendage is our hands, because many more neurons are devoted to signals from the hands than, say, our backs. It becomes a chicken-and-egg question: Are our brain maps this way because we feel things with our hands, or do we feel things with our hands because of our brain maps?

The idea for the book came to Schwarzlose while she was at MIT working on her doctorate in neuroscience and writing about a part of the brain that helps us recognize faces. "There's an

area right next to it that supports recognizing human bodies," she says. The two maps "are always right next to each other. And that got me thinking more broadly about what determines where specializations land in the brain."

The resulting book, which has been praised by the *New York Times* for its lively prose and storytelling, not only gives readers an insight into how our brains work, but also recounts some of the history of neuroscience. Schwarzlose explains how the Mosin-Nagant Model 91 gun led to the discovery of the V1 primary visual cortex; how British neurologist John Hughlings Jackson was able to identify areas of the primary motor cortex by studying patients with seizures; and why "John," a man who suffered a stroke, was able to describe a carrot with exactitude but unable to recognize one when presented with a drawing of it — or even recognize his own face in the mirror.

Schwarzlose finds all brains fascinating, human and animal. "The story of brain maps is one of tough trade-offs, not superiority," she writes. "A brain map can't be judged superior or inferior based on its intrinsic qualities; its value can be determined only in the context of a creature's environment and moment-to-moment needs for survival."

When trying to write about how sensitive pig snouts are, for instance, Schwarzlose so thoroughly envisioned what it might be like to be a pig (based on its brain map) that she can now no longer eat pork.

Plus, in showing how our brains create their maps, Schwarzlose asks basic questions about who we are and how we came to be that way. For instance, if evolution is the main driver for how we are the way we are, then why have brains been shown to draw entirely new maps based on early life circumstances? Baby rats raised in 2G gravity (twice the gravitational pull) developed new sensory maps around their paws. How did their brains know to do that without ancestors raised in 2G gravity?

The answer is that the brain has adapted over millennia *and* adapts based on early experiences. Blind children's brains remap the visual cortex. A girl born with only half a brain developed brain maps that didn't need the other hemisphere. Ferrets with damaged visual cortexes used the auditory cortex to see.

In looking at how our brain draws maps, Schwarzlose delves into how brains develop, how we navigate the world, the drawbacks and challenges of artificial intelligence and the computer-brain interface, and so much more. "The impact of brain maps on thought, health and technology is profound and far-reaching," Schwarzlose writes. "They matter not just to scientists but to every person and creature on earth."

■ ROSALIND EARLY, AB '03

FACULTY



Yamamba: In Search of the Japanese Mountain Witch
EDITED BY REBECCA COPELAND AND LINDA C. EHRLICH

The Yamamba, or Japanese mountain witch, is a figure from Japanese folklore. Sometimes she is a scary old crone, other times a benevolent protector, and yet in other stories a moral arbiter. Rebecca Copeland, professor of Japanese language and literature, and Linda C. Ehrlich, an essayist, poet and teacher, edited this collection of prose, poetry and interviews that upend the misogynistic trope.



Rethinking Market Regulation: Helping Labor by Overcoming Economic Myths
JOHN N. DROBAK

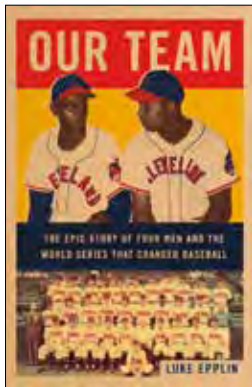
In this book, John N. Drobak, the George Alexander Madill Professor of Real Property & Equity Jurisprudence and professor of economics, challenges two key economic principles: that markets are competitive and that corporations exist for the benefit of their shareholders, but not for other stakeholders. How would we rethink market regulation if these claims were disproven?



Making the World Over: Confronting Racism, Misogyny, and Xenophobia in U.S. History
R. MARIE GRIFFITH

In her latest book, R. Marie Griffith, director of the Danforth Center on Religion and Politics, uncovers the roots of current American political and social conflict in areas such as race, immigration, misogyny and reproductive rights. Her book shares how to encourage constructive dialogue in a society that has forgotten how to listen or engage in productive debate.

ALUMNI



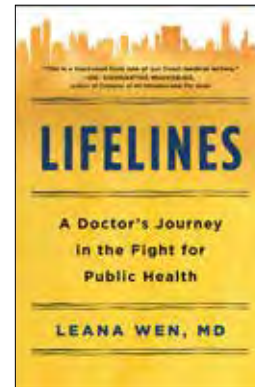
Our Team: The Epic Story of Four Men and the World Series That Changed Baseball
LUKE EPPLIN, AB '01

Everyone has heard of Jackie Robinson, but Larry Doby, the second Black player to integrate Major League Baseball, has a story just as intriguing. Doby integrated the Cleveland Indians, and in 1948, just a year after he was recruited to the team, he became a superstar and sparked one of the wildest and most meaningful seasons in baseball history.



Lessons from Plants
BERONDA L. MONTGOMERY, AB '94

Did you know that plants can distinguish between a relative, friend and enemy? That they can respond to ecological competition? Plants can even experience sensations that don't require eyes or ears. Alumna Beronda L. Montgomery, a plant biology professor at Michigan State University, wants us to expand our understanding of plants and change our relationship to them. For more on Montgomery, visit source.wustl.edu/2021/10/pursuing-reciprocity-with-plants.



Lifelines: A Doctor's Journey in the Fight for Public Health
LEANA WEN, MD '07

Leana Wen, MD, has a favorite saying: "Public health saved your life today — you just don't know it." Wen is an emergency physician, was the health commissioner for Baltimore, and now writes for the *Washington Post* and is a CNN medical analyst. In her latest book, she shares her story of growing up as an immigrant from China, entering college at 13, becoming a Rhodes Scholar and fighting misinformation during the COVID-19 pandemic.



Photo: Joe Angeles

David Blount & Louis Jones: How do we build a healthy and vibrant civic community?

There is no doubt that we are experiencing a time of immense sociocultural upheaval and division in the United States. Our podcast, “This Civic Moment,” explores how we can come through it together.

We are a country divided. This is not novel. For all of our country’s history, there have been ongoing divisions along racial, class, ideological and, of course, partisan lines. The uniqueness of this current moment lies not in the division we are experiencing, but the very context in which we are experiencing it.

Current movements and events have added new fuel to ancient American debates on civil and religious liberties, access and affordability of health care, access to and quality of jobs, impacts of climate change and the right to vote. The COVID-19 pandemic uprooted global normalcy to rearrange priorities related to health and the economy. The killings of George Floyd and Breonna Taylor in 2020 brought people out to the streets to advance the movement for the liberation of Black people, along with all people, from systemic racism and violence. This movement and many others across the political landscape have motivated groundswells of people standing together behind a message and vision to make our nation healthier, safer and more equitable.

It was in this climate that we created our podcast, “This Civic Moment,” where we speak with regional, civic and community leaders about what inspired them to engage in this civic moment and better understand what is next for our future.

We conceived the podcast in March 2020, at the beginning of major actions due to the COVID-19 pandemic. Communities and activists were responding to multiple incidents of police violence. Sights were set on the presidential election in November. Fear, anxiety, conspiracy and divisions were amplified. But people were also asking, “What can I do to help?”

We often hear narratives of political partisanship, polarizing stances and adversarial political maneuvering in government. The podcast centers on personal stories of how people from different spheres of influence and walks of life are embodying community solidarity and collective visioning to answer the call and help address big problems.

We believe in the power of personal narrative and storytelling to empower others to step into their own civic calling, whatever that may be, and

have healthier dialogues and disagreements with neighbors. Whether they’re serving at a local food bank, leading a congregation as a religious figure, covering stories in the community as a journalist or developing scholarship on social issues impacting people of color, we wanted to elevate narratives of everyday leaders. These folks contribute to more livable, equitable and sustainable communities for all of us.

As we have been working on our podcast, we have been reminded of the speech “Remaining Awake Through a Great Revolution,” by Rev. Dr. Martin Luther King Jr. In the speech, King points out how global our society has become and says, “we’ve made of this world a neighborhood” through our advancements in science and technology. Personal computers and cell phones connect people globally through the internet, and the farthest points of the globe are only a couple flights away. More than ever, no problem, or endeavor to solve it, sits within only one country’s borders or touches only one nation’s people. We are, as King said, “tied together; all life is interrelated, and we are all caught in an inescapable network of mutuality, tied in a single garment of destiny.”

Despite the recent technological advancements, there is a long way to go to realize the possibilities that our world offers. As we toil to find answers to the challenges of today, we are invited to see that we all have inherited what King refers to as a “great world house” — a place of social charity and civic community. This world house has the potential to be a place of familial togetherness where injustice is swallowed up in harmony. In a time of deep racism and inequalities, King was able to see the opportunities of the present moment to build belonging across difference.

Inspired by King, we are attempting to give voice to the strengths of our particular corner of human history in our podcast. We hope that it will allow people to envision collective efforts where we all agree to generously and selflessly solve big problems inhibiting human growth and well-being.

■ DAVID BLOUNT, MSW ’21, AND LOUIS JONES

ABOUT DAVID BLOUNT:

Blount (pictured far left), MSW ’21, was an Engage Democracy Fellow at the Gephardt Institute for Civic and Community Engagement, which supports the podcast. He earned a master’s degree in social work at the Brown School and now works at the Center for the Study of Social Policy in Washington, D.C.

ABOUT LOUIS JONES:

Jones is an Engage Democracy Fellow at the Gephardt Institute for Civic and Community Engagement and a graduate student at the Brown School.

NEWEST HOST:

Bethany Copeland, the new Engage Democracy Fellow, is joining the podcast to take over for Blount.

CHECK IT OUT:

Listen to the podcast at gephardt.institute.wustl.edu/for-students/engage-democracy/this-civic-moment-podcast/.

Cleaner, greener, safer

The university is determined to help save the planet.

■ ERIKA EBSWORTH-GOOLD

WashU is committed to creating a cleaner, greener, safer and more sustainable world for future generations. It is doing that by collaborating on campus, in the region and across the globe with other universities, nonprofits, corporations and government entities. Here's a by-the-numbers look at what the university has achieved — along with its many partners — during the past 18 months.



For more information on sustainability initiatives at the university, visit: sustainability.wustl.edu/.

23

WashU is one of **23 universities** from the United States, Canada and Mexico actively involved in the University Climate Change Coalition, or UC3. The coalition focuses on accelerating local solutions via collaborative action among universities, businesses, cities, states and other organizations committed to advancing climate action. Through the UC3 engagement, WashU sponsored a postdoc fellow, who is now developing a Midwest climate research agenda.

700

Washington University's Climate Change Program presented a series of special talks and events, with more than **700 people** from across the region participating. A highlight: U.S. Rep. Cori Bush joined an online panel — along with local climate experts — to address the intersection of green recovery, climate solutions and environmental justice. The discussion was part of the Solve Climate by 2030 Initiative, an international collaboration featuring 100+ global climate dialogues in 50 countries.

43

Forty-three labs at the Medical and Danforth campuses are now in the Green Labs Program, supported by the School of Medicine's Sustainability staff. The Green Labs Program encourages labs to implement small changes that make a big difference in reducing our environmental impact, such as reducing energy use, water consumption and chemical use.

1,000+

More than **1,000 people** took part in the Midwest Climate Summit, hosted by WashU in October 2020. This gathering of universities, organizations and governmental agencies took place over four intensive online sessions and featured nationally renowned keynote speakers and panel discussions. All conversations were focused on addressing climate action and working collaboratively to identify solutions. These initial conversations led to a July 2021 panel discussion featuring federal climate experts, with more events and collaborative action planned for 2022.

886+

Homes in the St. Louis area got a boost of more than **886 kilowatts** through solar panels thanks to Grow Solar STL, which offers residential property owners access to solar energy at reduced costs or with no up-front costs. (That's the equivalent of removing greenhouse gas emissions from 173 passenger vehicles driven for one year and represents the carbon sequestered by 973 acres of U.S. forests in one year!)

Renew STL Solar, a commercial group buy program, aims to install 2 megawatts of solar before the end of 2021. Both programs are a partnership of WashU, the Missouri Botanical Garden and the Midwest Renewable Energy Association.



THE ESSENTIAL ACADEMIC

Photo: James Byard



Provost Beverly Wendland landed a dream job at WashU and started it in the middle of a pandemic. Fortunately, she was ready to jump in the deep end.

■ BY ROSALIND EARLY, AB '03

MOST PEOPLE UNDERSTAND THE IDEA OF A UNIVERSITY PRESIDENT OR CHANCELLOR, BUT WHAT EXACTLY IS A PROVOST? The provost oversees the teaching, learning, research and scholarship at a university. When a school has a great entrepreneurship program? That happens with help from the provost. If a school emphasizes interdisciplinary research and coursework? That's got the provost's hand in it, too.

That hand is invisible to the average undergraduate or graduate student, and it certainly doesn't act alone, but the provost has a major influence on what you learn and how you learn it. And in January 2020, Washington University got a new provost named Beverly Wendland, who is by any measure perfect for the job. A scientist who still loves the humanities, Wendland is able to find consensus in the diversity of needs and opinions at a place like WashU that has strong science, medical and engineering programs, as well as professional schools and robust humanities departments.

Wendland came from Johns Hopkins University, where she'd been the dean at the Krieger School of Arts & Sciences since 2015. There, she oversaw 22 academic departments, and her bona fides were well-established: She increased tenure-track faculty by 11 percent; she raised \$747 million as part of a successful capital campaign; and she helped establish the SNF Agora Institute, a research, teaching and practice hub dedicated to strengthening global democracy.

What initially brought her to academe, though, was science. A first-generation college student, Wendland studied bioengineering at the University of California, San Diego (UCSD) and neuroscience at Stanford University, where she earned her doctorate in 1994. She developed a lifelong interest in studying yeast during a 4 1/2-year postdoc and joined the Johns Hopkins faculty in 1998.

In January 2020, faculty and staff at WashU gathered in Holmes Lounge to meet the new provost. The mood of the event was optimistic, excited. But the next time the WashU community saw Wendland — whose first day wasn't until July 1, 2020 — was on Zoom, and she was discussing fall plans for a pandemic everyone thought would have been over months before.

"I basically had to roll up my sleeves, jump in the pool at the deep end and start swimming," Wendland says. "But it allowed me to develop strong working relationships with everyone here. Instead of spending a lot of time sitting around reading reports, we actually got in there and got busy doing things together."

Unsurprisingly the best way to meet Wendland would not be on Zoom but at a party where you could find out how a neuroscientist came to study yeast and what makes yeast similar to brain neurons. Or hear how a first-generation college student became a leader in academia. Or discover why she's always going to be an American League fan in love with the Orioles, yet the Cardinals are finding their way into her heart.

The party may have to wait, but your introduction to Provost Wendland doesn't have to.

A first-generation college graduate herself, Provost Beverly Wendland leads with empathy as she works toward making a WashU education more accessible for all.



Photo: James Byard

“I ... HAD TO ROLL UP MY SLEEVES, JUMP IN ... AND START SWIMMING, BUT IT ALLOWED ME TO DEVELOP STRONG WORKING RELATIONSHIPS WITH EVERYONE HERE. INSTEAD OF SPENDING A LOT OF TIME ... READING REPORTS, WE ... GOT BUSY DOING THINGS TOGETHER.”

You were the first in your family to graduate from college. What was that journey like?

My mother had gone to a junior college, and my father had a little bit of chemistry for a year. They valued education, but they didn't have the whole picture of getting ready to go to college and applying to college and all of that. So I had to figure it out myself. A friend of mine, her mother actually helped me apply for my student loans. I feel like it's a miracle I'm here.

How do you think your experience going to college impacts your leadership today?

It makes me an empathetic leader. I can relate to a lot of different circumstances and challenges.

How did you decide to go to grad school?

When I was at UCSD, I ended up doing a research-for-credit position in a research lab and enjoyed that. Also, I had a neurobiology course that showed me what the path is from an idea to discovery. I like puzzles, and this was a puzzle with real consequences. And in this neurobiology course, the professor told us about another professor at Stanford who had an idea about a molecule that organized [brain] synapses. He had designed some beautiful experiments that demonstrated the molecule had to exist. It made me want to do that.

So you knew you wanted to go to Stanford?

No, I applied to a bunch of programs in biology and neuroscience. I actually interviewed at WashU. But when I got into Stanford, I had the opportunity to work with the actual professor who had made me interested in graduate school.

From there, how did you come to study yeast?

Neurons are amazing cells. They are super complicated, very sophisticated, very intricate,

very specialized. If you think about when something's flying at your face, and then you blink your eyes, all of that happens fast because of the ways in which synapses and neurons are organized. They do their signaling in milliseconds.

When I was finishing up my graduate work, it was realized that yeast and neurons have similar proteins that are involved in secretion. Neurons use them to release neurotransmitters, yeast secrete enzymes for degrading sugars and other molecules. And the idea that there was anything similar between how a yeast would do secretion and how something as sophisticated as a neuron releases neurotransmitters was pretty mind-blowing. Going to work in a yeast system to try to understand more fully the intricacies of this process seemed like it would be an interesting move to make personally, because the experimental control available in the yeast system for designing and executing experiments was much more powerful than in mammalian cells (at the time). So I switched to yeast because I appreciated that they are actually much more sophisticated than people would give them credit for.

You joined Johns Hopkins in 1998. Do you remember the early days of being a professor?

I'm not going to lie: It was a lot of stress. But it was also very exciting. I got my first graduate student; I got undergrads who joined my lab immediately. One of them helped me finish my last paper from my postdoc, and she got to be an author on the paper with me. I got my first grant. I felt like within the first year, I checked off all the milestones. A couple of years after I'd started, I remember walking down the hallway, and this professor who'd just been hired was running down the hallway toward me, and I was thinking, "Thank God that's not me." But it brought me back to being a brand-new person in the department.

I know a lot of people deal with imposter syndrome even though they're very talented and qualified. Was there any point when you first started at Johns Hopkins or later in your career that you experienced any imposter syndrome?

