

Washington



Moment of promise

WashU is rallying its strengths in neuroscience to understand the profound mysteries underlying the functions of the brain. By connecting the most creative scientific minds in a new 11-story research hub on the Medical Campus, the university aims to accelerate the translation of science into treatments for those living with neurodegenerative diseases, pg. 20.

Evidence Isn't Enough

Undergraduate students are learning how science communication and moral worldviews intersect, pg. 12.

Drawn In

WashU alumni are writing and illustrating the books you wish you could have read as a kid — increasing diversity one picture book at a time, pg. 32.

Interplanetary Rock Star

Meenakshi Wadhwa has built a formidable career studying our solar system, pg. 44.

APRIL 2024
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Comments



On the cover: In our cover feature, *Washington Magazine* introduces readers to some of the creative, collaborative work being done at WashU in the neurosciences, "the next frontier of science."

“People will often ask: ‘Why were we hit so hard by this virus?’ There are many answers ... but one of them would have to be, how we showed up to the pandemic in terms of our overall health.”

— SANJAY GUPTA, MD, SPOKE ABOUT THE NEGATIVE HEALTH OUTCOMES IN THE U.S. FROM THE COVID-19 PANDEMIC DURING A BROAD-RANGING DISCUSSION NOV. 15, 2023.

DEPARTMENTS

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20 Moment of Promise

Washington University is known the world over for being a leader in neuroscience research. The university underscored its commitment to the neurosciences by building an 11-story hub on the Medical Campus that enables researchers to work more collaboratively and creatively. The goal: to accelerate the translation of science into treatments to help those suffering from neurodegenerative diseases.

32 Drawn In

WashU alumni are writing and illustrating the books you wish you could have read as a kid — increasing diversity one picture book at a time.



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(Left) Sanjay Gupta, MD, chief medical correspondent for CNN, visited WashU Nov. 15, 2023, for an Assembly Series discussion on public health and the media. While on the Danforth Campus, Gupta also spoke at the McDonnell International Scholars Academy monthly lunch.

Photo: Gara Elizabeth Lacy

FROM THE CHANCELLOR



Photo: Matt Miller

The next era of neuroscience research

Chancellor Andrew Martin (center) celebrates the dedication of the Jeffrey T. Fort Neuroscience Research Building after cutting the ribbon with WashU leaders and friends, including Jeffrey T. Fort and Fort's sister, Liz Dorr (both right of Chancellor Martin), Jan. 18.

This winter in St. Louis, we had the privilege of celebrating a major advancement in neuroscience research when we cut the ribbon and dedicated the new Jeffrey T. Fort Neuroscience Research Building at Washington University School of Medicine.

This 11-story, 609,000-square-foot facility will be a game changer, providing space for some 120 research teams to collaborate on unlocking the mysteries of the brain. Their discoveries will lead to new therapies and treatments for devastating neurological illnesses such as Alzheimer's disease and brain tumors.

The lobby of the building will be named the McDonnell Lobby, honoring the family's generations of visionary philanthropy at Washington University, particularly at our School of Medicine. The McDonnells have supported neuroscience research at WashU for decades through gifts to endow professorships and establish groundbreaking centers like the McDonnell Genome Institute.

On that exciting day, we also announced that the entire building will be named the Jeffrey T. Fort Neuroscience Research Building and known colloquially as Fort Labs. For years, Fort and his family have contributed to the advancement of research in neurosurgery, ophthalmology and other areas at WashU. This gift to name the neuroscience building takes their impact to new heights.

At a celebratory dinner that evening, I had the opportunity to personally thank our many friends, including the McDonnell and Fort families, for helping us realize our vision. We toasted the incredible contributions of our philanthropic community, and celebrated our drive for scientific progress and our refusal to dream small when it comes to healing.

I couldn't be more excited about this next era of neuroscience research at Washington University. We now have a facility unmatched in the world, where the brightest and most passionate innovators can push the boundaries of neuroscience and generate life-changing therapies to alleviate human suffering the world over. To say I'm humbled to play a small part in this work is an understatement.

Please see the cover feature starting on pg. 20 to learn more about some of the advancements in health that are being born right here at WashU in the Jeffrey T. Fort Neuroscience Research Building. We should all be very proud.

A handwritten signature in black ink, appearing to read 'Andrew D. Martin'.

Andrew D. Martin
Chancellor

FEEDBACK



“I wish to congratulate Randall Roberts on his article in the December issue of *Washington Magazine*. I am an '83 graduate of the Master of Architecture and the Master of Urban Design programs; therefore, I am naturally attracted to the visuals of the cartoon. But the impact of the article lies in its warmth, followed by sound research into the career of an innovator in Lee Harrison III. It is a heartwarming story that reflects well on the university.

“Thank you for including this story in the magazine.”

– RUSSELL P. (RIP) PARKS, MA '83, MAUD '83, AIA ACHA, EDAC, founding principal of Parks Consult, response to “An Old Illustration Animates a New Story”

THE DECEMBER 2023 ISSUE



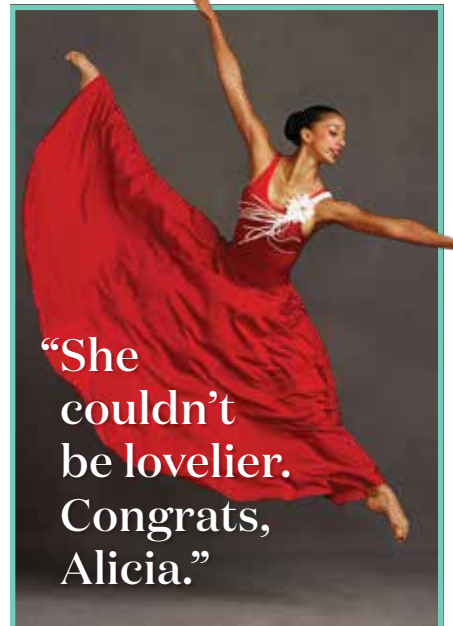
Alumnus Gary Arlen responded to the “Lasting Impression” photo published in the December 2023 print issue of *Washington* (above, right). He wrote: “It looks like we were still using those same circa 1945 Royal and other typewriters when I was editor of *Student Life* in 1966 and '67. Although the attached photo from *Student Life* (above, left) only captures a corner of my typewriters, those well-used devices could have lasted for a couple decades, although our newsroom was never as lined up/organized as your photo.

“Keep up the good alumni work! Thanks for the memories.”

– GARY ARLEN, BS '67 (English), who earned a master’s degree in journalism from Northwestern University in 1968, is president of Arlen Communications, a research and consulting firm known for its insights into the converging and sometimes conflicting worlds of media, telecommunications and interactive program content, based in Bethesda, Maryland.

“Highly recommend, SmartFlyer has helped us with many expeditions! And nice article.”

– KIMBERLY LOEB, BSBA '99, response to “Flying Smart,” a profile on Michael Holtz, BS '87, as seen on Facebook



“She couldn’t be lovelier. Congrats, Alicia.”

– ALEXA SHOEMAKER BROOKS, AB '09, response to “Grace and Grit,” a feature on Alicia Graf Mack, MA '10, as seen on Facebook

We want to hear from you!

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ST. LOUIS
In



Another Rhodes Scholar

Last fall, Victoria “Tori” Harwell, Arts & Sciences Class of ’24, was among the 32 students nationwide selected as a Rhodes Scholar and offered the opportunity to earn an advanced degree at Oxford University. Harwell, a member of the John B. Ervin Scholars Program, is WashU’s 30th Rhodes Scholar and, since 2013, the fourth Ervin Scholar to earn the prestigious title.

Photo: Whitney Curtis



Photo: Keith Lucas/Sideline Media

A SEASON TO REMEMBER

The women's soccer team finished oh-so-close to a national title, losing a heartbreaking 1-0 to California Lutheran University in the NCAA Division III Championship game Dec. 2 in Salem, Virginia. Despite the loss, the team's 2023 season was among the most memorable in program history as the Bears raced through September and most of October with 15 consecutive shutouts — best in all NCAA levels, men and women, in 2023. Led by goalkeeper **Sidney Conner** and defender **Ally Hackett**, both of whom were named United Soccer Coaches All-Americans, the defense gave up just nine goals all season. The Bears earned their 16th University Athletic Association title — their first since 2021 — in a nationally competitive conference that saw seven out of eight members make the NCAA tournament and win first-round matchups.

TEAMING UP TO FIGHT HUNGER

Two student groups joined forces last year to decrease food waste and help distribute healthy, fresh food to local shelters and food banks. Burning Kumquat, the student-run urban garden that has shared fresh vegetables with St. Louis-area food banks since 2007, teamed up with a WashU chapter of the national Food Recovery Network. Along with the fresh produce, the students collected food left over from university dining halls and also helped prepare meals for St. Patrick Center and Gateway 180, two programs that serve the homeless in the St. Louis region. The effort recovered more than 400 pounds of food last semester.

NEW ADMINISTRATIVE LEADER

Nichol L. Luoma officially began her tenure as executive vice chancellor for administration and chief administrative officer Feb. 5. Previously vice president of University Business Services at Arizona State University (ASU), she is an ASU alum with more than two decades of leadership in global business operations. Luoma now leads core WashU administrative divisions, including human resources and institutional equity, procurement, supplier diversity, environmental health and safety, and she co-leads information technology. She also directs operations, including facilities management, public safety, university services, global travel and the ombuds position on the Danforth Campus, and serves as coordinator with the School of Medicine's administrative functions. Luoma is on Chancellor Andrew D. Martin's cabinet, alongside other executive vice chancellors and vice chancellors.

LINDQUIST NAMED LAW DEAN

Stefanie A. Lindquist will assume the role of dean of the School of Law July 1. Lindquist hails from Arizona State University (ASU), where she was Foundation Professor of Law and Political Science in the School of Global Politics and the Sandra Day O'Connor College of Law. A nationally recognized expert in constitutional law and the U.S. Supreme Court, Lindquist was also executive director of ASU's Center for Constitutional Design.

"I'm confident Stefanie's innovative leadership and deep commitment to jurisprudence will further advance WashU Law's mission: equipping students to effectively and ethically practice law and pursue justice," Chancellor Andrew D. Martin says. Lindquist succeeds Russell K. Osgood, who has served as interim dean since September 2021.



Preserving rare books,
evermore

Cassie Brand, curator of rare books for Olin Libraries, was perusing a backlog of books one day when she discovered an old tome that had been so damaged by moisture that she could not risk even opening it. And then she discovered it was a first edition of Edgar Allan Poe's *The Raven*.

Now, thanks to a generous gift from **Daniel J. Smith, AB '85** (economics), and **Linda Way-Smith**, the book has been taken apart and lovingly restored, and it is available to view by appointment in the Rare Book Collections at Olin.

"Short of the volume never having been damaged in the first place, we couldn't be happier with how the conservation project turned out," Brand says.

Restoring the book was part of Olin's Legacy of Books program, in which alumni can donate \$100 or more to preserve one library book or an item in another format. A list of books on the library's wish list is available at library.wustl.edu.

TRACKING OUR IMPACT IN STL

A new online tool illustrates the scope, depth and breadth of WashU's commitment to the St. Louis region. Known as the St. Louis initiatives inventory, the visual tool catalogs, tracks and shares every community project in which WashU plays part, putting in one place an overview of existing collaborations with community partners.

"We are who we are because of where we are, and we're ready to further leverage our deep strengths in research, education and patient care to better serve our neighbors," says **Lisa Weingarth**, senior advisor for St. Louis initiatives. To learn more about this new inventory, visit andrewdmartin.wustl.edu/in-st-louis-for-st-louis/.

A TREE GROWS IN BROOKINGS

For more than a century, an American basswood, which housed bees and provided shade for Commencement ceremonies and passersby, stood tall on the northeast side of Brookings Quadrangle. Last summer, a violent storm toppled the iconic tree, but thankfully WashU arborists already had a plan in place to maintain its presence. Knowing that the tree's lifespan was nearing its end, in 2020 they began to grow identical copies, or clones, of the basswood. Arborists used a plant propagation technique of grafting twigs from the basswood onto new rootstock — yielding 17 saplings in all. Three of the saplings were planted in the Quad last September, and they're expected to grow to 30 feet tall. As for the beloved old tree, it is missed. But thankfully, no one was injured when it fell. Sections of the tree, or "nurse logs," were placed in the Quad and across campus. Over the next decade, the soft wood will decay, enriching the soil.



OVERHEARD ON CAMPUS

Last fall, WashU continued its tradition of attracting some of the country's deepest thinkers. Among the renowned speakers who visited the Danforth Campus were Pulitzer Prize-winning author **Hernan Diaz**, Oct. 24; *New York Times* columnist **David Brooks**, Oct. 30; and historian/political pundit/author **Heather Cox Richardson**, Dec. 4. Richardson's Substack newsletter, "Letters from an American,"

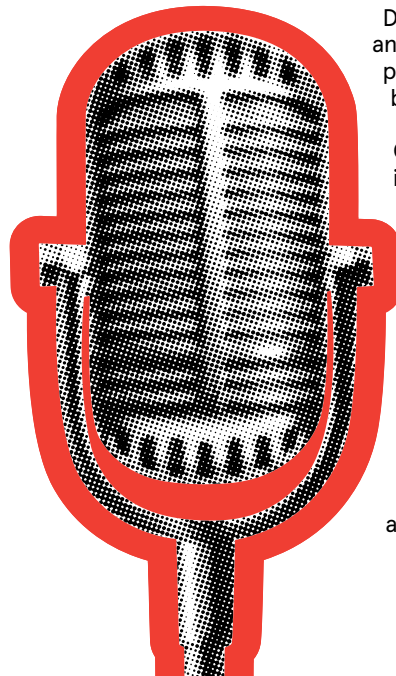
delivers daily plainspoken, insightful takes on the state of the country to more than 2 million subscribers.

Diaz delivered a craft talk in Hurst Lounge and answered questions about his writing process, telling the crowd how his career began as a childhood dream.

Brooks delivered a lecture in Graham Chapel about how to strengthen interpersonal relationships. "There are some people who are diminishers, and there are some people who are illuminators," Brooks said.

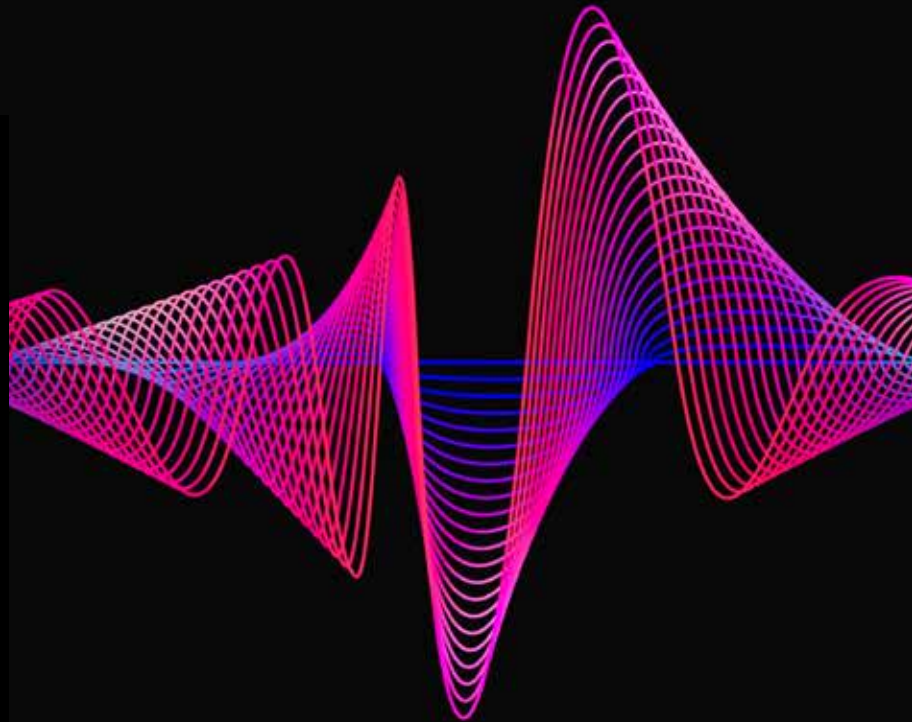
"The diminishers make you feel stereotyped, small, unseen, invisible. The illuminators are curious about you. ... They make you feel respected."