Sometimes I actually suffer from it even now. [Laughs.] I don't know how much of it is being a first-generation woman, but I do feel as if I suffer from it less as I get older. So for any of our younger readers out there who suffer from imposter syndrome, take heart that it fades over time. If I feel some sense of imposter syndrome from time to time, I have a firm talk with myself, or I talk to my husband or to some friends who believe in me and can help me get over it, because it's definitely a waste of time.

By 2019, you were dean of Arts & Sciences at Johns Hopkins University. What made you want to throw your hat in the ring to be WashU's next provost?

I would get emails not infrequently from recruiters and generally ignore them because I wasn't looking for a new job. But when I got this email, there was something that made me look into it more. I went to Chancellor Martin's blog, and I know it's going to sound cheesy, but it's almost like the stars aligned in my head because he seemed like a person who would be really interesting to work for and that I could learn a lot from. And his priorities were things that I was familiar with from Hopkins. I felt as if I'd have something to bring with me to WashU to help him achieve his goals.

What was your reaction to getting the job? What were you most excited about?

I was excited about getting to know everybody here at WashU, developing myself to the next level of leadership and helping make WashU as good as it could be.

Then the pandemic started. What were some of the toughest lessons?

In a situation like this, where there's changing circumstances, Chancellor Martin's playbook is to try to delay your actual decision for as long as possible to allow as much information as possible to come in. It is smart, and we did that. But that was also hard, because everybody wants to know: What's the plan? And then at some point, you have to make a judgment call. And it's challenging to know when the time is right for that.

Has COVID significantly impacted the future of the educational experience at WashU?

In some ways, it's a little too early to tell. I did appoint a Future of Instruction Task Force, and they helped us think through some of the lessons learned from the adaptations during this year-plus of COVID-impacted instruction. And there were definitely some things that we will be trying to carry forward. Doing a larger number of lower-stakes assessments throughout the semester, which is actually better for student learning, is one example. Faculty found they had a much greater uptake in attendance at office hours when they were doing them through Zoom. We're not going to completely replace all office hours with Zoom, but we'd like to encourage faculty to offer both kinds.

Most people think WashU is a fairly decentralized institution. Have you found this to be the case? How do you think you'll get more cooperation among the schools?

WashU is definitely a decentralized institution, without a doubt. One of the lessons from the pandemic is the benefit of working together. In a lot of my conversations, people have indicated

their desire to work together in a more facilitated way. I'm trying to structure the provost office to help make that happen.

St. Louis and the region face a lot of challenges, similarly to Baltimore [where Johns Hopkins is]. How much do you think WashU can do to improve the future of St. Louis?

When I think of St. Louis and Baltimore, challenges are not the first things I think of. The feature, I think, that is so palpable in both Baltimore and St. Louis is the creativity, the pride, the potential that resides within these cities that have this interesting mixture of people, opportunities and ideas. I really do see WashU as an institution that can attract amazing students, amazing staff, amazing faculty, and bring even more creative brain power to our city. I look for us to be attracting people who want to come here because we are *in* St. Louis. They want to be here; they want to contribute; they want to make a difference. Because if we can all work together and have high ambition, I think the sky's the limit.

The university recently announced Gateway to Success – a \$1 billion commitment to advancing our distinction in academics and student success. This is a huge commitment! What impact will this have on academics at the university? How do you think this will shift learning at the university as a whole?

Gateway to Success expands our ability to attract and support the very best and most promising individuals at the undergraduate and graduate levels. Our students are remarkable. With additional financial aid resources, our student body will continue to grow in caliber and academic distinction. Not only will this growth enhance the classroom experience for students and faculty alike, it also will help us recruit outstanding scholars and scientists to WashU.

A need-blind admissions policy allows us to focus on what matters: the academic potential, accomplishments and character of those who apply. It also sends a strong message that all qualified students are welcome in the WashU community. As a result, I anticipate that we will see significant growth in the applicant pool, which will include individuals who previously wouldn't have considered applying. As the number of applicants increases, the quality of the students and diversity of the applicant pool will increase as well. We will be able to admit talented and promising students from all walks of life, representing a broad range of backgrounds and socioeconomic classes. Elevating diversity enriches the student experience and the WashU community for all. A need-blind admissions policy exemplifies our core value of creating an inclusive campus environment that is welcoming, nurturing and intellectually rigorous.



Photo: James Byard

Provost Beverly Wendland was among the university leaders welcoming the Class of 2025 to Washington University during 2021 Convocation in the Quad Aug. 28.

I know faculty diversity has always been important to you. Why do you see it as important, and what is WashU doing to improve in this area?

Trying to recruit from a very restricted pool of applicants, you're missing out on a whole host of talent, whether it's students, faculty or staff. Plus, there is so much evidence out there that better decisions are made and better progress is made when you tap into a wide range of perspectives. If you're restricted to a monolithic, homogeneous set of inputs, you are not going to get the best output possible. That's why it's so important.

So what are we doing? One of the things that I'm very excited about is our WashU Equity and Inclusion Council [a university-wide body that is creating accountability and structure around equity and inclusion at the institution]. I think that is an important body that is going to help the whole institution keep our focus on equity and inclusion. I'm excited to support Kia Caldwell in her new position as vice provost for faculty affairs and diversity. We're also working on several grants that will help us keep making progress on hiring and setting up structures institutionally that will help support the success and the accomplishments of all our faculty.

You're a scientist and you also love the humanities. Why do you think they're important?

The critical foundational skills that the humanities teach our students are fundamental and enduring. Training in the humanities facilitates understanding differences, engagement with others, reflecting on and acting within ethical frameworks, and asking important and deep questions: What are rights? What are our obligations to one another? How do I fit in with a community? We are a university. We're training students who are going to be leaders in the world, who are going to be able to be responsive to whatever the world throws at them. And the humanities are a fundamental component of training students in their ability to do all that.

WashU is in the midst of a strategic planning process. Where do you hope the university will be in 25 years?

Since the planning is still ongoing, it's difficult to say for certain what our goals will be, but I hope that the reputation and stature of WashU will have risen significantly. Also, by then, I hope we'll be known nationally as the leader in educational access for students from under-resourced backgrounds, and we'll have achieved our goal of providing the very best opportunity for each and every one of our students to thrive and prosper, regardless of their background. And I hope that we'll have contributed to making St. Louis an even stronger and more vibrant city.

Wendland fast facts



BIRTHPLACE
Palo Alto, California

A FAVORITE HOBBY

She creates stained glass. "I used to make one for each of my graduate students." (She got too busy to keep up the practice.) "I feel as if I owe all my subsequent graduate students their own stained-glass window. Maybe someday I'll get around to it."



FIRST ATTENDED

San Diego State, because a friend was going there. "I was very interested in geology and geophysics, and it has a pretty strong program," Wendland says. But, ultimately, she decided to transfer to UCSD and study bioengineering.

AS A KID

She liked writing, reading and science. She was passionate about Sumerian language and cuneiform writing, and did a sixth-grade research report on the 1883 cataclysmic eruption of the volcano Krakatau.



DOG LOVER

Wendland currently is dog-mom to Sookie (named for Sookie Stackhouse), a yellow lab; and Lucy (after Lucille Ball, because of her reddish-brown fur), a rescue that's part Catahoula Leopard Dog.

HER BASEBALL FANDOM

"I'm always going to be an Orioles fan, first and foremost. And it so happens the Orioles were originally the St. Louis Browns before they moved to Baltimore in 1954. So really, I've been rooting for a St. Louis team all along! And it's convenient that the Cardinals are in the National League, so I'll be able to root for the Cards and not feel like a traitor."



Our world *by degrees*
climate series

SOMETHING'S

UP

Rajan Chakrabarty and Randall Martin research fine particulate matter, which is the leading cause of environment-related diseases around the world. Approaching the problem from opposite ends of the atmospheric spectrum, **the two work to create a complete picture of the challenges** and, ultimately, offer ideas for mitigation.

■ BRANDIE JEFFERSON

THE MCKELVEY SCHOOL OF ENGINEERING'S Rajan Chakrabarty and Randall Martin are a world apart when it comes to research.

Both study the Earth's atmospheric components, particularly — though not exclusively — aerosols, in the Department of Energy, Environmental & Chemical Engineering. These are tiny bits of solid matter suspended in air. They can absorb and reflect light, contributing to the warming and cooling of the atmosphere. And when they are below a certain size, smaller than 2.5 microns, these particles can enter a person's bloodstream and penetrate the lungs.

PM2.5, as it's called, is the leading global environmental risk factor for mortality.

Though the focus of their research is similar, Chakrabarty, the Harold D. Jolley Career Development Associate Professor, conducts his research with both feet firmly planted on the ground. He chases wildfires, takes measurements from household cookstoves in developing countries, and watches the chaotic motion of a few aerosols — or even just one — using high-tech instruments in his lab.

By contrast, for his research, Martin, the Raymond R. Tucker Distinguished Professor, depends on data collected from above the clouds, on the edge of space. Using NASA satellite data, as well as data from a network of air-quality monitoring stations that span the globe, he uses computer modeling to better understand the composition and movement of aerosols around the planet.

But this is not a story of never the twain shall meet. On the contrary, the two research methods are intertwined, depending on each other in more ways than one. And their data meet to inform some of the most consequential aspects of our lives: They meet in the lung, where PM2.5 makes us more susceptible to infections such as COVID-19. They meet in the increasingly ferocious wildfires of Utah, California and New South Wales, which send brown carbon spewing across the globe. And they meet in an atmosphere altered by aerosols that absorb and radiate heat — destabilizing the climate, making extreme and deadly weather events more common while threatening our homes, our livelihoods and our health.

They meet, as Martin says, “because in the end, they're the same aerosols.”

FROM THE GROUND UP

If you've met Randall Martin, chances are that you know about the relationship between aerosols and health.

“I know I often say it, but it's so important: Aerosols are the leading environmental risk factor for mortality worldwide.” Some of his most recent research makes this unmistakably clear.

This past summer, Martin and an interdisciplinary team of researchers published results of a study revealing that more than 1 million deaths worldwide in 2017 were attributable to the burning of fossil fuels, which forms aerosols through multiple pathways.

To do such a study requires a vast amount of data: health data from the Global Burden of Disease; NASA satellite images of vertical columns of the atmosphere (known as aerosol optical depths) that stretch from the ground to space; measurements from ground-based air-monitoring stations; details about what sources were responsible for emissions in different locations; data about the relationships between aerosols and various health outcomes.

While impressive in their depth and breadth, the data are static. Plugging the data into models, however, sets them in motion. The GEOS-Chem model, which he helped develop, allows Martin to use the satellite data to determine the concentration of PM_{2.5} aerosols on the ground and to simulate how they move across the globe. That's how he was able to show the relationships between health outcomes and aerosols: models.

But how do the models know what to do with all that data? How do the laws of physics act on aerosols?

That information comes from the ground up.

Researchers such as Chakrabarty investigate aerosols on the ground and in the laboratory, measuring their intrinsic properties as well as the ways they physically interact with their environment, all in a focused effort to understand their fundamental nature.

Ultimately, "You can model the entire universe using simple, underlying physics-like laws," he says.

Those laws, the rules that govern how aerosols move through and interact with the atmosphere, are an essential spark that brings to life the models used by researchers. Once they feed those laws into complex atmospheric models, the data gathered from satellites and ground-based air-monitoring stations begin to move, mimicking the motion seen on the ground.

Chakrabarty and researchers like him provide another service to researchers developing and improving models: research truth. When a model suggests that, for instance, weather patterns will carry soot from California wildfires to Missouri, how do they know the model is right? A researcher on the ground takes a sample of the air; if there's long-range transported soot in Missouri, the model has been validated. If there isn't, the model is tweaked, and they try again.

The model is then calibrated, in a sense, to an area where the on-the-ground truth is already known. This helps the model more closely mimic the natural principles at work.

"We not only provide information about what's happening on the ground," Chakrabarty says. "We also provide ground truth."

MODELING CHAOS

Chakrabarty came to Washington University in 2014 after beginning his academic career at the Desert Research Institute in Reno, Nevada. He has a master's degree in atmospheric physics and a PhD in chemical physics, both from the University of Nevada, Reno.

With all that physics in his background, it's no surprise that Chakrabarty's contributions to the field have clustered around uncovering the underlying rules that govern aerosol transport, as well as discovering new knowledge about the ways they absorb and radiate heat.

But he probably does spend more time chasing wildfires than most physicists.

"We wanted to get a handle on what's happening in these real-world fires in the western United States," he says. How do all the aerosols and gas emissions — that together most people just call "smoke" — interact with the atmosphere?

In the summer of 2019, Chakrabarty and his team loaded a suite of specialty instruments that they'd built in-house into a van and headed west as part of the NASA/NOAA interagency FIREX-AQ project. "We studied smoke over periods of 24 to 36 hours. Nobody slept," he says. And as a result, they were able to gather data showing that a conventional viewpoint held by researchers about a particular class of aerosol — organic carbon — needed revision.

Organic carbon is thought to reflect sunlight because of its white color, somewhat offsetting the warming effect of soot. But watching its chemical evolution on the ground, Chakrabarty and his team found that at night, organic carbon gets a boost in its ability to absorb

Below: Rajan Chakrabarty, the Harold D. Jolley Career Development Associate Professor of Energy, Environmental & Chemical Engineering, works at the forefront of addressing the grand challenges associated with the tiny particles in complex environmental systems.



Photo: Whitney Curtis

sunlight. “It’s a balancing act,” he says. “In the daytime, the photochemistry diminishes the light absorbing and warming effect. In the nighttime, it increases the effect.”

Which one wins out?

“We think the nighttime wins out,” he says.

Like soot, these organics go on growing their strength in absorption as the plume of smoke ages. The research was recently published in the journal *Atmospheric Chemistry and Physics*.

Chakrabarty also still works in a lab. Yes, it’s a lab in which he can re-create wildfires, but it’s a bit safer and a place where he can really get down to fundamentals.

There, he uses aerosols to understand chaos.

In his lab, Chakrabarty’s team set up a box containing soot particles. Then they created a turbulent “atmosphere,” an example of a chaotic system. Using a high-speed camera, they plotted

Below: Theo Paik, BSChE '19, a PhD student in Chakrabarty’s lab, ignites biomass in a combustion chamber. Burning biomass taken directly from places where forest fires burn allows the research team to analyze the properties and life-cycles of the particles emitted by fire.

“We wanted to get a handle on what’s happening in these real-world fires in the western United States,” Rajan Chakrabarty says. How do all of the aerosols and gas emissions — that together most people just call “smoke” — interact with the atmosphere?



Photo: Whitney Curtis

the path of the soot as it zipped around in a seemingly unpredictable way.

Then they turned to a kind of machine learning called a “generative adversarial network.” In a sense, it’s like two computer programs. One tries to trick the other into believing that fake data actually fit the pattern of real data. The more it tries to create plausible fake data, the closer it gets to actually fitting the pattern.

In doing so, it moves closer in reality to describing the chaotic motion of soot in a plume.

Ultimately, this model can help predict chaotic behaviors of anything, from the motion of a single aerosol in a turbulent system to the hidden pattern of seemingly random tics in children.

“By observing chaos in nature,” Chakrabarty says, “what seems to be completely chaotic is actually telling us something.”

FROM SKEPTIC TO BELIEVER

In the 1990s, Martin came to the field precisely because he was concerned about what he was hearing about climate change. He was working as an engineer and increasingly reading news stories about climate.

“I couldn’t make sense of them. They would present two opposing views: Yes, it’s happening. No, it’s not.” Martin really wanted to get to the bottom of this, so he changed careers, earning master’s degrees from Oxford University and Harvard University in environmental science and engineering sciences, respectively, and a doctorate from Harvard University in engineering sciences.

“Climate is what brought me in, first,” he says.

He came for the climate science but stayed for the modeling. When he began his doctoral work, Martin says he wanted to work with data and measurements because, at the time, he didn’t trust models. But after investigating satellite data, he realized that there definitely was a need to be able to accurately interpret observational data. “In the absence of a model, you just get a pretty picture from a satellite that one can provide anecdotes about.”

From there, Martin went on to contribute to the chemical transport model that is so integral to the work he does today; he is now a co-model scientist for GEOS-Chem. This work gave him a true understanding of the power of modeling. He began looking at trace gases, but once he realized the consequences that aerosols have for human health, his new path was set.

Martin’s skill in combining satellite remote sensing and modeling bears out its applications. His laboratory regularly publishes global pollution estimates — a comprehensive, consistent map of pollution across the globe. Those data from Martin’s lab are used by the World Health Organization and the Global Burden of Disease.



Photo: Whitney Curtis

Above: Randall Martin, the Raymond R. Tucker Distinguished Professor of Energy, Environmental & Chemical Engineering, leads research at the interface of satellite remote sensing and global modeling. His work provides data for population-exposure health studies, top-down constraints on emissions, and analyses of processes that affect the composition of the atmosphere.

GEOS-Chem is a global 3D model of atmospheric chemistry driven by meteorological input from the Goddard Earth Observing System (GEOS) of the NASA Global Modeling and Assimilation Office. Research groups around the world apply GEOS-Chem to a wide range of atmospheric composition problems.



Photo: Whitney Curtis

Above: Randall Martin and PhD student Dandan Zhang (left) study a map showing the movement of smoke from wildfires in California. Particles emitted from the fires reached St. Louis in days. It takes just weeks for some atmospheric particles to traverse the globe. Mineral dust from the Sahara Desert, for example, provides nutrients for the Amazon. “That interconnectedness requires a global perspective in order to understand what is happening at a specific location,” Martin says.

Their most recent long-term pollution estimates, published in 2020, span 1998 to 2018. Modeling global pollution is necessary because there is no comprehensive air-quality network covering the planet. There are fairly extensive monitoring systems in some areas — North America, Europe and China — but much of the world is a mystery. Here is how Martin’s lab fills in the gaps: First, there’s the data. NASA satellites and scientists provide the aerosol optical depths, global data about the vertical column of atmosphere stretching from orbit to the ground. His group has developed algorithms to combine data from multiple satellite instruments together with output from the GEOS-Chem model and with sparse ground-based measurements to infer how much PM2.5 is on the ground, at the bottom of any particular column anywhere in the world. And ongoing improvements to their algorithms, which combine these information sources, are paying off. When they tested the 2018 findings against air quality at monitoring stations, Martin’s group found their estimates were closer to the actual measurements than had ever been determined before.