Richardson also spoke to an overflow crowd in Graham Chapel, sounding an alarm about political extremism but ending on a hopeful note. "It's a time of extraordinary creativity and potentially joy, and that's the part I find exciting," she said.



Deepfake defense

Recent advances in artificial intelligence have spurred developments in realistic speech synthesis, leading to the emergence of deepfakes — generated speech aimed to deceive humans and machines for nefarious purposes. In response to this evolving threat, **Ning Zhang**, assistant professor of computer science and engineering at the McKelvey School of Engineering, developed a tool called AntiFake, a novel defense mechanism designed to thwart unauthorized speech synthesis before it happens. “We mess up the recorded audio signal just a little bit, distort or perturb it just enough that it still sounds right to human listeners, but it’s completely different to AI,” Zhang says. The code is freely available to users.



LONG-COVID CLINIC EXPANDS ITS REACH

The narratives of long-COVID patients often share a common theme: the persistent struggle to obtain care. With a grant from the U.S. Department of Health and Human Services, the School of Medicine’s long-COVID clinic aims to fight that trend and better serve vulnerable St. Louis metro and rural Missouri communities. The new funding will support two case managers to help patients access social resources and manage complex paperwork. The clinic also aims to improve communication and the referral process between primary care teams and WashU specialists.

MAPPING SOUNDSCAPES EVERYWHERE

One important factor in how people experience their surroundings is through a place’s sound, but maps that document sound often rely on insufficient or unreliable data. **Nathan Jacobs**, professor of computer science and engineering, and graduate student collaborators at the McKelvey School of Engineering set out to change that. Their novel framework incorporates geotagged audio, textual description and overhead images to create soundscape maps that can be applied anywhere in the world. Policymakers, urban planners, homebuyers, business owners and others stand to benefit from the tool.

SPEEDING UP CREATION OF QUANTUM ENTANGLEMENT

A team of researchers in Arts & Sciences has found a way to speed up the creation of quantum entanglement, a mystifying property of quantum mechanics that Albert Einstein once described as “spooky action at a distance.” “With some subtle tricks in quantum dynamics involving complex energies, we found a way to get quantum systems to become entangled dramatically faster than expected based on the strength of their interaction,” says **Kater Murch**, the Charles M. Hohenberg Professor of Physics. Any increase in entanglement speed could potentially benefit quantum computers and other technologies.

ACCELERATING DRUG DISCOVERY

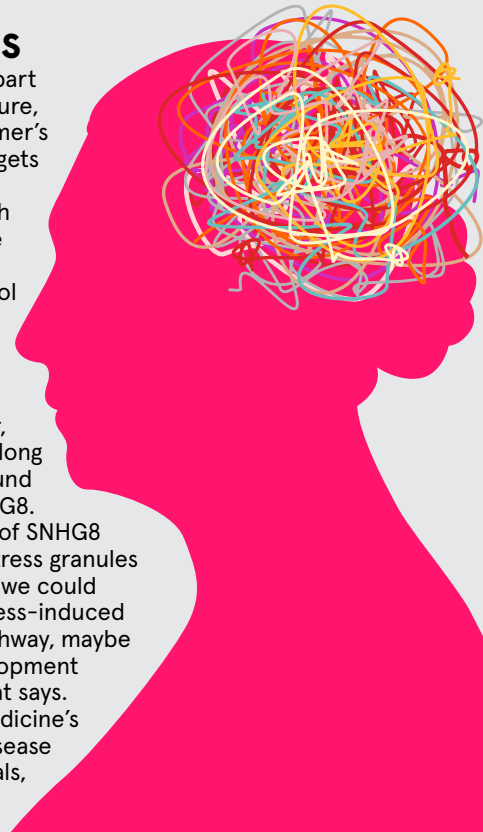
Washington University has paired up with health-care investment firm Deerfield Management to launch VeritaScience, an R&D collaboration aimed at translating WashU discoveries to improve human health. Deerfield has committed up to \$130 million over the next 10 years, along with functional expertise across the drug development continuum, to support VeritaScience projects. Accepted projects from WashU investigators will receive a development plan and may be eligible for additional funding and support for the creation of separate startup companies. VeritaScience is named to honor Washington University’s motto “Per Veritatem Vis,” which means “Strength Through Truth” in Latin.



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

Toxic tangles

Tau protein is a normal part of the brain's infrastructure, but in those with Alzheimer's and other diseases, tau gets knotted up into tangles and turns toxic. In search of ways to prevent these destructive tangles, researchers at the School of Medicine have identified a key step in their development. First author **Reshma Bhagat**, postdoctoral researcher, looked for clues among long noncoding RNAs and found one that stood out: SNHG8. Neurons with low levels of SNHG8 also had high levels of stress granules that were rich in tau. "If we could somehow target this stress-induced protein-aggregation pathway, maybe we can inhibit the development of tau pathology," Bhagat says. [For more on WashU Medicine's efforts in Alzheimer's disease research and clinical trials, see pg. 20.]



2,000 YEARS OF WATER

What will happen to water as temperatures continue to rise? To make informed predictions, a team led by **Bronwen Konecky**, assistant professor in earth, environmental and planetary sciences in Arts & Sciences, examined the history of water over thousands of years. The project team — which includes more than 40 researchers from 10 countries — collected, collated and sometimes digitized water isotope records from hundreds of studies. Using geologic and biologic evidence preserved in natural archives like corals, trees, ice, cave formations and sediments, the researchers showed that the global water cycle has changed during periods of higher and lower temperatures in the recent past. "This is a first step toward reconstructing drought or rainfall patterns at the global scale during the past 2,000 years," Konecky says.

PARTNERSHIP IS KEY

Responding to complex health inequities in communities requires collaborative partnerships, according to a study from the Brown School. **Maura Kepper**, assistant professor, and co-authors completed a comprehensive evaluation of The Alliance program, a group of local health and social services organizations that have come together to increase participation in and access to evidence-based lifestyle-change programs. While having programs aimed at improving health is important, improving access to those programs makes them far more impactful, the analysis found.

HISTORICAL NEWSPAPERS TRACE RACIAL TERROR

Geoff Ward, professor of African and African American studies, and **David Cunningham**, professor of sociology, are leading a new research project that is using digital text mining to examine how historical newspapers contributed to the spread of racial violence. The research team will use the technique to gain insight into periods in which entire Black communities were targeted, which tends to be less widely studied than individual killings. The researchers also aim to study historical newspapers' approaches to documenting collective violence and what it means for our modern media landscape.





Postdoctoral fellow Samantha Zambuto uses biomaterials to create models of reproductive tissues, including the uterus, vagina and placenta.

Photo: Whitney Curtis

Women deserve better health care. Engineers can help.

The new Center for Women's Health Engineering unites engineering, medicine and biology to bring about long-overdue advances in women's health care.

Pressure. Contraction. Pushing. Rupture. For many, these words point to the experience of labor and childbirth. For **Michelle Oyen**, something else also comes to mind.

"These are all very clearly engineering words that have to do with physical forces," says Oyen, associate professor of biomedical engineering in the McKelvey School of Engineering. "We've been treating women's health as solely a biology problem, but it's also the realm of engineering and physics."

As director of WashU's Center for Women's Health Engineering, Oyen seeks to bring medical practitioners and engineers together to improve women's health care. Such collaborations have long proved successful in fields like orthopedics, but technological advances in women's health have lagged — contributing to some startling statistics. One in 10 babies in the U.S. is born prematurely, for example. And maternal mortality is on the rise, especially among women of color.

"There's a false idea in people's minds that there's no more to know about pregnancy. Of course, any woman who has experienced a miscarriage or stillbirth, or has ended up being induced early because of preeclampsia, will disagree," Oyen says. "We don't talk very often about how poorly we understand all this."

Oyen points to a few root causes of the problem. For good reasons, medical experiments aren't typically performed during pregnancy. Animal models don't provide much helpful information, either. And, for decades, biomedical research was designed, performed and funded exclusively by men. This historical lack of gender diversity has likely also hampered the study

of diseases that disproportionately affect women, like autoimmune disorders, as well as various conditions that lead hundreds of thousands of women each year to undergo hysterectomies.

The Center for Women's Health Engineering is already making strides in overcoming these challenges. In one ongoing project, Oyen studies the placenta with **Anthony Odibo**, the Virginia S. Lang Endowed Chair in Obstetrics and Gynecology at the School of Medicine, and **Ulugbek Kamilov**, associate professor of computer science and engineering at the McKelvey School. Using machine learning and advanced imaging techniques, the researchers create computational models of placenta function. Such models provide insights into issues with the placenta that can occur early in pregnancy and cause long-term cardiovascular problems for both pregnant women and newborns.

"Everyone is born with a placenta," Oyen says. "I think in the grand scheme of women's health, this is what hasn't been appreciated. We're talking about things that affect all humans."

Students, particularly women training to be physicians and engineers, are taking note. Alongside research and entrepreneurship, Oyen cites education and training as an essential pillar of the center.

"It's exciting to see enthusiastic young women wanting to use their engineering skills in this field," Oyen says. "I'm not personally going to solve all maternal health problems. I'm part of a generation pushing the next generation forward toward solutions."

■ CLAIRE GAUEN

QUOTED

WASHU IN THE NEWS

WashU experts weigh in on major topics of the day.

“It’s really important to have leaders who understand that excellence and diversity are not separate things.”

DWIGHT A. MCBRIDE, THE GERALD EARLY DISTINGUISHED PROFESSOR, IN *INSIGHT INTO DIVERSITY*, ON THE ESTABLISHMENT OF THE ACADEMIC LEADERSHIP INSTITUTE, A JOINT EFFORT OF UNIVERSITY OF MICHIGAN AND WASHU THAT TRAINS ACADEMIC LEADERS.



Courtesy photo

“These were just extraordinary wins, especially for those of us who’ve been studying strikes for decades.”

JAKE ROSENFELD, PROFESSOR OF SOCIOLOGY, IN *THE WASHINGTON POST* ON THE RECORD CONTRACT INCREASES GAINED BY UNITED AUTOWORKERS AFTER A SERIES OF STRIKES LAST FALL.

“Even in lighter drinkers, you can have noticeable health effects when you stop drinking alcohol for a month.”

CARRIE MINTZ, MD, ASSISTANT PROFESSOR OF PSYCHIATRY AT THE SCHOOL OF MEDICINE, IN *NATIONAL GEOGRAPHIC* ON THE HEALTH BENEFITS OF CUTTING BACK ON SOCIAL DRINKING.



Courtesy photo

“Mosquitoes have been doing mosquito things for millennia, and they’re really, really good at it, despite our best efforts to keep them at bay.”

KIM MEDLEY, DIRECTOR OF TYSON RESEARCH CENTER, IN *SCIENTIFIC AMERICAN TALKING ABOUT MOSQUITOES AND CLIMATE CHANGE*.



Photo: Susan Flowers, Tyson Research Center

“We have long known that Leonardo was an inveterate experimenter.”

WILLIAM WALLACE, THE BARBARA MURPHY BRYANT DISTINGUISHED PROFESSOR OF ART HISTORY, TO CNN UPON THE DISCOVERY OF A RARE CHEMICAL COMPOUND LEONARDO DAVINCI USED IN THE PAINTING OF THE “MONA LISA.”

L41 BIOL 3160 Beyond the Evidence

Evidence isn't enough

Undergraduates are learning how science communication and moral worldviews intersect.

“Facts don’t matter.”

With this provocative statement, **Eleanor Pardini** grabs the attention of students in her science communication course.

Pardini designed “Beyond the Evidence” after wrestling with this question: Why do facts about topics such as climate change and vaccines spark vastly different reactions among groups of people? At the same time, she noticed that her natural science students lacked knowledge that could make them better communicators.

“It’s important to understand how humans receive and process information and make decisions,” says Pardini, a teaching professor in environmental studies in Arts & Sciences. “And that is a piece of interdisciplinary training that we don’t typically include in natural science curricula.”

To remedy this, Pardini introduces data from the fields of cognitive psychology, behavioral economics and political science, in addition to works by artists, humanists and community organizers.

For example, she says, there’s a wealth of evidence from cognitive psychology that says people base decisions largely on identity, beliefs, feelings, values and moral worldviews. “When I say facts don’t matter, the students are really uncomfortable with that and sometimes it’s a struggle for them,” she says. “Looking at moral worldviews that are different from your own can be really uncomfortable.”

She created this course in 2018 partly in response to a memorable discussion about vaccine hesitancy in a different course. She says the response from students was basically, “Why are people so stupid?”

“I felt very dissatisfied with that,” she says. “I thought it was much more complicated. That response was underestimating people.”

Pardini wants her students to use respectful language and realize that people usually are well-informed. “We just have different ways of perceiving what makes us safe or who keeps us safe,” she says. “Do individuals and families keep us safe? Does the government keep us safe?”

Our brains have evolved shortcuts that allow us to quickly size up perceived threats, Pardini

says. “We have lots of biases, stereotypes and a strong gravity toward figuring out who our people are,” she says. “We are moved by stories and relationships.”

Successful communication depends on understanding your audience. If your audience values liberty and individual decision-making versus care and harm, you should design your public health policies and frame your messages in terms that matter to your audience. It’s also effective to leverage relationships, choose the right messengers and do a lot of listening.

She recommends using fear sparingly. “You can do a little bit of fear but not too much because doom and gloom cause paralysis,” Pardini says. “The best messaging is a little bit of fear mixed with a healthy amount of optimism and solution.”

On climate, portraying people working together to solve problems is more effective than showing a lone polar bear adrift on a small patch of ice, she says. Also, negative statistics or projections can cause people to feel overwhelmed or hopeless. She suggests breaking long-term solutions into short, manageable chunks. “If we want to cut carbon emissions 80% by 2050, instead say that we want to reduce carbon 2% per year by 2050,” she says. “It’s the same total amount, but people react much more positively to the 2% a year.”

Upper-level students from many disciplines — including pre-health, environmental studies, biology, political science and business — interact and engage with the ideas in this class.

“Because of this course, I feel more confident in my abilities in scientific communication,” says **Lara Briggs**, a senior studying political science and environmental analysis. “And I also had the valuable chance to examine my own belief systems.”

Pardini wants students like Briggs to go out into the world equipped with all the skills they need to make a difference.

“My goal is to teach future leaders working on important global challenges to be strong, effective science communicators,” Pardini says.

■ JULIE KENNEDY, MA '22

Illustration: Monica Duwel



“The best science communication incorporates these principles: You really understand your audience, you understand what moral foundations matter to them, and you frame your information in terms of those moral foundations.”

— Eleanor Pardini

The messy middle

Laura Meckler returns home to chronicle decades of a city grappling with questions many communities never even ask.