Because, at the time, the data were so new, they were able to capture the results of mitigation strategies put in place that other models hadn’t. In China, for instance, Martin’s group found a significant drop in pollution in the recent past as the result of strategies begun in earnest around 2011. Other data sets hadn’t captured the drop. Martin’s research is a way to quantitatively understand satellite observations — and to understand the processes contributing to aerosol formation, loss and movement. It does more, however, than offer a static picture of the atmosphere. “It offers a predictive capability of aerosols,” he says, “and allows us to develop alternative scenarios. “If we wanted to reduce the aerosol burden in a certain region, for either health or climate purposes, we’d want to test any scenario in a model before undertaking any activity.” That’s the real power of these models: They are dynamic and flexible and can be used to predict outcomes by tweaking the input conditions. Would building a factory in one city change the air quality in another? Add the factory as a source of pollution into the model and see what happens.

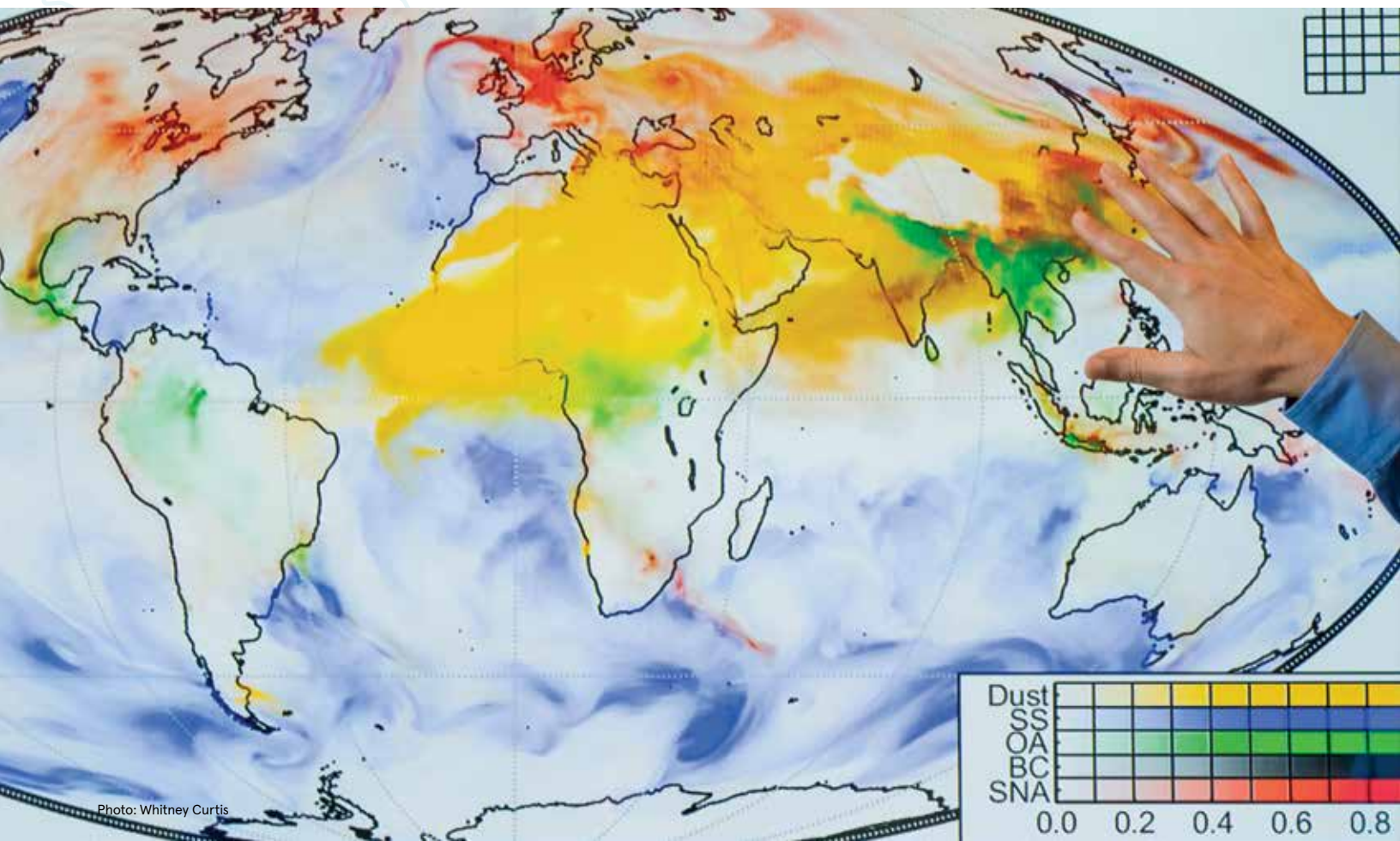


Photo: Whitney Curtis

SHOWING CONSEQUENCES OF OUR ACTIONS

Like Martin and Chakrabarty, aerosols operate on various scales. “They affect every person individually through health, while climate effects are generally on a larger scale,” Martin says.

At the global scale, researchers with their feet on the ground and other researchers with their eyes on the sky come together to tell the story of one of the most critical times in human history.

In August, Working Group I of the Intergovernmental Panel on Climate Change (IPCC) released its 2021 assessment report. Among other findings, the report concluded that the planet will not be able to stave off a 1.5 C rise in temperature within the next 20 years. That additional heat, modulated by aerosols that absorb and radiate the sun’s rays, will shrink the divide between the individual and global scales:

“Many changes in the climate system become larger in direct relation to increasing global warming. They include increases in the frequency and intensity of hot extremes, marine heat waves, and heavy precipitation, agricultural and ecological droughts in some regions and proportion of intense tropical cyclones, as well as reductions in Arctic sea ice, snow cover and permafrost.”

In addition to those effects, outlined in the IPCC report, increased pollution may have set us up for the spread of COVID-19.

At the beginning of the pandemic in the United States, Chakrabarty said he was surprised that the infection had taken off so quickly. He wanted to understand if aerosols affect the basic reproduction ratio — R_0 — of COVID-19, which denotes the expected number of people each sick person can infect.

Chakrabarty’s lab took a look at places where R_0 was greater than one, the point at which an illness takes off, spreading through a community. They factored in more than 40 variables, from age to stay-at-home orders. Then a role-reversal of sorts took place; like the objects they study, aerosol scientists are a dynamic sort.

His team turned to Martin for data, specifically for pollution estimates across the country, to see whether there was any connection between R_0 and pollution. Together with collaborators at Saint Louis University, they found there was, but it wasn’t intuitive. The effects were seen mostly below a certain level of pollution. Chakrabarty thinks that is because the initial exposure is a catalyst for change: There are no adverse effects until pollution hits a certain level. Then, all at once, everyone’s exposure crosses over from not susceptible to susceptible.

The effect was present at PM_{2.5} levels below 6 micrograms per cubic meter. National levels of “safe” exposure to PM_{2.5} are set at or below 12 micrograms per cubic meter.

Above: A still frame captured from a GEOS-Chem high performance animation shows the movements of certain atmospheric aerosols: dust, sea salt, organic aerosols, black carbon, and sulfate-nitrate-ammonium.

“In most of the U.S., we think there’s a certain standard set, and so long as we’re below that standard, or at that standard, we’re OK,” he says. But it may be that problems arise when pollution levels are much lower than the standard, setting us up to become infected with and to spread airborne illnesses like COVID-19 with relative ease.

Joining forces, so to speak, Chakrabarty and Martin were able to pinpoint another example of the merging of the individual and global effects of climate change. The two researchers will continue to probe the nature of aerosols together, 500 miles apart.

Chakrabarty is already working with Martin’s grassroots Surface Particulate Matter Network (SPARTAN). This network of air-quality monitoring stations will measure the concentrations of PM_{2.5} to help enhance satellite estimates — the ground truth for climate models.

Chakrabarty is using his expertise to analyze the particulate matter collected at the stations, while Martin will return to his models, updating them with the information Chakrabarty and others provide.

Martin is working on a new modeling system, a joint project with Harvard, MIT and NASA. They want to merge the 500-mile-high view with the down-to-earth view, creating a new type of chemical transport system that can use satellite data to retrieve very fine resolution over a region the size of, say, St. Louis, while retaining the large-scale, global transport capabilities.

These tools — chemical transport systems, modeling a single soot particle in a lab, chasing down a wildfire in a van that you may or may not also sleep in — are designed first and foremost to help us understand and explain the world around us. But the best-case scenario is that they can guide us to make better choices. Martin, whose research originates in space, ties his work firmly to the ground, keen to understand the consequences of those choices through modeling.

“We look at this data, put it together, and we can understand how things move around the globe,” Martin says. “The models provide more than a descriptor; they show the real consequences of our actions.”

Though Chakrabarty’s research keeps him busy analyzing data from ground-based monitors, or cooking up research in the Indian countryside, he often takes a more abstract view.

Once you can describe the motion of a particle, “Now you have order in chaos,” he says. The new understanding offers a peek into the framework that governs the world.

“And these laws are what the universe is actually. There are laws governing everything, but they’re hidden. You just have to uncover them. That is what science is doing, right?”



Photo: Whitney Curtis

Left: A “negative gravity” flame in the Chakrabarty lab facilitates the formation of the same types of soot found in large-scale wildfires.

Once you can describe the motion of a particle, “Now you have order in chaos. ...

And these laws are what the universe is actually. There are laws governing everything, but they’re hidden. You just have to uncover them. That is what science is doing, right?”

— Rajan Chakrabarty

In the first graduate studioloab, “Freedom | Information | Acts,” students are comparing interviews filmed for the iconic civil rights chronicle *Eyes on the Prize* to roughly contemporaneous interviews. In doing so, they’re thinking through how we tell the civil rights story — and how that might impact our understanding of the current political moment.



A NEW HOME FOR HUMANISTS

The Lewis Collaborative — a reinvention of a century-old U. City landmark — and a new “studioloab” model are reshaping humanities education at WashU.

■ BY LIAM OTTEN, BFA '93

Photo: Joe Angeles



“WHAT EXACTLY ARE WE LOOKING FOR?”

The question, posed by Abdallah Belhadj, a senior in Arts & Sciences, is at once simple and loaded. A beat passes.

“I’ll take a run at it,” says Joe Loewenstein, professor of English in Arts & Sciences. “What’s there? What’s available to be thought about, with these materials? What analyses might bear fruit?”

It’s a classically Socratic exchange, and one that gets to the heart of “Freedom | Information | Acts,” the first in a new series of yearlong interdisciplinary investigations known as “studiolabs.” In this initial studiolab, students are exploring how interviews filmed for *Eyes on the Prize* — the iconic civil rights chronicle produced by Blackside, the great documentary film company founded by Henry E. Hampton, AB ’61 (English) — compare to roughly contemporaneous interviews, with many of the same participants, by celebrated documentarian Jack Willis.

“*Eyes* is perhaps the canonical telling of the civil rights era,” says David Cunningham, professor and chair of sociology in Arts &



Sciences, who co-teaches “Freedom | Information | Acts” with Loewenstein, also director of the Digital Humanities Workshop (HDW), and Douglas Knox, assistant director of HDW. “As much as anything, it has shaped the public’s knowledge of the civil rights movement.”

But digging into both filmmakers’ archives, which are housed within WashU Libraries, suggests a fascinating counterfactual.

“In Willis, we have a trove of alternative accounts that could have been used to create a different telling,” Cunningham explains. “We also glimpse hundreds of alternative directions that Hampton’s team could have taken — by selecting different figures, asking different questions or even just using different quotes.

“That’s true for any documentary account, but in this case, the stakes seem quite high,” Cunningham adds. “There remains a lot of debate among movement veterans, and among people who study the movement, about how we tell the civil rights story — and what that means for understanding our current political moment.”



Photo: Courtesy of the Archives of the University City Public Library

Located less than a mile north of the Danforth Campus, the reimagined Lewis Collaborative complex was originally a women's art academy in the early 20th century.

CONVERGENCE AND CONSTRUCTION

More than a year in the planning, “Freedom | Information | Acts” was made possible by an extraordinary convergence of campus resources. First of these was the extensive, multimillion-dollar renovation of WashU’s sprawling, 3.75-acre Lewis Collaborative.

Located less than a mile north of the Danforth Campus, the Lewis Collaborative is one of University City’s oldest and most storied sites. It dates to 1902, when Edward Lewis — who published both the popular *Woman’s Magazine* and the *Woman’s Farm Journal* — purchased a large tract of land along WashU’s north edge. Four years later, U. City was incorporated and Lewis elected founding mayor.

In 1909, Lewis began construction of a planned women’s art academy, in a Classical Revival building designed by St. Louis architects Eames & Young. But in 1915, Lewis decamped for Atascadero, California, where he’d established the capital of the utopian American Woman’s Republic. The academy building was acquired by U. City’s fledgling school district, and expansions followed in 1923 and 1926. In 1984, the now three-building complex became a satellite location for WashU art students, with other portions transformed into apartments.

Then in 2019, the east end transformation project allowed WashU’s Sam Fox School of Design & Visual Arts to consolidate facilities on the Danforth Campus. Lewis’ academy was ripe for reimagining. Architects from The Lawrence Group and Mahlum Architects made plans to realign all three buildings around a new central corridor. Walls were opened, traffic re-routed, bricks and beams exposed to view.

Now known as the Lewis Collaborative, the renovated complex encompasses 93 residential units, ranging from less than 500 to more than 1,200 square feet. The new studiolab suite features two flexible classroom spaces with large sliding glass doors that open onto a spacious outdoor courtyard. Other elements include a renovated front entrance; offices and co-working spaces for TechArtist; and a communal, commercial-quality kitchen. (The opening of a first-floor coffee shop, adjacent to the studiolab suite, has been delayed by the pandemic.)

“This has always been a creative hub,” says Mary Campbell, associate vice chancellor for real estate, who oversaw the renovation. “What we’ve done here stays true to that tradition. I think that’s in the very DNA of this project.”

BRIDGING THE GAPS

Organized by the Center for the Humanities in Arts & Sciences and partially underwritten by a grant from the Mellon Foundation, the studiolabs also build on a series of campus conversations and initiatives about the future of humanist inquiry.

“We’ve been thinking a lot about how to integrate new capacities into graduate training,” says Jean Allman, director of the Center for the Humanities, who conceived the studiolab model as part of her “Faculty for the Next Generation” grant. “Collaboration, project management, quantitative analysis, engaging the public and writing for multiple audiences, competency with digital and other media — these are all essential to success both within and beyond the academy.”

Allman, also the J.H. Hexter Professor in the Humanities in Arts & Sciences, says the studiolabs were inspired by the collaborative ethos she frequently observed in scientific, medical and engineering laboratories, as well as in art and architecture studio practice. The idea was to create a physical and curricular space that will allow interdisciplinary cohorts of scholars and students to examine contemporary issues while also engaging the broader public.

Meredith Kelling, a doctoral candidate in literature and a Lynne Cooper Harvey Fellow in American Culture Studies in Arts & Sciences, notes that, over the last several years, the graduate-level Digital Approaches Reading Group and Loewenstein’s Digital Humanities Workshop also have grappled with divides between public and institutional forms of knowledge.

“There are a lot of questions about the role of the university and what goes on outside its borders,” says Kelling, who worked closely with Loewenstein, Cunningham and Knox to develop the “Freedom | Information | Acts” syllabus. “How do workers in the academy meaningfully bridge those gaps?”

It’s a question the studiolab will grapple with directly. Over the course of the fall and spring

semesters, students and faculty will use the Hampton and Willis collections to design and then co-teach a new capstone research course for the WashU Prison Education Project (PEP), which provides classes at Missouri Eastern Correctional Center in Pacific, Missouri.

“The capstone project is a requirement for PEP’s new bachelor’s degree program,” says Cunningham, who has twice taught courses for the project. Yet the students’ limited equipment and restricted internet access can make conducting such in-depth research a challenge. He says that “for the first time, PEP students will have access to primary archival materials.”

‘UP IN HISTORY’

Born in St. Louis in 1940, Henry E. Hampton was the son of Henry E. Hampton, MD, chief of surgery at Homer G. Phillips, the city’s primary African American hospital. At WashU, the younger Hampton took pre-med courses but also studied English, hoping to become a fiction writer. But in 1965, his experiences at the civil rights protests in Selma, Alabama, provided the inspiration for what would become *Eyes on the Prize*.

“A hundred civil rights stories had been told, but it was always Black people being saved by whites,” Hampton recalled in a 1993 interview. “In *Eyes*, we brought our people up in history.”

Produced by Hampton’s Blackside, Inc., the largest African American-owned film production company of its day, *Eyes* debuted on PBS as a six-part series in 1985. This was followed, in 1988, by the eight-part *Eyes on the Prize II*. Together, the two series are widely considered the definitive documentary of the civil rights movement.

The Henry E. Hampton Collection was established as part of the WashU Libraries’ Film & Media Archive in 2002, four years after Hampton’s death. It contains more than 35,000 items, including hundreds of hours of original interview negatives and reel-to-reel audio for *Eyes* and other feature documentaries. In 2010, a grant from the National Historical Publications and Records Commission allowed the archive to digitize all 124 interviews conducted for *Eyes I*. Four years later, the archive acquired another 700 film reels and 300 audio reels, as well as videos and manuscript material, comprising the Jack Willis Collection.

Willis, a prolific producer for National Education Television (a forerunner to PBS), frequently tackled racism, poverty, the environment and other issues, highlighting, in his phrase, “unheard voices.” In 1964, Willis released *Streets of Greenwood*, a groundbreaking short film about civil rights organizing in Greenwood, Mississippi. By the late 1970s, he had begun collecting interviews — 85 in all — with people who’d been deeply involved in the larger civil rights movement.



Photo: Washington University Archives

“Willis envisioned a grand civil rights history that, in scale and topic, would have been a lot like *Eyes*,” Cunningham explains. “But the project was never realized.”