Award-winning journalist **Laura Meckler, AB '90**, has decades of experience reporting on social and political issues. She began her journalism career at WashU's *Student Life* before graduating to a newspaper job in Canton, Ohio. Then came stints at the Associated Press in Canton, Ohio, and in Washington, D.C.; at *The Wall Street Journal*; and her current job as national education reporter for *The Washington Post*.

Yet, it turns out, one of the most significant stories of her career was in her hometown, in the Cleveland, Ohio, suburb of Shaker Heights. That's where what began as a long-form story on the city's well-known history of racial equity and school integration turned into a five-year journey writing *Dream Town: Shaker Heights and the Quest for Racial Equity* (Macmillan 2023).

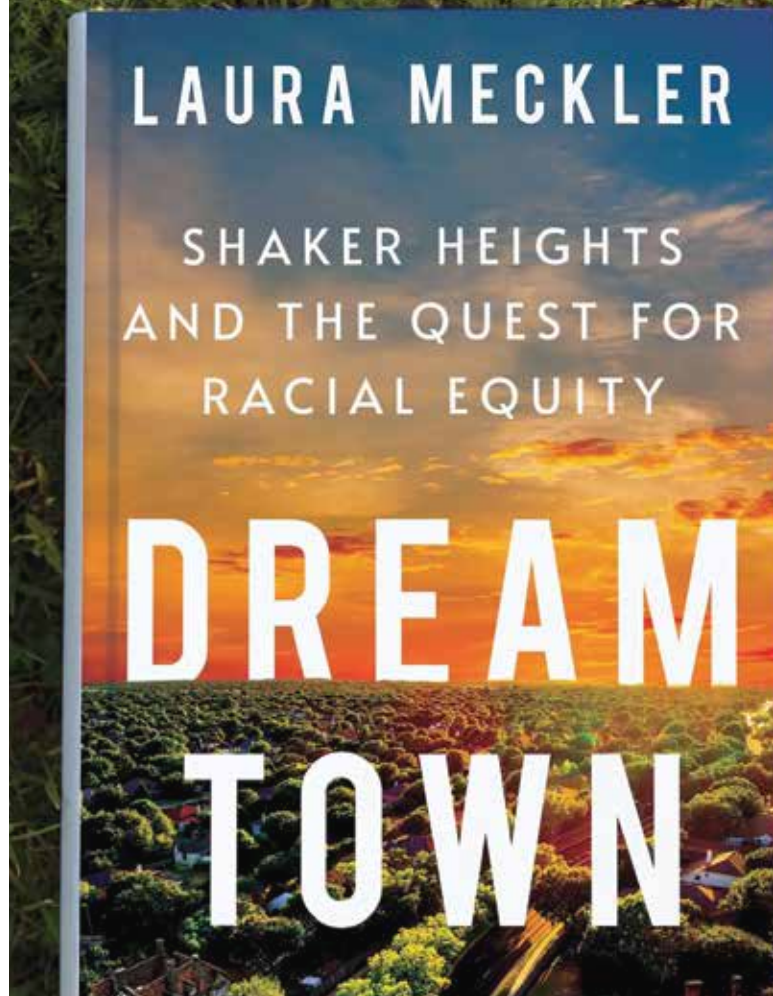
Established in the early 20th century, Shaker Heights had long been viewed as a model for fair housing and, since the 1970s, school integration. But over time that model proved to be a challenge, and Meckler went home to learn why.

In taking a deep dive into how Shaker Heights grappled with decades of trying to do the right thing for all its citizens, Meckler tackles complexity and nuance chapter by chapter with one simple reporter's tool: the power of story. Each chapter of *Dream Town* is anchored by an individual who made a difference in the Ohio suburb — sometimes for better and worse, at the same time.

"This story exists in that messy middle where people aren't all villains and aren't all heroes," Meckler says. "There are good people trying hard and making mistakes; there are people making progress, and those not making enough progress. I wanted to paint a portrait of what racial equity looks like when you actually try," Meckler says.

Dream Town is the story of a community that made mistakes but has managed to become a place where racial equity remains part of the conversation. While she admits in the book that Shaker Heights is far from perfect, Meckler, through years of reporting experience, is able to make the city and its characters accessible.

"Everything was so familiar," she says. "I'd turn a corner in my old high school, and there'd



be a poster or a smell I'd recognize, or I'd meet up with one of my old teachers. I felt like I was home. But I was coming back as a reporter, so I was able to ask hard questions, to step back and look at things much more analytically.

"Marrying those two things — the personal feeling of really caring about this place with my skills as a reporter and the ability to detach — brought joy to writing this book."

It's a story 70 years in the making, and one of Shaker Heights' own is telling it, even challenging her own notions of growing up in the community as a white, Jewish Gen Xer. In doing so, she has laid out a roadmap for other communities to follow, if they are willing to try.

"My conclusion is a positive one about what this community has done and is trying to do," she says. "But there is a lot of struggle here, too. And there are things that have not succeeded, and I don't flinch at telling that story as well."

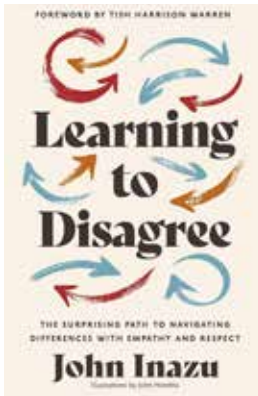
■ LESLIE GIBSON MCCARTHY

FACULTY



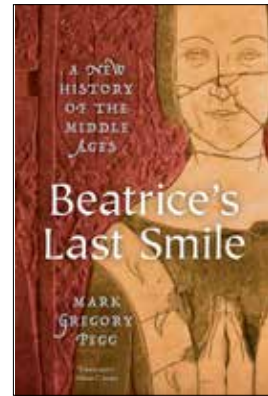
A Film in Which I Play Everyone MARY JO BANG

The latest collection from heralded poet Mary Jo Bang, professor of English in Arts & Sciences, takes its title from a semi-famous David Bowie quote responding to a fan who asked if he had upcoming film roles. In these poems, Bang is a first-person speaker who plays herself and everyone she's ever met. Tinged with dark humor and sharpened with keen imagery, this latest collection may be her best and most provocative.



Learning to Disagree JOHN INAZU

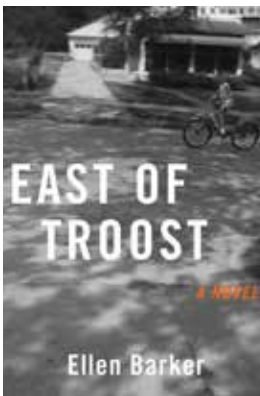
Spanning a range of issues, such as critical race theory, sexual assault, campus protests and religious freedom, this book by John Inazu, the Sally D. Danforth Distinguished Professor of Law and Religion, offers a path forward through the study of law and compromise. It draws on practices that legal training imparts — seeing complexity in every issue, inhabiting the mindset of opposing views — to help us handle daily encounters and form relationships with those who see life differently.



Beatrice's Last Smile: A New History of the Middle Ages MARK GREGORY PEGG

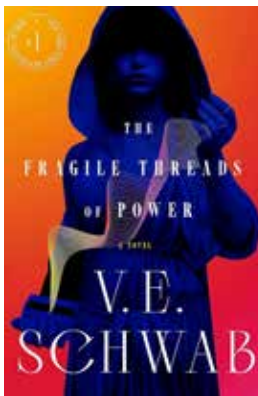
In his new book, Mark Gregory Pegg, professor of history in Arts & Sciences, traces humanity's changing relationship to the divine over 1,200 years of Western medieval history. In a sweeping narrative, the reader travels from the Mediterranean to the North Sea, from the Nile to the Volga, from North Africa to Central Asia, until finally ending in the Americas.

ALUMNI



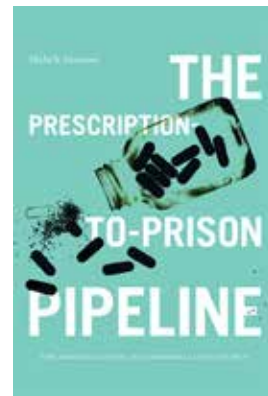
East of Troost ELLEN BARKER

Troost Avenue in Kansas City, Missouri, is a dividing line, an invisible barrier created in the early 1900s to keep and separate Black families on the east side while ensuring the west side remained white. This novel by Ellen Barker, AB '76, deals head-on with the subtle and overt racism of her hometown and is infused with universal themes of compassion and cruelty, fear and courage, comedy and drama.



The Fragile Threads of Power V.E. SCHWAB

Victoria "V.E." Schwab, AB '96, MA '01, is the author of more than 20 children's and young adult books, including four series of fantasy bestsellers and *The Invisible Life of Addie LaRue*. In this first book of yet another series, *The Fragile Threads of Power* explores, through a world of magic and politics, the intricate and delicate ways in which power is earned, taken and kept.



The Prescription-to-Prison Pipeline MICHELLE SMIRNOVA

Drawing on interviews with 80 incarcerated individuals in Missouri prisons, Michelle Smirnova, AB '06, shows how contradictions in medical practices, social ideals and legal policies disproportionately criminalize the poor for their social condition. Going beyond the well-worn narrative of assigning fault, the book encourages policymakers, politicians and voters to see the crisis as a social problem.



Photo: Roberts Creative LLC

Planting and cultivating seeds through connection

In her work with local organizations to promote health and wellness in the St. Louis region, **Diana Parra Perez, PhD '13**, sees the power of solidarity.

I come from farmers. In 1936, my grandfather, Jose Manuel Parra, bought five hectares of land for 1,350 Colombian pesos (not even one dollar today) in the village of Santa Teresa in Colombia. The name of his farm was Valladolid, and it produced coffee, corn and cacao, which the family sold and used as income. The farm also produced bananas, plantains, cassava and oranges, and my grandfather kept a few chickens and a cow. Even with a low income, his family of 13 (my grandmother and 11 children, including my dad) were well-fed and nourished. They were displaced in 1948 due to the internal conflict that started after the assassination of presidential candidate Jorge Eliécer Gaitán. Moving to the city meant food insecurity and poverty. After returning, they would be displaced from their farm again two more times during their lifetimes.

I share this story because I clearly remember visiting the farm as a child and realizing the profound sense of empowerment, solidarity, justice and sovereignty that came from growing one's own food. When I was offered the opportunity to implement and lead the Building Resilient and Inclusive Communities (BRIC) project for Missouri in late 2020, I did not hesitate.

The National Association for Chronic Disease Directors and the Centers for Disease Control and Prevention established BRIC during the COVID-19 pandemic to support healthy living and reduce social isolation. Little did I know that this project would be profoundly transformative for me, both professionally and personally. What started with a small Zoom meeting turned into a collaborative of more than 45 people representing various organizations from small nonprofits to large foundations.

During our very first meeting, I learned about the term "food apartheid" from a St. Louis food justice activist. Learning about this deeply changed the way in which I looked at food deserts, which are not natural occurrences, but rather reflections of systems of oppression and exclusion that have existed for hundreds of years.

At a celebration at the project's close in late 2023, every group shared the various ways in which BRIC funding was crucial to helping them implement essential programming to keep the community fed, active and connected. We heard from centers that offered computer skills classes so that seniors would not feel isolated. We heard from food pantries, food banks and farmers markets that purchased large-capacity freezers to store fresh and healthy foods and implemented programs such as SWAP and CHOICE to increase the dignity and respect of users. We heard from urban farms and community gardens that were able to continue their educational operations, farming schools and intergenerational programs. We heard from organizations that set up traffic-safety programs around schools, urban farms and farmers markets, so that residents did not face physical harm from automobile traffic while obtaining food. At the end of the celebration, I couldn't help but cry. These were tears of joy, as I was clearly seeing the power of solidarity and of a collective working together for a common cause, even when we all represented diverse groups of people and perhaps even diverse ideologies.

In part because of the relationships and partnerships we developed through BRIC over the past three years, Washington University was awarded a 5-year, \$3.8 million CDC REACH grant (Racial and Ethnic Approaches to Community Health), which will allow us to continue supporting the BRIC collaborative. In partnership with the St. Louis Integrated Health Network, the grant will promote clinical and community health solutions, increase access to nutritious foods in north St. Louis and create healthy weight programs for children and families. My role in REACH will be to ensure that decisions are community-driven. Communities know what solutions meet their needs, and our role is to listen and provide support, planting seeds to reduce health inequities in our region. Through REACH-STL, we'll tend those seeds and see them grow.

■ DIANA PARRA PEREZ, PHD '13

WHO

Diana Parra Perez, PhD '13, assistant professor at the Brown School and associate director of WashU's Center for the Study of Race, Ethnicity and Equity (CRE²)

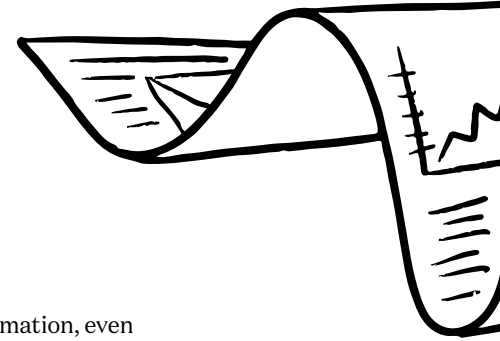
MINDFUL LEADERSHIP

As co-lead of the Mindfulness Science and Practice Cluster, Parra Perez helped launch the inaugural WashU Mindfulness Day in 2023. She is an advanced yoga instructor and certified mindfulness teacher.

BROWN SCHOOL ROOTS

Parra Perez earned a doctorate in social work and has served as a research assistant professor at the Brown School.

Harnessing modern data, transforming society



Through the new Digital Transformation initiative, Washington University is tackling head-on the challenges and opportunities of a data-driven society.

As part of its strategic plan “Here and Next,” WashU is mobilizing research, education and patient care to establish the university, and St. Louis, as a global hub for transformative solutions to society’s deepest challenges. The plan’s new Digital Transformation initiative is creating and accelerating those solutions with a collaborative, tech-based approach.

“Digital technologies are transforming our society in ways we are only beginning to comprehend,” says **Philip R.O. Payne**, the Janet and Bernard Becker Professor at the School of Medicine and the founding director of the Institute for Informatics, Data Science and Biostatistics, who leads the newly established initiative. “They have the power to save lives, revolutionize industries and store unlimited amounts of information. So much of our work at WashU can be elevated and accelerated by harnessing modern data and computational and communications methods. In response to these opportunities, we’re building a community of WashU faculty, staff and learners to advance digital transformation across all of our missions.”

“WashU Digital Transformation aims to enhance research excellence, strengthen digital learning experiences and enable optimized operations across schools and campuses,” says **Beverly Wendland**, provost and executive vice chancellor for academic affairs. “The initiative also will position WashU as a leader in addressing technological challenges and opportunities, including using big data to improve public health, combat disinformation and develop trustworthy and human-centric artificial intelligence.”

The initiative’s institutional home, the Digital Intelligence & Innovation (DI²) Accelerator, provides centralization and support to digital efforts across the Danforth and Medical campuses. It also promotes and increases digital activities at WashU via seed funding, special events and interdisciplinary collaborations.

Within the DI² Accelerator, the Digital Solutions Studio has a full team of data and software engineers to enable WashU faculty and students to better and more quickly leverage their research products for a whole host of uses. It’s already had significant success, including the debut of an innovative St. Louis data visualization platform.