This, Cunningham continues, raises a series of interesting questions: What might Willis’ history have looked like? Where might it have overlapped with *Eyes*, and where might it have differed? And how might such differences have influenced our understanding of history?

THE SPIRIT OF THE TIMES

Back at the Lewis Collaborative, an interdisciplinary group of nearly 20 students, faculty and staff have gathered in the studiobook suite to discuss the mechanics of digital transcription.

Though the Film & Media Archive’s *Eyes on the Prize* portal includes full transcripts of more than 300 interviews (the 124 from *Eyes I* plus another 180 from *Eyes II*), some important raw materials remain. Chief among these are audio recordings for what Hampton called his *Eyes on the Prize* “School,” a two-week colloquium, including vibrant sessions with a distinctive mix of movement veterans and leading academics, that preceded the production’s launch.

“Students, even graduate students, don’t generally have a lot of opportunity to think about how those materials are constructed,” Kelling says. “We thought, especially for humanities and social sciences students, this is a crucial point, and something they can take to their own research.”

Above: The late Henry E. Hampton, WashU alumnus and documentary filmmaker, was adamant about his *Eyes on the Prize* having a place in the classroom. Interviews, photographs and more are part of the Henry E. Hampton Collection — housed in Washington University Libraries, Department of Special Collections — being used as a resource in the first studiobook.



The studiolabs were inspired by the collaborative ethos ... in scientific, medical and engineering laboratories. ... The idea was to create a physical and curricular space that will allow interdisciplinary cohorts of scholars and students to examine contemporary issues while also engaging the broader public.

Loewenstein points out that contemporary, AI-powered transcription software is a useful tool, but that fixing the inevitable mistakes — to say nothing of untangling the crosstalk, false starts and filler words inherent to spoken language — still requires editorial decision making. “Don’t worry about every ‘uh,’” he advises. “The idea is to capture the way a person would honestly transcribe what they had said.”

Soon, the conversation turns to interview strategy. For their first assignment, students contrasted four key *Eyes* interviews — with Stokely Carmichael, Amzie Moore, E.D. Nixon and Rosa Parks — with Willis’ approach to the same speakers.

“Willis seemed very focused on the local experience of events,” says Orly Einhorn, a junior in sociology, “whereas Hampton was more interested in the national context.”

Naomi Kim, a first-year graduate student in English, points out that, in speaking with Parks, the *Eyes* team cast a wide net, asking about life in Montgomery, the day-to-day reality of racial discrimination and Park’s reaction to the murder of Emmett Till, among other topics. Conversely, “Willis is very focused on the day of the protest. It reminded me of a courtroom and witness stand, with the lawyer saying ‘Tell us what happened.’”

“Willis was trying to understand Parks’ internal reality,” adds Belhadj. “How did she feel in that moment? What was going through her mind?” Hampton’s team “was trying to capture the spirit of the times.”

STYLES AND AGENDAS

Next up are the interviews with Moore and Nixon, both local NAACP organizers, and Carmichael, an architect of the Black Power movement. Interview technique remains a focus, but the group also attends to the sometime competing styles and agendas of the interviewees. For example, Moore’s relaxed and roaming manner seems to hardly acknowledge the camera, whereas Nixon continually stresses a few key points, particularly relating to the Montgomery bus boycott. Carmichael, meanwhile, displays a novelist’s eye for detail and an editor’s instinct for revision.

“Carmichael is a pro,” Knox observes. “He’s good at this. He tells the same story five times, giving each take a slightly different emphasis. But I wonder if another tension here isn’t just between interviewer and interviewee, but also between them and us as later viewers. Sometimes I think we want these to be pure oral histories, and they’re not.”

“They’re making a documentary — all of them, camerapeople, interviewers and interviewees,” Loewenstein adds.

In the coming months, the studiolab has plans to travel to Mississippi, both to explore how contemporary institutions present historic civil rights materials and to conduct original field research. For example, in addition to analyzing the Hampton and Willis interviews, the group is preparing to conduct its own interview with Jacqueline Byrd Martin, who’d been a pivotal youth leader in McComb, Mississippi.

“In 1961, after a fellow student was expelled for sitting-in at a bus station, Ms. Martin and her brother led a march out of their high school and up to City Hall,” Cunningham says. “They were met with brutal violence by a white mob.” Byrd and dozens of others were arrested and pressured into signing a loyalty statement to be readmitted to school. Dozens refused to do so, cementing McComb’s status as a center of resistance and producing severe backlash from the entrenched white power structure as well as the Ku Klux Klan. By 1964, the city was infamously referred to as “the bombing capital of the world.”

“I was able to file a Freedom of Information Act request on the FBI investigation,” Cunningham adds. “Ms. Martin and her brother, Jerome, are all over those files, as leaders and catalysts for the walkout. It was the first mass youth action in the state, but we’re also interested in how that early activism impacted her life and informed her subsequent work on civil rights education.”

Meanwhile, the studiolab is working closely with Jami Ake, assistant dean in Arts & Sciences and senior lecturer in the Interdisciplinary Project in the Humanities, to design the PEP research methods course, which will launch with the spring semester, for the WashU Prison Education Project. Also in the spring, the studiolab will host a short residency with Judy Richardson, an important member of the Student Nonviolent Coordinating Committee and later one of the associate producers of *Eyes on the Prize*, and continue devising strategies for making the Hampton and Willis archives more accessible to scholars and the public.

“One thing that’s been gratifying is that many of the students’ question are less about ‘what’ than ‘how,’” Loewenstein concludes. “‘How are we going to do this?’ ‘How should we do this?’ ‘What will it cost in terms of time and expense?’

“These are unusual questions for a humanities seminar.”



Photos: Joe Angeles



Clockwise from left: The Lewis Collaborative has always been a hub of creativity. Today, it comprises 93 residential units, an outdoor courtyard, co-working spaces, a communal kitchen and a new studiobar suite — with the goal of creating living/learning spaces that foster community and creativity. “Freedom | Information | Acts” is the first studiobar being held in part of the new studiobar suite.

Next

SkyTerrace@Dawson

Renowned architect **Soo K. Chan, AB '84**, has designed buildings all over the world, but his SkyTerrace@Dawson, a social housing project in Singapore, stands out. Commissioned by the government in 2008, the complex re-envisioned intergenerational living. Chan's design includes modular flats that can be configured to add grandparent units. The project also incorporates vertical greenery, playgrounds with geriatric exercise equipment, and elder-care and child-care centers. For more, visit source.wustl.edu/2021/12/the-master-of-transition/.





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Photo: Aaron Pocock

An empowering brew

Veronica Swanson teams up with a basketball superstar to empower female coffee farmers.

Veronica Swanson, EMBA '03, first met NBA legend Dikembe Mutombo in the mid-1980s while they were undergrads at Georgetown University. He was a rising basketball star, and she was dating one of his teammates, with whom he shared a flat. “He would wake me up in the morning, yelling ‘Veronica!’ at the top of his lungs,” she remembers. “I have no idea why he did that.”

Swanson stayed in touch with the Hall-of-Fame center, famous for his “finger wag” at opponents whose shots he blocked. (You’ve probably seen his funny Geico ads.) They reunited over dinner in 2019 when he visited the city where she lives, Abu Dhabi, not long before COVID-19 descended. Soon after the dinner, she lost her job as the head of marketing and communications for an engineering consultancy there, before he called out of the blue.

“He said, ‘Why don’t we start a company?’” Swanson recalls. The resulting enterprise, called Cajary Majlis, launched in the fall of 2020, with Swanson as the vice president of marketing. Mutombo Coffee, their first offering, debuted four months later, taking advantage of the fact that many suppliers were shut down because of the pandemic — but everyone still wanted coffee.

Their “Starbucks-quality” arabica beans are sourced from Mutombo’s country, the Democratic Republic of the Congo. Though home to delicious coffee, the DRC has major infrastructure and supply chain issues, causing most beans to die on the vine.

To solve this problem, Mutombo Coffee works directly with women farmers. Trained by NGOs like the International Women’s Coffee Alliance, many of the farmers are widows from the country’s years of armed conflict, and they serve as the glue in their communities. “If we can’t trace the coffee back to the farm and talk to the farmer on the phone,” Swanson says, “we’re not buying the beans.”

It’s been an incredible journey for this East St. Louis native, whose father was a fire captain and training officer and mother an executive assistant. Inspired to work abroad by books she read from the bookmobile, Swanson got that chance in the 1990s as a news assistant in the *Wall Street Journal*’s Brussels office.

A love interest brought her back to the St. Louis area, and as a newlywed in 2002, she entered WashU’s Executive MBA program while working full time for Illinois Power Company. The next 18 months were incredibly intense, but she thrived in an environment that included standout professors like James T. Little and fellow students who were already luminaries in their fields.

“It was the most transformative experience I’ve ever had, learning from CEOs and entrepreneurs who were actually running companies,” she says. “I was just an account manager at the time, and they were showing me how to run my own business.”

Swanson comes across as someone who could get any job, anywhere, any time. She credits the EMBA program for teaching her transferable skills. Indeed, following her graduation, she took positions in everything from corn commodities pricing to nuclear communications.

She sees her current role as an opportunity to give back by empowering historically marginalized female farmers. Her priorities align with those of Mutombo, who, since retiring from basketball, has become a renowned humanitarian, helping fight Ebola and opening a hospital in Kinshasa, also in the DRC, that has served hundreds of thousands of patients.

“Veronica is a longtime friend, and given her level of experience in marketing and branding, it only made sense for me to partner with her on my coffee brand,” Mutombo said of Swanson at a recent promotional event at Black-owned St. Louis cafe Northwest Coffee. “She’s brilliant, and she’s super passionate about our mission to raise awareness of the African coffee industry and help affect positive change for so many women and families.”

Though most companies would barely have business cards so soon after their launch, Cajary Majlis is already profitable, Swanson says. She credits the ideals and acumen of her old college friend. “It helps that we have a 7-foot-2-inch billboard,” she says, “with great connections and an outstanding reputation.”

■ BEN WESTHOFF, AB '99



WHO: Veronica Swanson

SHEEPSKIN: Executive MBA '03

COMPANY: "Cajary" comes from Mutombo's children's names — Carrie, Jean Jacques and Ryan — while "Majlis" is an Arabic term for a salon where people might enjoy coffee.

LIFE IN THE UAE: "I've gotten used to the heat; your body acclimates. And I love raising my 14-year-old son and 16-year-old daughter there. It's so diverse. Their friends look like the United Nations."



Photo: Josh New

Honoring the past to build the future

Lisa G. Byers draws on her American Indian ancestry to shape her students into culturally aware social workers.

WHO

Lisa G. Byers, MSW '98, PhD '05

TRIBAL AFFILIATION

Cherokee Nation citizen – Bird Clan

TRAILBLAZER

First Buder Scholar to earn both a master's degree and a doctorate from the Brown School

WANTS PEOPLE TO KNOW

American Indian nations are sovereign entities that have a formal nation-to-nation relationship with the U.S. government.

As a citizen of the Cherokee Nation, **Lisa G. Byers, MSW '98, PhD '05**, is no stranger to historical trauma passed down through generations.

Byers says her grandmother, who helped raise her, impressed upon her at a young age the strength and sorrow of her roots. "She was the conduit for Cherokee culture," Byers says. "She also told me stories about the oppression of our people, including the Trail of Tears, and what that meant."

Byers' own family was touched by poverty and trauma, she says, in part because of her mother's painful experiences at an American Indian boarding school. Created to assimilate and strip culture from indigenous people, these schools have come under scrutiny after hundreds of children's graves were discovered at similar schools in Canada.

Today, Byers, an associate professor at the Anne and Henry Zarrow School of Social Work at the University of Oklahoma, shows her social work students how to react to their clients' historical trauma. "When a native person comes into their office, it's important that social workers not put their own guilt and shame on the client," she says. "To best serve clients, we must put them in the best place possible."

Byers teaches courses in a graduate certificate program that focuses on social work for American Indians, and she is happy to see the program's growing tribal diversity. "When I get an email that says, 'Thank you for being unapologetically indigenous,' that's what really stirs my heart," she says.

Byers also wants her students to understand the wisdom and importance of traditional tribal healing methods. "We don't isolate mental health and substance abuse," she says. "We see it holistically as related to physical health, spiritual health."

About 25 years ago, Byers' desire to study indigenous mental health drew her to the graduate program at the Kathryn M. Buder Center for American Indian Studies in the Brown School. The Buder Center is a scholarship program committed to the education of American Indian students earning master's degrees in social work.

Byers says starting graduate school with a 1-year-old son was very difficult. "Thankfully, I was a Buder Scholar, and we were a tight-knit group. They were a major source of support."

Byers now has three children. Her youngest attends a public elementary school in a suburb within the boundaries of the Cherokee reservation. (In a sign of hard-fought progress, public schools within those boundaries now offer Cherokee cultural lessons and activities.)

"My mother went to a school where she lost her language and encountered immense abuse and assimilation pressure. Now my daughter is going to a public school that has enabled her to enrich her cultural knowledge.

"We still have struggles, but we also have many strengths; so don't look at us with pity," she says. "I call it a quiet revolution that we have this graduate certificate, that we have these classes, that I'm here. Growing up so poor, I was really not supposed to be here."

■ JULIE KENNEDY

Making water accessible, reliable and sustainable

Josiah Cox's utilities company has grown to service multiple states while also changing how we access clean water.

No public utility is as vital as water, and yet it is the resource that is perhaps most often an afterthought. You turn on a faucet, and water comes out. Simple, right?

In areas with rich aquifers and sustainable structures, clean water is easy to take for granted, but many American communities have damaged systems and poor water quality. For example, earlier this year, *Consumer Reports* published that, measured against EPA standards, U.S. "rural counties have 28% more violation points than metropolitan ones."

A desire to find a solution to these problems was the spark that became Central States Water Resources (CSWR), the brainchild of **Josiah Cox, EMBA '07**.

"Our mission is to bring safe, reliable and environmentally sustainable water resources to every community in the United States," says Cox, whose St. Louis-based company transforms how water utilities work.

Using innovative technology, CSWR purchases distressed water and wastewater utility systems and revitalizes them. "We are a private solution to a very public problem."

Working with water, Cox's background in science was a plus — he earned a BS in environmental science from the University of Kansas — but it was his Executive MBA education through WashU's Olin Business School that gave him the skills needed to found and run an ever-growing business.

"When I started raising money for CSWR, it took me a couple of years to land my first round of funding," Cox says. "Without my WashU credentials, I don't think I would have gotten it done. All the big institutional investors recognize the quality of a WashU education."

After earning his EMBA, Cox recalls doing a lot of "private-equity speed dating," pitching his business plan to venture capitalists. And his backers should be quite happy with the results: Since the company's founding in 2014, "We've grown from serving 900-some households to more than 70,000," he says.

And it hasn't been easy work. "We've bought systems out of bankruptcy, [including] ones with bird feces in the water," he remarks. "It's kind of crazy, the stuff I've seen."

All the hard work is paying off, though: Starting with a one-person team, Cox now leads a staff of 37, and CSWR operates in seven states, with plans to expand to Arizona, Florida and North Carolina by 2022.

■ BILLY MCENTEE

WHO

Josiah Cox, EMBA '07

JOB

Founder and president, Central States Water Resources

LOCATION

St. Louis

FUN FACT

Josiah played college football and enjoys science fiction. "I'm a jock guy who loves fantasy books," he says.

VISIT

centralstates-waterresources.com





Courtesy Photo

Impacting millions

His work in pharmaceuticals has brought drugs to market that have saved countless lives, and Frank Jiang is just getting started.

WHO

Frank Jiang, HS '99

LOCATION

Shanghai, China

FUN FACT

He has twin daughters who were born in St. Louis in the morning. So he and his wife named them Chinese for Louis, which corresponds to two Chinese characters. Each daughter got one part of the word, and both have the middle name morning. "We're simple people," he says with a laugh.

In 2000, **Frank Jiang, HS '99**, had just finished a year as an attending physician at Barnes-Jewish Hospital. "As a doctor, especially in the emergency room, you are the one calling the shots," Jiang says. But Jiang was now joining pharmaceutical company Eli Lilly. "You're still working with a bunch of people with similar medical backgrounds, but you're no longer calling the shots. It is consensus-driven. It was really a culture shock," he says with a laugh.

Treating an individual required someone to take charge, but a new drug "is going to serve a million or even more patients, so the process, obviously, is very rigorous and carefully regulated."

Despite the initial shock, Jiang enjoyed pharmaceutical research. He is now the chairman and CEO of CStone, a biopharmaceutical company creating immuno-oncology and precision medicines to address cancers that are prevalent in China, such as liver cancer, stomach cancer and esophageal cancer, but are rare in the West. He hopes CStone will become a leading global pharmaceutical company like Eli Lilly.

Jiang became chairman and CEO of CStone in 2016 and had almost no

employees. By 2019 the company was listed on the Hong Kong Stock Exchange. CStone now has 700 employees, 15 assets in its pipeline, two approved products, and two more expected by the end of 2021.

Jiang attended medical school in China — he's from Nanjing — but went to Canada for his PhD and to WashU for his residency and clinical fellowship.

At Eli Lilly, Jiang was trained in running clinical trials and ran his first within a few months. Two years later, Jiang joined Sanofi Pharmaceuticals, where he was global project team leader and ran a mega clinical trial of 21,000 patients. The trial, EXTRACT, used a blood thinner to treat patients who had suffered an acute myocardial infarction (heart attack). "The success of the study, of this trial, changed the entire treatment paradigm," Jiang says. "And to see that drug on the market after four years straight of working on weekends, working every day — it was worth every single minute of the effort."

In 2006, Jiang returned to China with Sanofi, eventually becoming head of research and development for Asia. At the time, it could take over a year to get a clinical trial approved in China, while in the U.S., for example, it took 30 calendar days. This meant clinical trials often had no Chinese participants, making it harder to get the drug approved in China.

"We did a lot of work with Chinese regulators to shorten the review time," Jiang says. Sanofi also started submitting their applications earlier in China. As a result, the number of clinical trial patients from China increased six-fold, and application approval times went from 12-18 months to 60 days.