Developed in partnership with Arts & Sciences faculty members and with support from WashU’s Incubator for Transdisciplinary Futures, the St. Louis Data Dashboard lets WashU researchers, community members and area stakeholders easily track and compare datasets in categories including health

factors, election results, census information, even Citizens’ Service Bureau calls. The Digital Solutions Studio built the dashboard in just six months, a process that otherwise might have taken years.

“The researchers needed help from software developers to best enable the development of their dashboard,” explains **Albert Lai**, professor of general medical sciences and chief research information officer at the School of Medicine, and deputy faculty lead for Digital Transformation. “Being able to bring in our Digital Solutions Studio team dramatically accelerated the pace at which the team was able to arrive at a functional dashboard.”

“It was like having a jet rocket all of a sudden, propelling the project forward,” says **Andrew Reeves**, director of the Weidenbaum Center on the Economy, Government, and Public Policy.

Reeves, a professor of political science in Arts & Sciences, says the new dashboard will let him and his colleagues easily access and analyze large datasets, allowing them to better study regional policy options.

“A researcher might have a question about the causal effect of different policing strategies or the relationship between environment and voter turnout,” Reeves says. “Not only can we answer these questions about how to make the region better, how to make lives better for the people who live here ... we can answer these really profound public policy questions in a scientific way that aligns with the cutting-edge research that people here at the university are doing.”

The Digital Transformation initiative is extending its reach beyond the university, establishing strategic relationships with key industry partners to further propel interdisciplinary digital transformation efforts at WashU. It’s also working as a convener and catalyst for others operating in the digital space. Last October, the initiative held a two-day AI and Digital Health Summit, bringing in field-leading speakers to address the ways in which AI will transform health-care delivery. The initiative is also scheduled to host the Inside Higher Ed and Times Higher Education Digital Universities conference in May. The event will bring together leading voices from higher education to discuss digital-first access, equity and innovation happening at universities across the country.

“We are harnessing WashU’s unique resources and expertise to responsibly and ethically address complex problems and advance science, engineering, public health, creative practice and so much more,” Payne says.

■ ERIKA EBSWORTH-GOOLD, MA '22



Here
and
Next
WashU



To learn more about the
Digital Transformation initiative,
visit di2accelerator.wustl.edu.

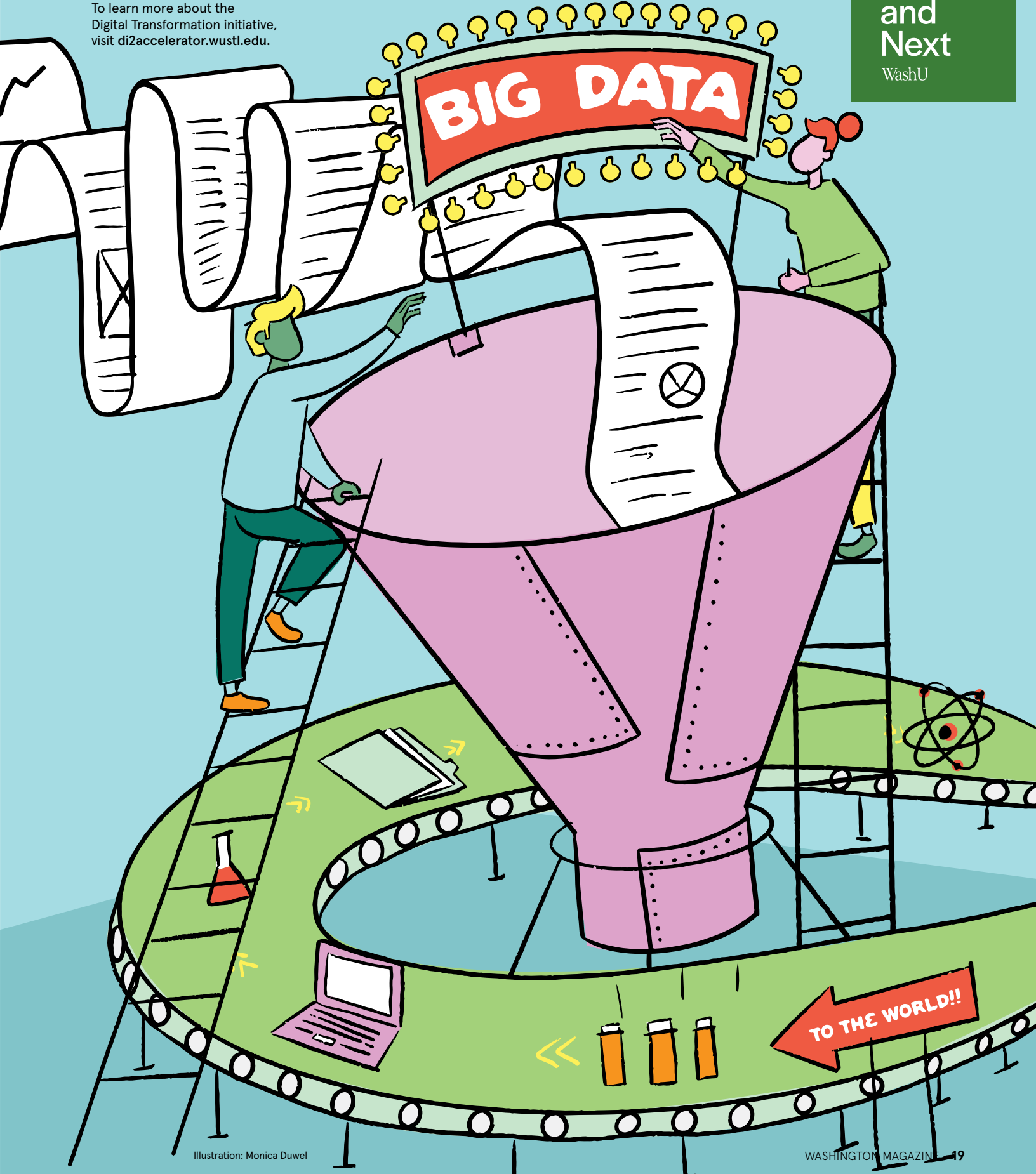


Illustration: Monica Duwel

Moment of Promise

Washington University is known the world over for being a leader in neuroscience research. And the university underscored its commitment to the neurosciences by building an 11-story hub on the Medical Campus that enables researchers to work more collaboratively and creatively. The goal: to accelerate the translation of science into treatments to help those living with neurodegenerative diseases.

■ BY TAMARA SCHNEIDER
■ PHOTOS: MATT MILLER





Washington University School of Medicine has always been a place for jaw-dropping medical advances, from pioneering innovations in radiology to the mapping of the human genome. And the pace of discovery continues to quicken. The university recently dedicated the new 609,000-square-foot Jeffrey T. Fort Neuroscience Research Building, which houses some 120 research teams — one of the highest concentrations of neuroscientists in the world. The researchers are committed to unlocking the mysteries of the human brain and tackling the intractable neurological and psychiatric diseases confronting humankind.

“We’re ranked No. 2 among U.S. medical schools in overall research funding from the National Institutes of Health (NIH) and No. 1 in NIH funding for neurology research,” says David H. Perlmutter, MD, executive vice chancellor for medical affairs, the George and Carol Bauer Dean of the School of Medicine and the Spencer T. and Ann W. Olin Distinguished Professor. “When I think about where Washington University can have a unique, indelible impact on human health, it is in the neurosciences. This is the next frontier of science, in which new technologies and a coalescence of great talent at this university can help us address human suffering.”

Over the next 10 pages, *Washington Magazine* will introduce readers to some of the creative, collaborative work being done in this “next frontier of science” by expert researchers as well as everyday people and their families, who are putting everything on the line for a chance at cures.

THE ALZHEIMER'S families

Through a landmark program started at Washington University School of Medicine, families with inherited, early-onset Alzheimer's fight for a cure.