Throughout his career, Jiang has made time for patient care and mentorship either at his companies or as a professor. Now, he teaches part-time at Tsinghua University.

"I developed a very clear mission statement for myself. It is a tripartite mission: patient care, education and also research," he says. "That's it. That's my mission, and the things that I do."

■ ROSALIND EARLY, AB '03

Peter Vogel: The business of cannabis

Peter Vogel, AB '97 (economics with a minor in writing), looks at the cannabis industry and sees nothing but growth. As CEO, Vogel leads a budding online network, Leafwire, connecting folks in the cannabis industry and helping them meet their business needs. As of July 2021, the network had 40,000 members, representing 18,000 companies, and the numbers are only going higher.

► **Leafwire is the LinkedIn of the cannabis and hemp industries.** We're a network focused on the business side of cannabis. We attract growers, dispensary workers and those swirling around the industry in fertilizing, packaging, shipping, etc. We designed the platform for people to conduct business and learn more about the industry. It's not a place to talk about smoking cannabis. It's all business.

► **I was recruited by a group of investors.** I'd been in the tech startup space for 20 years and had success building member bases of a couple million people. I started at Leafwire in late 2017, helping build the platform from scratch. A year later, we launched to the public. We had a big coming-out party, where we hosted a "Shark Tank"-style pitch contest in Denver. Since then, we've hosted 12 other pitch contests in other cities, including Miami, Los Angeles, Toronto and Vancouver, as a way to establish the Leafwire brand.

► **A lot of social media sites — Facebook, YouTube, Google — still won't let you use the word cannabis,** even if you're talking about cannabis news or the science and politics of it. They can shut you down and cancel your account. We built Leafwire because industry workers needed a safe space to discuss their businesses, find business partners, find employees, find investors and just simply network.

► **As a startup CEO, I am involved in almost every aspect of the operation,** more than I even usually want to be. In the beginning, we had basically two people. I was more on the sales/business development and customer-service side, and my partner was on the technical side, managing a team of developers in Sri Lanka and developing a product road map. We've since brought in more people in sales, marketing and customer service, but I still work across divisions. Since the cannabis landscape is ever-changing, we're always launching new initiatives.

► **Everything we've done to date has been web-based.** Now we're planning to expand by developing a mobile app. Around 300,000 folks, [who are] considered "plant touching," work for licensed cannabis companies. They grow, transport, extract, formulate and sell it. Probably a million more work in non-plant-touching functions. We're just scratching the surface with member numbers, especially as more states become legal.

► **In the cannabis industry, conferences are a big deal.** Since the industry once operated in the dark, you typically worked only with people you knew. We're building our app to be used also as a meeting tool: to connect with other Leafwire contacts and to schedule appointments during conferences. We'd also like to partner with organizers and offer layouts of the event site, the schedule, and information on sessions and speakers.

► **People use Leafwire now as their go-to networking site when they're at home;** we'd like them to use the app as a connection tool anywhere they go, on the road and even in-person at cannabis/hemp conferences around the world.

■ TERRI NAPPIER

WHO

Peter Vogel

LOCATION

Denver

FIRST JOB

While working at *Student Life*, Vogel answered the phone when someone was looking to place an ad for a summer job. "I need a job; hire me," Vogel said. It led to a summer job and then full-time position. Vogel has been working in sales and startups ever since.

INDUSTRY TRENDS

Legal cannabis is projected to drive \$65 billion in sales in 2021. Senior citizens are one of the most rapidly growing segments of new consumers.

SITE

Leafwire.com



Courtesy Photo



Courtesy Photo

Advancing new knowledge and new leaders

Alumnus **Gaurav Garg** and his wife, **Komal Shah**, help forward the university's mission by serving in numerous leadership roles, and generously supporting student scholarships and transformative faculty research.

Although they both grew up in Ahmedabad, India, Gaurav Garg, BS '88, BS '88, MS '90, and Komal Shah met in California. "We had to travel thousands and thousands of miles in order to find one another," explains Komal lightheartedly. Now longtime residents of the San Francisco Bay Area, the couple has been married for 22 years and has a son, Bijoy, a Class of 2024 student in the McKelvey School of Engineering, and a daughter, Ellie.

Today, they also are among Washington University's most active volunteer leaders. A tech entrepreneur, venture capitalist and founding partner of Wing Venture Capital, Gaurav has served on Washington University's Board of Trustees since 2018 and the McKelvey Engineering National Council since 2015. The university and engineering school both have recognized him with Distinguished Alumni Awards.

Earlier this year, Komal joined the Sam Fox School of Design & Visual Arts National Council and the Kemper Art Museum's collections committee. A former engineer and tech industry executive, she is an avid collector of contemporary art by women and artists of color, and serves as a trustee for the San Francisco Museum of Modern Art, among her other roles in museum philanthropy.

WHAT'S UNIQUE ABOUT A WASHU EDUCATION?

Gaurav: WashU offers a broad-based education, which is a significant reason why I chose to attend the university. All the knowledge and skills I gained as a double major in electrical engineering and computer science have served me well throughout my career. It's like oxygen though: I don't think about it. What I learned in my economics, philosophy and other classes prepared me to connect the dots and think in a larger context. As a venture capitalist, I am continuously encountering new ideas and framing those ideas in terms of what is going on and changing in the world. This way of

thinking is foundational at WashU and sets it apart from other schools.

Komal: Being able to study across disciplines attracted our son, Bijoy, to the university, too. He is a sophomore pursuing a systems science and engineering degree in McKelvey. The program develops students' aptitude in math and helps them apply it through a second major in another area. Bijoy is still figuring out exactly where his interests lie. Some schools can be rigid, but WashU is flexible about students deciding on and changing their majors. The university enables a journey of discovery that helps students become mature, driven and accomplished human beings.

WHAT INSPIRES YOUR VOLUNTEER LEADERSHIP?

Gaurav: My affinity for WashU and desire to give back prompted me to get involved about 10 years ago. Serving on the McKelvey Engineering National Council and the Board of Trustees is intellectually stimulating. I enjoy conversations with members of the leadership team and getting to see how the university works.

Faculty throughout WashU are doing truly amazing research, and hearing about it helps keep me involved and constantly learning. In my own work, the intersection of biology and technology is an area of intense interest, which is partly driven by what I've learned about the research at the medical and engineering schools. Marrying these disciplines through efforts like bioinformatics is going to transform medicine and health care in the next couple of decades. I've been connecting WashU faculty with leaders I know in industry, and that cross-pollination has been a lot of fun to initiate.

Komal: Chancellor Andrew Martin is another important motivation for our support and enthusiasm for WashU, as was Chancellor Emeritus Mark Wrighton. Both are fantastic leaders who truly get

to know members of the university community and who help cultivate positive energy and momentum on campus and beyond. It's been wonderful to witness that here in the Bay Area.

HOW WOULD YOU DESCRIBE THE WASHU COMMUNITY?

Komal: Like Gaurav, my relationship with the university has evolved over time. I've graduated from being the wife of an alumnus to a trustee's spouse to the mother of a student. From a parent perspective, WashU is a special place where our son will learn, grow and become a contributing member of society. When the Sam Fox School invited me to join the national council and the Kemper's collections committee, my instant reaction was, "Yes, I'm happy to support these efforts." The university community always has been so welcoming, and WashU really feels like family now.

WHAT INSPIRES YOUR PHILANTHROPIC SUPPORT?

Gaurav: Scholarships have been a great way to give back, and it has been fulfilling to meet and get to know students who have received our support. I recently connected one with an internship at a small biotech company in the Bay Area, and last summer we got together for lunch. I enjoyed hearing about how this student was able to play a role in the company's mission.

Providing funding for faculty research also has been important to us. Brilliant professors are the heart of the university, and WashU's engineering faculty are pursuing and refining mind-bending ideas and technologies. It's thrilling to support this work.

Overall, we know that WashU is making a difference in our world through education, discovery and scholarship. It's an honor for Komal and me to help advance new knowledge and new generations of leaders.

■ TRICIA HENDRICKS

Texas forever, WashU for always

WashU's Alumni and Parents Admission Program crosses generations, states and even continents.

Students come to Washington University for myriad reasons, including a specific major, co-curricular opportunity and the idyllic campus. However, it may have been a batch of delicious homemade guacamole that tipped the scales in WashU's favor for **Summer McKenna, AB '21**. More likely, it was the chef responsible for the ace appetizer: **Varuni Kumara, AB '96**. Since 2013, Varuni has chaired the San Antonio, Texas, chapter of the Alumni and Parents Admission Program (APAP), a group of WashU undergraduate alumni and current parents who volunteer their time to support the university's undergraduate admissions efforts.

In April 2017, she and husband Minesh Jariwala hosted a gathering for newly admitted students and families from the greater San Antonio area. Taking inspiration from the city's annual spring Fiesta, Varuni greeted guests with a festive spread of nonalcoholic mango margaritas, tacos, chips and guacamole, and spicy Mexican candy. The Admitted Student Reception is one of APAP's signature events, and the afternoon was designed to offer a friendly, casual forum for prospective students and their families to mingle with alumni and current parents, ask questions and learn more about the WashU experience.

Among the guests were Summer, her parents, and her younger brother, **Tully McKenna, Class of 2024**. While still undecided, Summer was drawn to WashU because it would allow her to pursue an interdisciplinary philosophy-neuroscience-psychology (PNP) major while continuing to run varsity track and field. During the reception, she felt no pressure to choose WashU or to disclose her competing offers. Indeed, Summer had been blown away by the enthusiasm and care that had accompanied her WashU acceptance, and Varuni's warmth was further proof of the university's welcoming energy.

"She was so excited to get to know each of us and to hear our stories," Summer recalls. "I really felt like she saw me as an individual and was interested in not only my passions but also my concerns."

One of those concerns was finances. Even with a scholarship from WashU and an opportunity to earn



another by participating in the St. Louis Army Reserve Officers' Training Corp (ROTC), Summer worried that the cost of tuition would be a stretch for her family. She knew that attending WashU held financial risk but also the potential for even greater personal and intellectual reward. And so, less than two weeks after the reception, Summer emailed Varuni to thank her for her hospitality — "a big factor in my decision," she wrote — and share that she was now an official member of WashU's Class of 2021.

Quite simply, Summer thrived at WashU. Because of her elite performance in the first year of ROTC training, she earned a scholarship that helped support her through graduation. And she became so invested in ROTC that she retired from competitive athletics after sophomore year to focus on it and eventually ascended to the Gateway Battalion's top cadet leadership post, cadet battalion commander. In the summer of 2018, she studied abroad in Morocco through the Department of Defense-sponsored Project Global Officer program and developed an interest in Arabic and the Middle East. Having completed her PNP major requirements in under three years, she added a second, and now primary, concentration in modern Middle Eastern studies. A finalist for both the Rhodes and Marshall Scholarships, she is now a Fulbright Scholar teaching English to college students in Trabzon, Turkey.

Throughout the years, Summer and her family stayed in contact with Varuni, mostly via text and email but occasionally in person. Shortly after her enrollment, Varuni attended and even delivered brief remarks at Summer's athletics signing ceremony. When Varuni returned to campus for APAP chair training in the fall of 2017, she reunited with Summer outside her first-year dorm and then again two years later as she moved into a new off-campus apartment. In addition, Summer's parents are now active members of APAP in San Antonio.

For Summer, her family's bond with Varuni created an invaluable bridge between home and college, as did their interactions with other San Antonio-area students and families through APAP and alumni

programming. “I was able to preserve a little bit of WashU in San Antonio because of this network and also maintain a sense of home in St. Louis with my friends from Texas,” she says.

For Varuni, it has been incredibly rewarding to follow Summer’s rise over the past four years and to know she played a small part in her story. “This is why I volunteer with APAP,” she says. And while she takes pride in Summer’s journey from prospective student to WashU alumna, she is equally proud of leading and growing the San Antonio APAP chapter and serving as an ambassador for her beloved alma mater and hometown.

On a practical level, joining APAP is one of the most flexible means for undergraduate alumni and current parents to engage with the university. Although Varuni assumed leadership of the San Antonio group eight years ago, she has been involved with APAP since 1998. She worked with the Chicago chapter while earning a doctor of podiatric medicine degree and, at times, has decreased her participation to accommodate other commitments. Because there are no participation requirements, APAP is uniquely suited to meet life’s ebbs and flows. That also makes it a golden opportunity for younger alumni to network and maintain ties to the university and for alumni who may feel out of touch to reconnect.

WashU students and alumni of all ages share a certain “essence,” according to Varuni. Like a secret spice blend, it is difficult to identify the individual ingredients but easy to recognize the resulting flavor profile. Open and intelligent, collaborative and curious, inviting and humble — members of the WashU community possess these qualities and many more. “WashU is special because of its people,” Summer says, and people lie at the heart of APAP’s work.

While APAP may be best known for assisting with admissions interviews, volunteer efforts extend to staffing college fairs and organizing both in-person and virtual events like Admitted Student Receptions and Summer Send-Offs. Committed to outreach, APAP calls attention to the vibrant WashU community of today in order to shape tomorrow’s.

■ EMMA DENT, AB '09

BOOKMARK THESE PAGES!

Washington University is thrilled to announce the launch of not one but three brand-new University Advancement websites.

► Visit advancement.wustl.edu to find the latest Advancement news and career opportunities, browse the department staff directory, and discover more about the university’s partnerships with corporations and private foundations.

► Visit alumni.wustl.edu to keep up with the latest events for alumni and friends, make connections through WashU CNX, and join a regional network or shared interest and cultural group.

► Visit giving.wustl.edu to learn about the impact of philanthropy, explore giving opportunities and make a gift online.



Photos: Josh Huskin

Top left: While hosting an APAP Admitted Student Reception in San Antonio in 2017, Varuni Kumara (right), AB '96, met Summer McKenna, AB '21. Top right: Steven and Anastasia McKenna (left), Summer’s parents, also met Varuni at the event and have since joined APAP. Summer’s younger brother, Tully McKenna (right), is now a member of the Class of 2024. The group recently caught up at San Antonio’s River Walk. Above: Summer and Varuni remain close to this day.



Are you a WashU undergraduate alum or current parent looking to join APAP or simply want to know more? Contact apap@wustl.edu or (314) 935-4826 or (800) 935-4826.

Next

Class Notes

Q: First-year students at WashU always used to sport one item of clothing. What was it?

a. Fuzzy socks – First-year students were given a pair of fuzzy socks to wear to promote campus comfort.

b. WashU scarves – First-year students sported scarves in their ResCollege colors, like the Hogwarts houses.

c. Beanies – First-year students were coerced to sport these caps to promote school spirit and unity.

(SEE OTHER QUESTIONS, “BYGONE WASHU QUIZ,” AT [SOURCE.WUSTL.EDU/2018/08/BYGONE-WASHU-QUIZ/](https://source.wustl.edu/2018/08/bygone-washu-quiz/).)

Photo (from 1959): Washington University Archives

What's New?

Let us know about recent honors, promotions, appointments, travels, marriages and births, so we can keep your classmates informed of important changes in your lives.



SEND NEWS:

Class Notes, *Washington Magazine*
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Entries may take up to three issues after submission to appear in the magazine; they are published in the order in which they are received.

ALUMNI CODES

AR	Architecture
BU	Business
DE	Dentistry
EMBA	Executive MBA
EN	Engineering
FA	Art
GA	Graduate Architecture
GB	Graduate Business
GD	Graduate Dentistry
GF	Graduate Art
GL	Graduate Law
GM	Graduate Medicine
GN	Graduate Nursing
GR	Graduate Arts & Sciences
HA	Health Care Administration
HS	House Staff (Residency)
LA	Arts & Sciences
LW	Law
MD	Medicine
MT	Manual Training
NU	Nursing
OT	Occupational Therapy
PMBA	Professional MBA
PT	Physical Therapy
SI	Sever Institute
SU	Sever Institute Undergraduate
SW	Social Work
TI	Technology & Information Management
UC	University College

1956

Arthur Auer, MD56, and his wife, **Marian**, NU55, remain semiquarantined in their home in Clayton, Mo., although they've been vaccinated. They hope all their classmates escape COVID-19 and look forward to their next WashU reunion.

1957

Richard W. Furlong, SI57, and his wife, Helen Prince Furlong, celebrated their 70th wedding anniversary Sept. 7, 2021. Richard, who began his teaching career at WashU, is a retired emeritus professor from the University of Texas at Austin. The couple lives in Plano, Texas.

1958

Steve Fredman, LA58, MD62, in May self-published *Understanding Modern Health Care: The Wonders We Created and the Potholes We Dug*. The book discusses mankind's remarkable accomplishments, the forces shaping our future and the challenges we face.

1959

Edward P. Ortleb, GR59, GR63, who for 30 years was the science supervisor for the St. Louis Public Schools, was tapped by the National Science Teaching Association (NSTA) for its highest honor, the Robert H. Carleton Award. The award recognizes teachers who have made outstanding contributions to and provided leadership in science and education at the national level and to NSTA. Ortleb worked with Marlin Perkins and Charlie Hoessle to establish the St. Louis Zoo Education Department and with WashU's Owen Sexton on several research projects in the rainforests of Panama.

1961

Wade R. Watts, DE61, was honored this year by Marquis *Who's Who* with the Albert Nelson Marquis Lifetime Achievement Award. Watts, who served on the faculties of WashU's School of Dental Medicine and School of Medicine, practiced in Clayton and Frontenac, Mo., for 52 years. He and **Dorothy Skelton**, GR55, have been married for 66 years.

1962

Warren Morgens, BU62, LW64, retired in 2004 after 40 years in the practice of law, during which he specialized in banking and securities regulation and in corporate law. Following law school, he served on active duty as an officer with the U.S. Navy's JAG Corps (1964-68) and then worked in the general counsel's office at the Securities and Exchange Commission in Washington, D.C., until returning to

St. Louis in mid-1969 as assistant attorney general in charge of the Missouri Attorney General's Office.

Vicki Sharp, LA62, professor emeritus at California State University, Northridge, wrote more than 55 books on statistics, medicine and the use of computers in schools as a computer consultant and trainer for publishers such as Little Brown and McGraw-Hill and for school districts. As a creative departure, Sharp wrote "When Retirement Equals Eviction," for *Academe*, the magazine of the American Association of University Professors.

1967

Anna Katherine "Kay" Behrensmeyer, LA67, a senior research geologist and curator of vertebrate paleontology in the Department of Paleobiology of the Smithsonian's National Museum of Natural History, was elected to the American Philosophical Society (APS) in April. Founded in 1743 by Benjamin Franklin for the purpose of "promoting useful knowledge," the APS is the oldest learned society in the United States. (See a profile on Kay Behrensmeyer in the October 2021 digital issue of *Washington*.)

Robert W. Duffy, LA67, wrote and edited at the *St. Louis Post-Dispatch* for some 40 years and at the *St. Louis Beacon*, an online publication he helped found. For 30 years, he has served as an adjunct at WashU, teaching in the Sam Fox School's fine arts division, the College of Architecture, University College and the College of Arts & Sciences. Duffy lives in the city's Central West End with his husband, **Martin Kaplan**, GA88.

Susan Wilson Krechel, MD, LA67, HS75, penned *How to Navigate the Minefield That Is Dementia with Your Loved One: A Guide Borne of Experience* (Christian Faith Publishing, March 2021). Written for a lay audience, the book explains dementia and the latest research into cause, treatment, prevention and cure, and sets out a roadmap for obtaining care for a loved one.

1970

Gary Feder, LA70, LW74, GL80, was recently elected to the Clayton, Mo., Board of Aldermen. He will retire from the Husch Blackwell law firm at the end of this year, concluding 48 years of primarily practicing real estate law. An adjunct professor in WashU's School of Law, Feder will continue teaching a class in commercial real estate law.

Gary Allen Marmolya, LA70, retired from radiology as chief of computed tomography at an 800-bed hospital, then he worked at a community hospital, followed by being a locum tenens. Marmolya also started a photography publishing business and built a privately held photography collection showing the evolution of landscape photography from the mid-1800s to today.

Jack Schnettler, EN70, continues his career as a senior transportation engineer with global firm Atkins from his base near Fort Lauderdale, Fla. After a year focused on hobbies, reading and home-improvement projects, he and his wife, Joan, look forward to resuming travel to visit friends and family in and outside St. Louis.

1971

James Marx, EN71, retired after 43 years with infrastructure consulting firm AECOM and moved to the Blue Ridge Mountains of North Carolina with his wife, **Cynthia (Lowrey) Marx**, LA71. He plays tennis as often as possible.

Jim Oliver, BU71, and his wife, Debbie, have continued their big adventure by relocating from California to the north shore of Kauai, Hawaii. Oliver writes that “the nearest traffic light is 22 miles away, the temperature is always the same and the grandkids live five minutes down the road.” He says, “Aloha from paradise!”

Elliott Seif, GR71, wrote *Teaching for Lifelong Learning: How to Prepare Students for a Changing World* (Solution Tree Press, 2021). The book examines recent advances in learning research; suggests four goals for preparing students to be successful in a changing and uncertain world; and describes practical ideas and strategies for instruction, assessment and curriculum design. Website: <https://bit.ly/3tVXIKd>

1972

Raymond Dalton, LA72, retired in 2019 from the St. Louis VA Medical Center as a clinical psychologist. After earning his degree at WashU, he earned a master’s degree in clinical psychology from Oakland University, served as an officer in the U.S. Air Force and earned a doctoral degree in clinical psychology from Arizona State University.

1973

Albert Ip, EN73, assumed chairmanship of the World Green Organization in Hong Kong Jan. 1, 2021. He previously served on the board of governors for six years, the last three as vice chairman.

1975

Khan Zahid, GR75, is seeking a publisher for his completed memoir, which includes sweeping adventures that span six countries in three continents.

1976

Allan Trautman, LA76, performs two regular characters in the latest *The Barbarian and the Troll* series on Nickelodeon (also streaming on Nick.com): General Skelly and the wizard Horus Scrumm. You can also see his work on Disney+, which is streaming the original *Dinosaurs* series from the 1990s.

Trautman is Fran’s puppeteer as well as many other characters. And you can still stream *Earth to Ned* on Disney+, in which he is the lead animatronic performer for Ned.

1978

Rick Eisen, LA78, a founding member of Growe Eisen Karlen Eilerts LLC in Clayton, Mo., for the past several years was named to the Super Lawyers Missouri and Best Lawyers in America directories in the area of family law. He and his wife, Marci, live in University City, Mo., and their three children reside in St. Louis, Denver and Detroit.

Jim Kilberg, BU78, and his wife, **Lori (Eisenberg) Kilberg**, LA77, have completed their Seattle adventure and returned to Atlanta. Jim retired from Weyerhaeuser where he oversaw real estate, energy and natural resources; Lori retired as an equity partner from Hartman Simons where her practice focused on commercial real estate. Lori is chair of the Atlanta-Fulton County Library Foundation, and Jim oversees their family investment business. They’re about to enjoy their fifth grandchild.

Janet (Loft) Reinhardt, BU78, for decades has volunteered to fulfill her passions for advancing women in society, disease research and church missions. She relocated to Nashville, Tenn., with an array of devoted Kappa Gamma sorority friends who share her penchant for needlework.

Greg R. Scott, SW78, retired after 30 years as professor and program director of social work at Kuyper College in Grand Rapids, Mich. Scott was instrumental in starting the first school of social work in Liberia and taught international social work in the Dominican Republic. He moved to Bethlehem, Pa., to be near his grandchildren.

Ira Spector, EN78, EN78, is co-founder and CEO of SFA Therapeutics, a development-stage biopharmaceutical startup focused on a new advancement – the use of microbiome-derived metabolites as drugs – in the treatment of chronic inflammatory disease. Spector and his wife, Donna, frequently visit his daughter and grandchildren in St. Louis.

1979

Steven Boggs, MD, LA79, is chairman of the Department of Anesthesiology at the University of Tennessee Health Science Center. He and his program director re-established a residency program at the center after an 18-year hiatus. Boggs has served as president of the Tennessee State Society of Anesthesiologists and continues his work on developing a training curriculum for remote learning and teaching of anesthesia providers in sub-Saharan Africa.

Lucinda Marshall, AR79, is an artist, writer, activist and founder of the DiVerse Gaithersburg Poetry Reading and Open Mic. She penned a new collection of poetry, *Inheritance of Aging Self* (Finishing Line

Press, 2021), exploring the impact of the aging, illness and death of elder loved ones, and our grieving for them, on our sense of identity and place as we in turn age.

Scott Serota, HA79, is an executive adviser for Castlight Health, focusing on product and market strategy as well as new opportunities in the health-plan market. Serota retired as CEO of Blue Cross Blue Shield Association at the end of 2020.

1980

Richard Thoma, LA80, is the senior editor of *100 Years of the Webster Groves Nature Study Society*. The book is a history of the society from its formation in 1920 to its present as one of the premier nonprofit natural history organizations. For more, visit WGNS.org. Thoma recently retired as a protein biochemist after a 35-year career that included time at Washington University School of Medicine.

1981

Sheri Arbitaljacoby, LA81, received multiple honors from the Press Club of Long Island chapter of the Society of Professional Journalists in the Sigma Delta Chi Awards competition this year. She took first place with a series examining the healthiest foods and third place for “Plant-Based Eating for Better Family Health.” Both appeared on *The Well* by Northwell, a website that provides consumers with personalized content that reduces their stress, promotes laughter, and ultimately makes them feel more confident and capable on their health-care journeys. And as managing editor of *Temple Beth-El of Great Neck’s Shema* magazine, she won third place in the Best Magazine category for the winter and fall 2020 issues.

Scott Lundius, LA81, was named executive director of the Morrison-Shearer Foundation, Northbrook, Ill. The foundation perpetuates the legacies of dancer-choreographer Sybil Shearer and photographer Helen Balfour Morrison as inspirations for creativity in the arts. Earlier, Lundius worked with arts organizations Pentacle and Prospect Park Alliance, in New York City, and the Taos (New Mexico) Center for the Arts.

Joe Nuñez, LA81, is back in private practice after almost 20 years as a supervising attorney in the Target Corporation Real Estate Law work group. He was named to the Super Lawyers directory in each of the past three years and to Best Lawyers for Real Estate in each of the past four years. Nuñez also was twice named a Top Latino Lawyer by *Latino Leaders Magazine* and to the 2020 Super Lawyers list of the Best 10 Real Estate Lawyers in Minnesota.

1983

Joel Hardin, LA83, HS93, is medical director of the Tampa Bay Adult Congenital Heart Center. Hardin served in the military,



When I began my college career back in 1953 at Washington U., as a freshman I was required to wear a green and red beanie, per my 'Freshman Bible.' I may be stopped by an upperclassperson and quizzed about such questions as 'What are the school colors?' But they were not green and red then; they were myrtle and maroon! My 'Freshman Bible' said so!"

Photo: Joe Angeles



My name is **Ronald O. Krieger, AB '59**. My wife and I decided recently to go to Ted Drewes after church for a sweets-lunch "concrete" with a coupon I had received. As we were enjoying our frozen custard while sitting in our vehicle, we noticed a small group of women standing nearby on the parking lot. One in particular, decked out in a flashy green graduation robe with a cap with red trimmings, was posing in front of the Ted Drewes sign on the side of the building, as countless others have done over the years. My wife remarked that the gown looked fancy enough to be for a doctoral degree, and I concurred, further saying that it was probably from Washington University since it was green and red.

How did I know that, you ask? Well, when I began my college career back in 1953 at Washington U., as a freshman I was required to wear a green-and-red beanie, per my "Freshman Bible." I could be stopped by an upperclassperson and quizzed with such questions as "What are the school colors?" But they were not green and red then; they were myrtle and maroon! My "Freshman Bible" said so! I still have that beanie and bible, and I suppose that type of hazing is no longer acceptable.

We finished our concretes, and I got out of the car to find a trash receptacle, which was in front of the custard stand. Much to my surprise, the robed woman and her friends were standing close by. I felt like I could not pass up this opportunity, so I immediately approached the group and blurted out "myrtle and maroon, huh?" The startled lady in the gown got this blank look on her face and finally said, "green and red." I asked, "Washington University?"

"Yes," she retorted. I replied, "Back in my day, it was myrtle and maroon!" Now she was really confused and reacted so. Well, I gave up on the entire situation, waved and wished her congratulations and good luck, and went on my way.

Gosh, things are much simpler now. School colors probably don't mean much anymore except at sporting events. When I got home, the incident kept replaying in my brain. So I looked up the Washington University school colors, and, boy, did I get an eyeful! This is what a Google search revealed: "The university's official colors, adopted in the mid-1890s, are red and green. An often-repeated, but inaccurate, campus myth says that the ... colors are 'myrtle and maroon.'" This confusion has existed at least since the 1890s when a university songbook included a tune 'Myrtle and Maroon' and referred to the lyrics that use those colors."

The article continues, "While the song is no longer being sung by the university community, the title of it appears to have had a most unfortunate effect upon the colors of the university, which have gradually changed from a combination as first adopted [red and green] to very dull and dark colors known as myrtle and maroon. These colors were used in athletic uniforms and academic regalia as recently as the early 1970s."

Wow, so I guess both she and I were correct. It depends on your age and era, and I'm just an old man who tends to recall too much insignificant information.

Thanks for reading.

— **RONALD O. KRIEGER, AB '59**, was photographed in September 2021 wearing the green-and-red beanie he wore as a first-year student at the university in the 1950s.

attaining the rank of commander in the U.S. Navy Medical Corps Fleet Marine Forces as surgeon for the 3rd Battalion, 24th Marines, 1st Marine Division deployed to Iraq. He left the military in 2006.

Jeanette Meyer, LA83, a real estate agent with RE/MAX Alliance in Fort Collins, Colo., earned a Quality Service Certified Platinum award for 2020. This is the highest level of service achievement in the real estate industry, and she's earned it 16 years in a row.

Dana (Gustafson) Regan, FA83 has launched a new series of children's books. The first book in the series, *Mike Delivers: The Big Mix-Up!* (Simon and Schuster, 2021) is about a hard-working delivery hedgehog who sometimes makes mistakes. Mike always makes it right — but not before some very funny mix-ups. Regan has written and/or illustrated more than 75 children's books from her studio in Kansas City.

1984

John M. Dawes, HA84, retired as the CEO of Rusk Rehabilitation Hospital in Columbia, Mo. His career spanned more than 40 years of hospital leadership in 10 hospitals and health systems in six states. He writes that he'd like to hear from other WashU health-care administration alums.

Carl A. Williams, SW84, was promoted to inpatient psychiatric unit social worker supervisor at Rocky Mountain Regional Veteran Affairs Medical Center in Aurora, Colo.

1985

Wendi Alper-Pressman, LW85, a partner with Lathrop GPM, was the subject of *St. Louis Business Journal's* "St. Louis Character" feature. In the Q&A piece, she shared her love of music, her passion for poker, the importance of mentoring, and how she met her husband, **Norman Pressman**, LA70, LW74.

Bryan Ewbank, EN85, SI85, is a software-language developer at Nvidia, focusing on programming the behavior of autonomous vehicles.

Sieglinde (Talbot) Peterson, LA85, LW91, is the director of people and culture at Kermit PPI, a tech company in Hunt Valley, Md. The company's software equips supply-chain managers, surgeons and executives with real-time data on implantable medical device transactions, saving hospitals millions of dollars. Peterson lives with her husband, children, two cats and dog in Greenbelt, Md., and she visits St. Louis and Washington University as frequently as she can.

Daniel Smith, LA85, was promoted to adjunct professor at the University of Maryland, Global Campus where he teaches courses in business law and ethics. Employed at Under Armour, Inc., as senior counsel for technology, Smith is president of the Baltimore Chapter of the Association of Corporate Counsel.

1986

Victoria "Vicki" Day, BU86, writes that she is excited to be a part of a local healing, wellness and expressive art collective in Columbia, Mo., where she offers her services as a registered somatic-movement therapist and educator, and as a licensed professional counselor. She and her life partner recently moved to their new dream home on the edge of Rock Bridge State Park.

Alex Douglas II, LA86, a partner with ShuffieldLowman, was selected to the 2021 list of Legal Elite attorneys by *Florida Trend* magazine and as a 2021 Florida Super Lawyer. Douglas practices in the area of fiduciary litigation.

Simon Huang, EN86, GB99, is a partner with Experience on Demand, a St. Louis-area consulting company. Huang specializes in IT governance, cybersecurity and digital transformation. Previously, he worked in information systems management for St. Charles County, Mo.

Brett Preston, LW86, a shareholder at Hill Ward Henderson in Tampa and Clearwater, Fla., wrote *One Taken: A Lawyer's Guide to Being Sure You Are a Christian* (River Birch Press, 2021).

1987

Leon Bibi, LA87, penned a new book in his Adam series trilogy: *Adam — The Missing Link: DNA Evidence of Man's Alien Origins*. Bibi is working on a documentary, *Adam Decoded*, that will run on Netflix in 2024. Preview: [youtube.com/watch?v=Bn45-T5Aioc](https://www.youtube.com/watch?v=Bn45-T5Aioc)

Paul Eykamp, LA87, LA87, is principal data scientist and strategist at AAA Mountain West Group. He lives with his wife, Stephanie, and their two children, Tyler, 12, and Maggie, 11, at Incline Village, Nev. In August 2020, the Eykamps began an RV road trip, with family members working or schooling remotely. Blog: greatamericanrvroadtrip.blogspot.com

Laura Glass, LA87, is a principal product manager at Workday, where she is involved in human-centered software design. Workday is the fourth software company she has worked for during her 30-year career supporting automation in the federal government. Glass shares that she is grateful to the WashU Career Center for helping her find her first internship, which turned into a full-time job.

Laura Valero, LA87, who earned a bachelor's degree in nursing from Virginia Commonwealth University in 2015, is working in a primary care clinic while studying for her boards in lifestyle medicine. Valero was selected from candidates around the world for a rotation at Barnard Medical Center in Washington, D.C.

1988

Art Hinshaw II, LA88, a law professor at the Sandra Day O'Connor College of Law at Arizona State University, published two books during the pandemic. He co-edited *Discussions in Dispute Resolution: The Foundational Articles* (Oxford University Press, 2021), a retrospective of the alternative dispute resolution field. *Negotiation and Lawyers* (West Academic Press, 2021), which Hinshaw co-authored, is a textbook presenting the core concepts, skills and strategies for lawyers to succeed in the negotiation process.

Tracey Kenney, LA88, in October 2020 was elected itinerant deacon for the Fourth Episcopal District of the African Methodist Episcopal Church, in Chicago.

David Riddle, EN88, joined The Falcon Group, a full-service, multistate engineering, architecture and energy consulting firm, as the director of the West Palm Beach, Fla., office.

1989

Julie (Sirkin) Blake, LA89, GR91, was elected mayor of Hopewell Township, N.J., Jan. 4, 2021. First elected to the Township Committee in 2015, Blake now oversees the municipal government with particular responsibilities for public safety, the board of health and the historic preservation commission.

Susan (Pollack) Burns, FA89, designed a four-panel, stained-glass window, "Seasons of Joy," which was commissioned and recently dedicated by congregation Ohr Tzafon, Atascadero, Calif. Burns writes that her first experience with large-scale graphics was designing the façade mural for the 1986 Thurtene Carnival.

Sandra Cohen, LA89, is a founding partner in the New York City law firm Cohen & Buckmann, P.C. The firm was named a Top Employee Benefits & Executive Compensation Firm by Chambers & Partners, a UK-based company considered by many to publish the most researched and coveted rankings of top law firms and lawyers in the U.S. and around the world.

1990

Bradley M. Mueller, GR90, was promoted to business development manager for the Heritage and Environmental Resources Office of the Seminole Tribe of Florida. In this role, he assists in guiding and growing Seminole Heritage Services, LLC, a recently established company offering environmental and cultural resources consulting from the perspective of a Native American-owned business. Mueller lives in the Fort Lauderdale, Fla., area with his wife and two children.

Mike Salerno, PMBA90, in December 2020 retired from The Boeing Company, where he had worked for 36 years. In his final career role as the CFO of the Phantom Works R&D

organization, Salerno was instrumental in the procurement of the T-7A RedHawk trainer jet program for the U.S. Air Force and the MQ-25 Stingray unmanned aerial refueler aircraft for the U.S. Navy.

1991

Catherine Buley, LA91, medical director of SEARHC (Southeast Alaska Regional Health Consortium) Primary Care Clinics, recently became a Fellow of the American College of Healthcare Executives, the nation's leading professional society for health-care leaders. The highest standard of professional development, fellow status requires candidates to meet academic and experiential criteria, and to demonstrate community involvement, among other standards.

1992

Amanda (Paetz) Hiner, GR92, GR98, was promoted to full professor at Winthrop University in Rock Hill, S.C., where she teaches English and is director of the critical thinking program. In May, she was awarded the Winthrop Award of Excellence, which recognizes individuals who have excelled in implementing the university's strategic plan. A book that Hiner co-edited, *British Women Satirists in the Long Eighteenth Century* (Cambridge University Press), will be released in February 2022.

Risa Seelenfreund, LA92, an executive coach and business trainer, penned *Sacred Summer: A Mom's Guide to Resilience, Discovery, and Family Fun* (Gatekeeper Press, 2021). Through humorous and heartfelt personal anecdotes, she relates how she worked during the challenging summer of 2020 to increase her resilience to make managing life a little easier.

1993

Gina (Butler) Castillo, LW93, a nurse at Kaiser Permanente, enjoys spending time in her Portland, Ore., garden and sells her vegan food items at a neighborhood farmers market.

Murray Goldstein, LA93, was promoted to vice president, marketing and sales operations for Cox Communications. His new role includes leadership of sales operations and digital sales, as well as advanced marketing analytics and responsibility for B2B marketing strategy. Goldstein's career spans more than 25 years in marketing leadership roles at Cox, General Motors and General Electric.

Spencer Greene, LA93, LA93, is director of medical toxicology in the Department of Emergency Medicine at HCA Houston Healthcare-Kingwood. He is also a clinical professor at the University of Houston College of Medicine and serves as the president of Bayou City Medical Toxicology and Emergency Medicine Consultants in Houston.

Dea Hoover, BU93, authored *STL Scavenger: The Ultimate Search for St. Louis's Hidden Treasures* (Reedy Press, 2021). The owner of tour companies Are We There Yet? and Discover St. Louis, Hoover has been showing residents and visitors around the city's landmarks and other spots of interest for 15 years. Website: discover-stlouis.com

Jenny (Schulenberg) Hosfeld, LA93, was promoted to CEO of Think Bank, headquartered in Rochester, Minn. Hosfeld, who joined the bank in 2006, was previously president and chief banking officer.

Scott Markowitz, MD93, writes that he is honored and humbled to return to WashU as the inaugural vice chair for professional development and diversity, equity and inclusion in the Department of Anesthesiology in the School of Medicine.

1995

Mark Buckles, LA95, is special counsel in the Executive Office of Florida Governor Ron DeSantis. Prior to this appointment, he served one year as deputy general counsel and one year as acting general counsel in the Office of General Counsel at the Florida Department of Economic Opportunity.

Kristin Griffith, LA95, wrote and self-published *Rush: Memoir of a Gay Sorority Girl* (2020), a coming-of-age tale of her struggles and triumphs in coming out as gay and grappling with her gender identity while in a sorority at WashU.

Kristin Smith Ladewig, SI95, GB95, retired from Edward Jones in May 2021 after nearly 26 years of service.

1996

Rob Dunakin, EN96, married Lucmar Fuentes in February 2020, before the world changed forever. This year, in July, the couple was finally able to enjoy a honeymoon in Alaska. On the work front, Dunakin was recognized by Andor Technology as the most successful sales rep on the continent by being named to the President's Club for fiscal year 2021. He leads a team that sells confocal microscopy systems.

Mark Westfall, GB96, was named chief procurement officer and head of supply chain services for The Coca-Cola Company.

Amanda Wilson-Wong, DDS, MDS, LA96, LA96, self-published *An Easy Guide to Adding Orthodontics onto Your Dental Practice* (2020). She is offering a complimentary, signed copy of her book to WashU alums who graduated from any dental school in 2019-21. To request a copy, write her at info@straightmilesolutions.com. Website: straightmilesolutions.com

1999

Mara Baum, AR99, recently joined DIALOG as a partner. Previously, she was a principal with HOK. Baum's work experience includes

complex projects for the San Francisco International Airport, the University of Michigan, Kaiser Permanente and Indiana University.

Corey E. Mohn, LA99, LA99, is executive director of the Center for Advanced Professional Studies. The program connects high school students in 73 programs across 19 states and three countries to industries in which they have interest. Started in Kansas City, the program has grown into an international network in the field of education.

Stephanie Schlaifer, LA99, FA99, authored two collections of poetry, *Cleavemark* (BOAAT Press, 2016) and *Well Waiting Room* (Fordham University Press, 2021). She also penned a children's book, *The Cloud Lasso* (Penny Candy Books, 2019). Schlaifer works in marketing and communications, and maintains a creative practice as a sculptor and installation artist.

Karen (Reed) Troy, EN99, EN99, was promoted to professor in the Department of Biomedical Engineering at Worcester Polytechnic Institute. A member of the faculty since 2013, she teaches upper-level and graduate-level courses. Her research focuses on the interactions between physical activity and musculoskeletal health, disease and injury.

Jennifer Zimmerman, SW99, was promoted to vice president of evaluation and impact at bi3, Bethesda, Inc.'s grantmaking initiative to transform health in Greater Cincinnati. Since joining bi3, Zimmerman has been responsible for developing, managing and evaluating its portfolio of multiyear grants and initiatives.

2000

Deborah Levine, LA00, associate professor of health policy and management at Providence College, earned its 2019-20 Joseph R. Accinno Faculty Teaching Award. The award is presented annually to the faculty member who best exhibits excellence in teaching and passion and enthusiasm for learning, along with a genuine concern for students' academic and personal growth.

2001

Luke Epplin, LA01, released his first book, *Our Team: The Epic Story of Four Men and the World Series that Changed Baseball* (Flatiron Books, 2021). The book was profiled by NPR, *People Magazine*, *The Christian Science Monitor*, *The New York Times* and *The Washington Post*. *The Wall Street Journal* praised both Epplin and his work: "Epplin has a journalist's eye for narrative and gives a dramatic account of the season and the series."

Cliff Holekamp, GB01, is expanding operations for Cultivation Capital, the early-stage venture-capital firm that he co-founded. Before launching the firm, Holekamp was on the faculty of Olin Business School and led the entrepreneurship program to a No. 1 world ranking. He and his wife, **Megan (Kolbrener) Holekamp**, BU99, reside in Greenville, S.C.



Photo (from 1958): Washington University Archives

Songbai Ji, SI01, SI03, SI03, was promoted to professor in the Department of Biomedical Engineering at Worcester Polytechnic Institute. A member of the faculty and tenured since 2016, he has taught a wide range of courses. His research focuses on computational modeling and medical imaging for the study of traumatic brain injury and surgical image guidance.

Kate Van Steenhuyse, FA01, was appointed chief programs officer of the Kansas Creative Arts Industries Commission, the official state arts agency of Kansas. In this role, she manages grantmaking, program development, and arts and cultural community and economic development strategy. Van Steenhuyse still serves as the executive director of Harvester Arts, the artist-run space she co-founded in Wichita.

2002

Jonah Chiarenza, AR02, and **Emily Lammert**, AR02, in 2020 designed and built a custom “parklet” for the City of Melrose, Mass., as a volunteer effort to support outdoor economic and recreational activity during the pandemic. Three parklets now operate thanks to their charitable efforts. While at WashU, both studied in Copenhagen, Denmark, and they restarted their friendship after a serendipitous encounter in Melrose.

Cokey Nguyen, GM02, is chief scientific officer at San Francisco-based Atara Biotherapeutics, leading the development of next-generation allogeneic cell therapies for cancer and autoimmune diseases. Previously, Nguyen was vice president of innovation, research and development at Fate Therapeutics.

2003

Dennis Berger, EMBA03, was named to the board of directors of Pine Street Inn, New England’s largest homeless service organization. Berger is chief culture officer at Suffolk Construction and serves on its executive committee. He is a current board member and former vice chair of skills for Chicagoland’s Future, and serves on the board of directors of Skills for America’s Future.

2004

Jared Rouben, LA04, is founder and brewmaster of Moody Tongue, the world’s first two Michelin star brewery. The Chicago restaurant and bar is a longtime dream of Rouben, a trained chef who helped pioneer “culinary brewing,” which focuses on brewing with high-quality local and seasonal ingredients.

2006

Lauren M. Hoye, SW06, an attorney with Willig, Williams & Davidson, was named among the 2021 Pennsylvania Super Lawyers.

2007

Danielle Barav-Johnson, LA07, joined Kilpatrick Townsend & Stockton as counsel on the firm’s bankruptcy and financial restructuring team in Atlanta. Previously, Barav-Johnson was with Jones Day.

Rory Lucey, FA07, illustrated *Bad Sister* (First Second Books, July 2021), a middle-grade graphic novel by Charise Mericle Harper. Lucey lives in New Jersey with his wife and two cats.

Mario Treto Jr., LA07, is acting secretary of the Illinois Department of Financial and Professional Regulation, having been named by Illinois Governor J.B. Pritzker and with approval by the Illinois Senate pending. In this role, he oversees the regulation of over 1.2 million licenses for doctors, nurses, pharmacists, real estate agents and cosmetologists; almost 200 state-charter credit unions; over 300 state-charter commercial and savings banks; and 15,000 mortgage-loan originators, companies and branches. Previously, Treto was director of the department’s Division of Real Estate.

2009

Lainie Turkish, FA09, an interior designer at Gensler in Atlanta, was named by *Visual Merchandising + Store Design* magazine as one of its 2021 Designer Dozen. The award recognizes retail’s rising stars ages 35 and under who are making a mark on the industry. For more: [Inkd.in/dDWEB7G](https://www.linkedin.com/company/inkd/)

2011

Shannon Laine, GR11, is the founder and president of Emerge Brighter, a strategic planning firm serving nonprofit organizations. Previously, Laine was president and CEO of HealthWorks! Kids’ Museum St. Louis for 13 years.

2012

Colin Ardern, BU12, and his company, Applied Bioplastics, took the Social & Culture category of the SXSW Pitch competition at the 2021 South by Southwest Conference. Applied Bioplastics supplies manufacturers with a transformational plant-based plastic feedstock that dramatically reduces carbon emissions and can be used in a variety of applications.

Catherine (Rafferty-Millett) Quatrano, LA12, a senior manager at Wayfair, and **Alex Quatrano**, LA12, an engineer at startup AcuityMD, welcomed their first child, Elizabeth Barbara Quatrano, May 22, 2021. The family resides in Marblehead, Mass.

2013

Daniel Guenthe, LA13, joined the Boston law firm of Sherin and Lodgen, LLP as a litigation

associate after completing a federal clerkship with The Honorable Donald L. Cabell of the District Court of Massachusetts.

2014

Kathryn Walker, LA14, LW20, of Boston, was sworn in early this year as one of the new assistant district attorneys in Woburn, Mass.

2015

Kevin Kosiewicz, BU15, earned an MBA degree from Northwestern University’s Kellogg School of Management this past spring. He is director of strategy and operations at Lettuce Entertain You restaurants, the largest private restaurant group in Chicago.

2016

Gabriela Garcia, LA16, in May 2020 earned a master’s degree in water resource management from Duke University’s Nicholas School of the Environment. A water data science consultant at KISTERS, Garcia writes that she is a proud Latina in the environmental data analytics field.

2017

Allison Swimmer, LA17, began a master’s degree program at The University of Chicago Harris School of Public Policy this fall.

2018

Nathaniel “Trey” Lampley III, LA18, a third-year medical student at the University of Cincinnati College of Medicine, was accepted as a 2021–22 visiting predoctoral research fellow in the Department of Dermatology at Northwestern University Feinberg School of Medicine. After his research year, he will return to the University of Cincinnati to complete his final year and apply for a dermatology residency.

2020

Noah Offenkrantz, LA20, along with **Anish Naik**, EN19, SI19, **Ben Green**, BU20, **Francis Serrano**, LA20, and **Spencer Stewart**, LA21, created Find Your Farmer in May 2020. The venture is an online farmers market that delivers fresh meats, cheeses, fruits and produce from more than 40 sustainable family farms and artisans in the St. Louis region. Website: [find-your-farmer.com](https://www.find-your-farmer.com)

2021

Nathan Card, LA21, is a park ranger with the National Park Service, currently at Cape Hatteras National Seashore. His duty station is in Buxton, N.C.



Photo: Whitney Curtis

The late David Patterson Silver Wolf, associate professor at the Brown School, focused his work on two main areas: substance abuse recovery and advocating for underrepresented minority college students, especially those from American Indian/Alaska Native populations.

Regina Abel, instructor in occupational therapy and in medicine at the School of Medicine, died June 15, 2021, following a heart attack. She was 70.

Abel's research focused on how therapy dogs could benefit children during recovery and rehabilitation from injuries. She was often seen on the Medical Campus with Dolly and Wally, the therapy dogs she trained. She also studied the impact of dog training programs in prisons and how animal-human interaction could help children with chronic conditions.

"Regina was the kindest soul around and had a love of animals, especially dogs," says Lisa Tabor Connor, associate dean and director of the Program in Occupational Therapy. "We will miss her immensely, both as a person who was beloved by all and as a valuable member of our OT team."

Larry E. Davis, the former E. Desmond Lee Professor of Racial and Ethnic Diversity at the Brown School, died March 30, 2021. He was 74.

Davis joined the faculty at the Brown School in 1977 after becoming the first Black man to earn a PhD in social work and psychology from Michigan State University. He was not done breaking down barriers. In 1983, he became the first Black faculty member to earn tenure at Washington University.

In 2001, Davis became dean of the University of Pittsburgh School of Social Work. There he started a study abroad course in Cuba for graduate social work students and created the nationally renowned Center on Race and Social Problems. The center focuses

on researching and promoting serious dialogue around the role of race in social issues. He retired as dean at the end of the 2017-18 academic year.

"A first-rate applied social scientist, adept in cultivating fruitful town-gown relations, he was a man with a mission," recalls Shanti Khinduka, dean emeritus of the Brown School. "A ceaseless champion of racial equity and justice, in many respects he became the conscience of the social work profession."

Wallace Diboll, a professor of mechanical engineering & materials science in what is now the McKelvey School of Engineering, died May 7, 2021, of congestive heart failure. He was 97.

Diboll, who was known to friends as Wally, worked at the engineering school for 37 years, from 1954 until his retirement in 1991. He received the Distinguished Faculty Award in 1982 and developed an extensive consulting practice throughout his teaching career.

A veteran of the U.S. Navy, Diboll "enjoyed teaching first-year student courses in measurements and senior courses in mechanical design," says Kenneth Jerina, senior professor of mechanical engineering & materials science and a colleague of Diboll's. "His extensive consulting experience brought real-world practicality to the classroom. We will dearly miss Wally's smile and gentle nature."

Mark A. Franklin, former professor of electrical engineering and computer science at the McKelvey School of Engineering,

died May 25, 2021, from complications of Alzheimer's disease. He was 81.

Franklin joined the WashU faculty in 1970 and retired in 2011 as the Hugo F. and Ina Champ Urbauer Professor of Engineering. His work focused on computer architecture and parallel processing approaches and pioneered unique mappings between algorithms and novel hardware design. He co-wrote several books and more than 100 technical papers.

"Mark had a playful curiosity when it came to research, and he delighted in spending time brainstorming new approaches for computer architecture," says Ron Cytron, professor of computer science & engineering. "I will miss him greatly as a friend and colleague."

Joy C. Guze, AB '47, a former teacher and wife of Sam Guze, MD '45, died Jan. 26, 2021, in assisted living in North Carolina. She was 97.

Husband Sam Guze was the Spencer T. Olin Professor and head of the Department of Psychiatry at the School of Medicine. He also served as vice chancellor for medical affairs from 1971 until 1989. He was one of the first in his field to use twins in psychiatric research.

In the Guze household, the story of Sam and Joy's courtship is oft repeated. He had to ask her multiple times for a first date, and after the second date, he asked for her hand in marriage. She refused but later accepted. Sam, the love of Joy's life, died July 18, 2000.

Joy taught at the Community School and was involved in the League of Women Voters, the Women's International League for Peace and Freedom, the United Nations Association and Springboard to Learning. She loved poetry, and her family remembers her quoting it all her life.

Linda Kahn, AB '70, who worked for Nick at Nite, Nickelodeon, MTV Networks and Scholastic Media, died Aug. 30, 2021. She was 72.

Kahn worked in entertainment for more than 40 years. In the mid-1980s through the mid-1990s, she was VP of acquisitions at Nickelodeon and Nick at Nite and VP of international program sales at MTV. She brought shows like *Ren & Stimpy* and *Rugrats* to the worldwide TV market and was pivotal in launching Nick at Nite.

In 1995, Kahn joined Scholastic Media, promoting books like *Clifford the Big Red Dog*, *Maya & Miguel*, *Horrible Histories*, *Stellaluna*, *Goosebumps* and *WordGirl*. She also spearheaded the branding and distribution of the Scholastic Video Collection. This new consumer video line was based on the award-winning Weston Woods library of best-selling children's books.

She also founded Linda Kahn Media, which consulted with media companies, producers and IP holders. Later, she worked at Bridge Multimedia and also served as board president of New York Women in Film & Television from 2003-05.

Leslie J. Laskey, professor emeritus of architecture in the Sam Fox School of Design & Visual Arts, died June 17, 2021, at Barnes-Jewish Hospital in St. Louis. He was 99.

Laskey came to Washington University in 1956 as an assistant professor in the School of Architecture. By that time, he was already a World War II veteran, who had fought at D-Day and later in the Battle of the Bulge. He also

had studied architecture with Laszlo Moholy-Nagy, the pioneer of American Bauhaus, at the Institute of Design in Chicago (now part of the Illinois Institute of Technology).

At WashU, Laskey received the Distinguished Faculty Award in 1982, and in 1986 he received a Distinguished Professor Award from the Association of Collegiate Schools of Architecture. He became professor emeritus in 1987, though he returned to the classroom as a lecturer several times. In 2004, he was awarded the Dean's Medal from the School of Architecture and the Dean's Medal from the Sam Fox School in 2015.

His impact on students was profound. Alumnus Soo K. Chan still writes about Laskey's impact in essays. "I talk about him quite a bit, even now, because he taught the foundation design classes my first year," Chan says. "The professors that had a high impact your first year stay with you, and he was one of those teachers." (See pg. 40 for more on Chan.)

Karen Margo, MBA '79, former executive director of development for Olin Business School, died July 17, 2021, after a 10-year battle with Alzheimer's disease. She was 69.

Margo joined the university alumni and development team at Olin in 1985 and was appointed executive director of development for the school in 2009. Her ability to engage alumni was legendary. During her time with Olin, she tripled scholarship support and increased Olin's endowment sixfold to \$309 million.

At her retirement in 2014, Olin Dean Emeritus Robert L. Virgil, MBA '60, DBA '67, announced an endowed scholarship in Margo's name. More than \$1 million in gifts and pledges were received within three months of the announcement.

David Blasingame, AB '69, MBA '71, former executive vice chancellor of alumni and development, once said about Margo, "Over the past 30 years, I believe the Olin School has had the good fortune to have the best director of development in the country."

Michael M. Mueckler, professor emeritus of cell biology and physiology at the School of Medicine, died July 14, 2021, of natural causes. He was 67.

Mueckler, who was also the associate director of the university's Diabetes Research Center for a decade, studied how the body regulates blood sugar and how this regulation goes awry in diabetes. He identified and studied several glucose transporter molecules, uncovering key insights into glucose homeostasis and insulin resistance caused by HIV protease inhibitor therapy.

Mueckler also encouraged the diabetes research community to adopt genomics techniques to enhance understanding of the disease. In 1998, he received the Lilly Award for Outstanding Scientific Achievement from the American Diabetes Association, the highest accolade given by the association.

Matthew Nyman, EMBA '17, army veteran, wounded warrior and government innovator, died in an avalanche in Alaska in early 2021. He was 43.

Nyman served in both Afghanistan and Iraq and was injured in 2005 while a passenger on a helicopter that was attempting to land on top

of a building in Iraq. Nyman suffered traumatic brain injuries, as well as injuries to his lungs, femur and a below-the-knee amputation of his right leg.

He worked hard to heal so he could return to climbing mountains. He was featured in the 2012 documentary *High Ground*, which followed 11 veterans as they climbed the Himalayan Mount Lobuche.

He also had a career developing and launching threat-assessment centers. He had long considered going to graduate school, and his injuries in the helicopter pushed him to attend. At Olin, he met Kris Crichton, EMBA '17, whom he married in 2020.

In February 2021, Nyman, who lived in Denver, went to Alaska to hike at Bear Mountain near Chugiak, an area 20 miles northeast of Anchorage. He was with two other climbers. The last anyone heard from them was around 10:30 a.m. that day. The Alaska Mountain Rescue Group went out the next day to search the mountain and saw that an avalanche had occurred and found the men's bodies buried inside.

Nyman was a devoted father to his two sons and his stepson. At the time of his death, he was the Cyber Fusion Center director for American Family Insurance.

Malachi Owens Jr., EN'73, cantorial specialist for Temple Emanuel for 45 years, died June 21, 2021. He was 71.

Owens was an ordained Baptist minister but started singing at the Reform synagogue in 1977. While he was widely known for his musical abilities, he was a Renaissance man with skill as a craftsman and engineer.

David Patterson Silver Wolf, associate professor at the Brown School, died May 14, 2021, in hospice after being diagnosed with glioblastoma, an aggressive type of cancer, in fall 2020. He was 57.

Patterson Silver Wolf was of Irish and Cherokee descent, and the first faculty member of Native descent at the Brown School. His work focused on two main areas: substance abuse recovery and advocating for underrepresented minority college students, especially those from American Indian/Alaska Native populations.

He worked with the Kathryn M. Buder Center for American Indian Studies, supporting the staff on many projects including the Buder orientation and Pow Wow.

"David was a pioneer in his own land," says Michael Sherraden, the George Warren Brown Distinguished University Professor and founding director of the Center for Social Development. "It was his idea to create the Collaboration on Race, Inequality, and Social Mobility in America. As David once said of someone else, 'He [was] like an oak tree, dropping acorns that sprout and grow strong.' David understood this because he was, in fact, the biggest oak tree in the forest. Our school will miss him very much."

Janelle Alice Tessaro, AB '65, a former Spanish teacher in the Ritenour and Kirkwood school districts, and at St. Louis Community College, Meramec, died Sept. 20, 2020, at her home in Webster Groves. She was 77.

Tessaro taught Spanish for more than 25 years. She often took groups of students to Mexico and was a lifelong learner herself.

Her other interests included duplicate bridge, films, opera, gardening, house decorating, her pets, and bed and breakfast hosting, which she did at her home for five years.

John Turk, AB '70, MD '76, PhD '76, a pioneer in mass spectrometry research and a faculty member of more than 40 years at the School of Medicine, died May 26, 2021, after a brief illness. He was 73.

The Alan A. and Edith L. Wolff Professor of Endocrinology, Turk was a pioneer in lipid biochemistry, defining key mechanisms of phospholipid signaling that contribute to diabetes. His work drew national attention when he used tandem mass spectrometry to determine the molecular structures of complex lipids such as phosphatidylcholines, one of the fundamental lipid building blocks of cells.

Turk was also a professor of pathology and immunology and was among the discoverers of a phospholipase enzyme, iPLA2b, that participates in the control of insulin secretion and the survival of pancreatic beta cells. He and his collaborators demonstrated that this enzyme also is involved in cell proliferation, cell death, membrane biochemistry, and a wide range of conditions including infertility, chronic inflammation and neurodegenerative disorders such as Parkinsonism.

Carl Wellman, the Hortense and Tobias Lewin Distinguished University Professor Emeritus in the Humanities in Arts & Sciences, died July 17, 2021, at St. Mary's Hospital. He was 94.

Wellman joined the WashU faculty in 1968. By then, he had earned a PhD from Harvard in philosophy and published his first book, *The Language of Ethics*, which explored the logic of "ethical sentences." At the university, he taught seminars on the general theory of value and developed a theory of rights that grappled with racial discrimination, affirmative action and other contemporary issues.

He went on to publish 11 more books including *Challenge and Response: Justification in Ethics*; the popular textbook *Morals and Ethics; Welfare Rights; A Theory of Rights: Persons Under Laws, Institutions, and Morals*; and *Real Rights*.

Robert Wykes, composer and professor emeritus of music in Arts & Sciences, died June 29, 2021. He was 95.

Wykes had a varied career before he came to Washington University in the mid-1950s. He started playing flute when he was 9, performed with the Pittsburgh Little Symphony and served as a combat infantryman in World War II.

He earned his doctorate of musical arts from the University of Illinois at Urbana-Champaign and then came to WashU, where he taught, among others, actor Robert Guillaume, AB '59, and composers Olly Wilson, AB '59, Rhian Samuel, MA '71, PhD '78, and John Elwood Price.

He was a founding member of the New Music Circle in St. Louis and scored nearly 20 films for producer Charles Guggenheim. He was recognized with the Distinguished Faculty Award in 1976 and was named emeritus in 1988. He went on to be the composer-in-residence at California's Djerassi Foundation and a visiting scholar at Stanford University.

The following death notices were submitted from April 1, 2021–Aug. 31, 2021. Please contact Development Services at WUADDataChange@wustl.edu to report the death of an alumnus or alumna. And please submit full obituaries for consideration to earlyr@wustl.edu.

1940-1949

Dorismae (Hacker) Friedman, LA42; May '21
Eleanore (Gamble) Withrow, LA45; June '21
Donald J. Sher, LA47, LW49; April '21
Samuel W. Strother, LA47; July '21
Paul Bukstein, BU48; April '21
Virginia (Allbaugh) Friedland, SW48; May '21
Gustav F. Goetsch, EN48, SI54, SI58; April '21
Paul H. Greenlaw, LA48; May '21
Philip A. Isserman, LA48; May '21
David E. Tucker, BU48, July '21
Donald E. Waldemer, BU48, UC64; Aug. '21
Lee Abraham, BU49; May '21
Margaret (Rumer) Barrow, LA49; May '21
Dorothy M. Hanpeter, UC49; June '21
Constance (Ringham) Mahn, LA49, GR50; April '21
Catherine (Owen) McCaskey, NU49; April '21

1950-1959

Gilbert R. Cherrick, LA50; May '21
Dice M. Cowger, LA50, GR52; July '21
Betty (Castleman) Gilbert, NU50; May '21
William C. Hassall, BU50; April '21
Rosalyn (Shapiro) Klein, LA50; June '21
William D. Wurdack, LA50; Aug. '21
William P. Donovan, LA51, GR52; June '21
James H. Dunlevy, MD51; April '21
Louis T. Przetak, EN51; July '21
Richard T. Roberts, LA51; July '21
Anton Bettendorf, BU52; Aug. '21
Terry L. Burch, LA52; Aug. '21
William A. Schneider, LW52; Aug. '21
Joseph R. Gianino, EN53; July '21
Alan S. Greenspan, BU53; April '21
Robert E. Lischer, EN53, GB62; April '21
Jere P. McClure, MD53; April '21
Irving H. Silbergeld, LA53; May '21
Gerald F. Blanke, BU54; Aug. '21
Dolores (Paskar) Wolff, LA54, MD59; May '21
Howard M. Barton, LA56; April '21
Ralph Edwards, LA56; Aug. '21
Eleanor (Shanfeld) Meyer, LA56; Aug. '21
William A. Reynolds, MD56; Aug. '21
Paul J. Simon, BU56; June '21
Lloyd D. Doerflinger, BU57; July '21
Charles K. Gillespie, EN57; Aug. '21
Walter G. Sanders, LA57; June '21
Judith A. Strickland, FA57; Aug. '21
David S. Taylor, DE57; July '21
Bruce L. Brumbaugh, LA58, GR59; June '21
Paul L. Chandeysson, EN58, EN58; April '21
Earl J. Fuller, GR58; April '21
S. Nathan Kraines, EN58; April '21
Susan (Erwin) Pate, FA58; June '21
Robert M. Thomas, LA58; April '21
John L. Applegate, EN59, GB61; June '21
Wanda L. Bickel, LA59; Aug. '21
David L. Dau, BU59; May '21
Brian T. Mills, UC59; May '21
John N. Noettl, EN59, SI65; July '21
Robert W. Rostron, EN59, EN59; April '21
Alwyn E. Wolfarth, BU59, LW63, GL68; July '21
Sandra (Sullens) Ziegenfuss, BU59; July '21

1960-1969

Jerald R. Alpert, SW60; Aug. '21
Bill C. Downs, BU60, GB63; July '21
James G. Elliot, EN60; April '21
Paula (London) Glanzner, UC60; Aug. '21
Floyd G. Johnson, MD60; June '21
Norbert J. Karpfinger, GR60; June '21
William A. Sullins, BU60; June '21
Donald W. Turner, DE60; April '21
John C. Bosman, UC61; April '21
James E. Brodhacker, LA61; May '21
Ronald L. Luczak, EN61, LW67; April '21
Ronald E. Rosenthal, MD61, HS66; Aug. '21
Warren G. Rubel, GR61; June '21
Maurry J. Tamarkin, LA61, GB79; July '21
Edward C. Ahlheim, BU62; May '21
Judy (Searcy) Brackmann, LA62; May '21
Daniel W. Cadigan, BU62; April '21
Fay (Luebbert) Chiles, FA62; April '21
Gloria (Doll) Gottschalk, GN62; May '21
Lawrence A. Harshany, EN62; May '21
Marjorie (Kalb) Moore, PT62; May '21
Dale L. Rollings, LA62, LW64; July '21
Bernard Schaaf, MD62; April '21
Fred H. Seamans, TI62; June '21
Dennis A. Cassani, AR63; July '21
Lloyd J. Fiehler, UC63; April '21
Paul W. Kopsky, LW63; May '21
Stephanie (Wotka) McDonald, LA63; July '21
Robert C. Pettus, AR63; July '21
David E. Schramm, GR63, GR71; April '21
Edward H. Sellman, UC63; July '21
Kenneth A. Witbrodt, UC63; Aug. '21
Beverly (Novack) Hotchner, GR64, GR72; May '21
Robert L. Roberson, UC64; April '21
William L. Ruprecht, UC64; April '21
A. Arnold Sprague, LA64; July '21
Ted Carp, LA65; July '21
Richard G. Flynn, UC65; April '21
Francis X. Leighty, GR65; June '21
Charles R. Nuttmann, BU65; May '21
Ruth (Israel) Shulman, OT65; June '21
Otto A. Stamm, TI65, EN70; May '21
Mildred (Stiebel) Winter, UC65; Aug. '21
James H. Bennett, UC66; May '21
Tom Cori, GR66, GR70; May '21
S. Peter Gary, GR66, GR67; April '21
John E. Halka, LA66; April '21
Gerald Nadler, EN66; April '21
Marshall M. Curtis, EN68; Aug. '21
Jerome S. Garger, LA68; May '21
Ralph C. Hardy, LW68; June '21
Patricia (Gamble) Hecker, GR68; July '21
James C. Tegethoff, UC68, UC74; April '21
Judith (Buettner) Weiss, FA68; May '21
Bernarda (Lo) Wong, SW68; April '21
Steven Zucker, UC68; April '21
Dennis D. Fales, LW69; May '21
Judith (Paul) Prasil, LA69; April '21
Alan S. Rapoport, LW69; May '21
Nicholas Zak, UC69; Aug. '21

1970-1979

Robert L. Bartlett, DE70; April '21
Linda M. Kahn, LA70; Aug. '21
Yamuna K. Narayanan, GR70; April '21
William Stanton, MD70; June '21
Steven F. Techet, LW70; April '21
John W. Turk, LA70, GR76, MD76; May '21
Richard J. Feldman, GR71; May '21
Marilyn (Willer) Folkl, GR71; June '21
Richard J. Ford, GR71; June '21

Margaret (Preuss) Gaulke, GR71; June '21
Edward S. Hume, LA71, MD75; April '21
Patricia Payton, UC71; Aug. '21
Frank A. Welsh, GR71; April '21
Vivian P. Wood, GR71, GR73; April '21
Corine J. Colbert, SW72; May '21
James D. Nettle, GB72; April '20
Victor H. Nettle, SI72; May '21
Ronald F. Pratt, LA72; July '21
Richard E. Read, LA72; Aug. '21
Mariannne H. Stanek, UC72; May '21
Richard H. Koettker, GR73; Aug. '21
Malachi Owens, EN73; June '21
Russell M. Patton, UC73; Aug. '21
Richard J. Allgeyer, UC74; Aug. '21
Joseph H. Cole, UC74; June '21
Sandra M. Payne, FA74; July '21
Gary Roller, LA74; April '21
Shelley E. Natkow, LA75, SW75; June '21
Rosemary P. Rees, GR75; April '21
Dean F. Batty, TI76; May '21
John R. Dedeke, UC76, UC78; May '21
Andrew M. Catford, GA77, GB77; April '21
Paul R. Luehrs, HA77; June '21
Diane O'Rourke, GR77, GR87; June '21
Henry F. Erk, EN79, SI80, SI92; April '21
Daniel W. Fridrich, PMBA79; July '21
Karen (Engster) Margo, GB79; July '21
Anne (McNamara) Shinn, GR79; Aug. '21

1980-1989

Beverly (Richmond) Kinney, GR80; June '21
Terry M. Talley, UC80; April '21
Nancy (Dembeck) Croson, LA81, GR82; May '21
Harold L. Stockton, TI81; Aug. '21
Patricia (Eickmeyer) Wood, GR81; May '21
Hans P. Schwarz, GM82; Aug. '21
Steven R. Van Gorp, AR82, GA84; June '21
Steven C. Kapsar, BU83; June '21
Debra L. Frenchie, LA84, MD93, HS96; April '21
Marilyn B. Entenok, HA85; April '21
Babak Roboubi, LA86; April '21
Frank E. Kramer, GR87; May '21
Eric C. Holtz, AR88; June '21
Daniel C. Whithaus, PMBA88; June '21

1990-1999

Jeremy M. Black, LA90; June '21
Karen A. Donahue, PT90, PT06; Aug. '21
Rebecca S. Merry, LW90; June '21
Vance L. Gray, TI91; April '21
Jonathan C. Smith, GR92, GR01; June '21
Preston Humphrey, LA94, LW97; Aug. '21
Mark A. Repko, EN96; April '21
Carla (White) Sleeter, UC96, GR10; July '21
Julia (Lee) Baldus, LA97; Aug. '21
Halbert Sullivan, SW97; April '21

2000-2009

Tony O. Clark, SW00; June '21
David S. Holloway, LA03, GR14; June '21
John D. Winder, GR09; April '21

2010-2019

Craig D. McBride, EMBA15; April '21
Danielle T. Leventhal, FA16; Aug. '21
Max A. Bernstein, LA19, LA19, SI21; July '21

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 Washington
University in St. Louis



Photo (from 1975): Washington University Archives



Who are you?

In this archival image from 1975, students hang out “old-school” style on the South 40. So we ask: “Who are you? Who, who, who, who? We really want to know. Tell us who are you. ‘Cause we really want to know.” Please write wustlimgeditor@wustl.edu if you are one of the students in the photo or if you remember any of them. The magazine will include your feedback in the next print issue. Thank you!

First-Day fun

First Day is an event hosted in the iconic South 40 Underpass on the morning of the first day of classes. Student leaders, professors and student associates gather at the Underpass to hand out free breakfast and school supplies to students passing by. A photographer snaps first-day photos of all students, including seniors on their "last first day."



Photo: Jerry Naunheim