Christmas came early for the Redshaw children in 2023. On an ordinary day in early December, Ryan Redshaw was home with his three young children when several boxes were delivered to the house. The boxes contained toys, he discovered, so he handed them out. It wasn't until his wife came home and expressed dismay that he realized his mistake.

"All the Christmas presents I had ordered came on the same day, and he opened all the boxes and gave them to the kids," Liana Redshaw says. "This is what early-onset Alzheimer's looks like for us. It's not just his memory that's affected, but his thought processes, his judgment. Most people would see a bunch of toys right before Christmas and think, 'I have to put these away.' But Ryan didn't make the connection. And so, the kids got Christmas on a random Tuesday this year."

Ryan Redshaw is a participant in the Dominantly Inherited Alzheimer Network-Trials Unit (DIAN-TU), a global clinical trial led by Washington University School of Medicine involving people with a rare, genetic form of Alzheimer's disease. To participate in the trial, volunteers must have inherited a mutation that all but guarantees they will develop memory and thinking problems in their 50s, 40s or even 30s. Washington University researchers in DIAN-TU and the related observational study, DIAN, have played a crucial role in unraveling the complex biology of Alzheimer's disease over the past 16 years.

Once thought to be an inescapable part of aging, Alzheimer's was redefined as a disease of the brain in 1906 by German physician Alois Alzheimer. Throughout the 20th century, the deadly disease remained unpreventable and untreatable. But now, finally, things have begun to change. The first drug shown to change the course of the disease, lecanemab, sold

"It's not just his memory that's affected, but his thought processes, his judgment."

under the brand name Leqembi, was approved by the Food and Drug Administration (FDA) in January 2023. Another promising drug is currently under FDA review. A diagnostic blood test, developed by researchers at WashU's School of Medicine, is in clinical use. In short, scientists are on the cusp of transforming this unrelenting scourge into a manageable threat.

Ryan Redshaw was diagnosed with inherited Alzheimer's disease at the age of 33. The disease is so rare at his age that doctors routinely mistake it for more common problems such as depression, substance abuse or schizophrenia. But the Redshaws knew that Alzheimer's was a possibility. Redshaw's mother, Melissa "Mysi" Giesecki, as well as her mother and brother, had all developed dementia in their 30s and 40s. Redshaw doesn't know his family history beyond those three because his grandmother was adopted. Until his own symptoms emerged, he'd held out hope that the disease would pass him by.

In the quarter century between Redshaw's mother's diagnosis and his own, the outlook for people with Alzheimer's has gotten much brighter. We know tremendously more today about the disease and how to stop it, in no small part because of the work of WashU researchers.

Scientists first linked Alzheimer's disease to the protein amyloid beta more than a century ago, when autopsies revealed plaques of the sticky protein cluttering the brains of people who died of the disease. The gene for amyloid was identified in 1987. A few years later, mutations were identified in that gene and two related genes that lead to the massive overproduction of amyloid and, consequently, early-onset Alzheimer's disease. The Redshaw family carries a mutation in one of those three amyloid-related genes.

Around the time Redshaw's mother started having memory problems in the late 1990s, scientists were beginning to suspect that cognitive decline was just the tail end of a very long process. Studying the adult children of Alzheimer's patients, John C. Morris, MD, the Harvey A. and Dorismae Hacker Friedman Distinguished Professor of Neurology and then the director of WashU's Charles F. and Joanne Knight Alzheimer Disease Research Center, discovered the characteristic amyloid plaques of Alzheimer's in living people with no cognitive impairments. Morris also found that people with the highest amyloid levels were the most likely to develop memory and thinking problems later — evidence that amyloid builds up before cognitive symptoms emerge.

Discovering preclinical Alzheimer's changed the game. It provided an opening for an intervention in which people on the road to dementia could still be pushed onto a safer path. All that doctors needed were (1) a way to find such people, and (2) a way to reduce the amyloid in their brains. In 2006, when Giesecki died, they had neither. Now, both are in reach.

STEP NO. 1: FIND THOSE AT RISK

After his mother's death, Ryan Redshaw continued living with his stepfather in Florida until he finished high school. After graduation, he moved to Austin, Texas, for college, then returned to Florida to begin a career in marketing. Scientists now know that amyloid starts accumulating two decades or more before Alzheimer's symptoms set in. As Redshaw began his adult life, the disease may have been taking hold already in his brain.

Meanwhile, in 2005, Randall J. Bateman, MD, the Charles F. and Joanne Knight Distinguished Professor of Neurology, started the Familial Adult Children Study at Washington University, to study families like the Redshaws that carry a mutation in one of the three amyloid-related genes. The study was a deep dive into their biology, using a technique Bateman co-invented called Stable Isotope Labeling Kinetics (SILK) to study amyloid production and clearance, along with cognitive testing, brain imaging, and analysis of blood and spinal fluid at



(Pages 20–21)
On Jan. 22, Ryan Redshaw, who was diagnosed with inherited Alzheimer's last summer, became a participant in the Tau NexGen clinical trial. Over two days, he received a series of scans, including a PET imaging scan that uses an imaging agent to show the disease's progression. (Above) Then on Jan. 24, Redshaw received his first infusion from Kathryn Schubert, a Clinical and Translational Research Unit staff nurse, as part of the clinical trial.

frequent intervals. The goal was to learn more about the natural history of the disease, and particularly the preclinical stage. All members of such families would be invited to participate, regardless of mutation status. Those who did not inherit the mutation provided a natural comparison group for those who did, similar in age, genetics and lifestyle. In 2007, Morris started writing up a proposal to expand the Familial Adult Children Study into what would become DIAN, a nationwide — now global — network of centers to study such families.

For the families, it was the first time anyone had focused attention on finding the underlying causes of their disease in a systematic way. "There had never been a coordinated approach to understanding this form of Alzheimer's disease," Morris says. "Some families were unaware that there were other families like them. They thought they were the only ones."

Isolation bred shame and secrecy, says Wendy Sigurdson, a clinical nurse coordinator who has been working with DIAN participants at Washington University from the beginning. "I remember one mother who came in with her son soon after we started. The father had died of early-onset Alzheimer's years before. She said people had blamed her for her husband's illness, telling her that she was not feeding him properly," Sigurdson says. "It was so hard for these families when nobody knew what was going on."

Morris received a grant from the National Institutes of Health in 2008 to fund DIAN, and he became the principal investigator and Washington University the lead site. Today, DIAN spans 40 sites across 15 countries and five continents, and it follows more than 500 family members globally. Of note, DIAN was conceived as a partnership between families and researchers. For example, four family members are seated on the steering committee. Further, DIAN has hosted conferences

since 2015 to keep families informed about the progress of the research program and get their feedback.

The DIAN observational study and families such as the Redshaws are a major reason the first goal is close to realization. Mutation carriers usually develop symptoms around the same age as their parents. By studying people genetically destined to develop symptoms at a known age, DIAN researchers have been able to piece together the hidden sequence of molecular and cellular events that culminates in cognitive symptoms. Studies in other populations verified that people who develop Alzheimer's at older ages follow the same sequence, just later in life.

This detailed understanding of how Alzheimer's disease starts and progresses over three decades — in members of DIAN families as well as people with nongenetic forms of the disease — underpins the first generation of diagnostic tools capable of identifying people in early stages of the disease, when symptoms are mild and difficult to diagnose. Among those new diagnostic tools is a blood test developed by Bateman and a team of WashU scientists based on research in people with late-onset, nongenetic Alzheimer's. The test received a "Breakthrough Device" designation from



(Above) Randall Bateman, MD (right), director of the Dominantly Inherited Alzheimer Network (DIAN) and founding director of the DIAN-Trials Unit (DIAN-TU), confers with research technician Olatayo Ajenifuja. In his lab, Bateman trains junior faculty, postdoctoral fellows, graduate students and undergraduates as they investigate the causes and methods of diagnosis and treatment of Alzheimer's disease by using a wide variety of assays and techniques.

the FDA and was approved for clinical use in 2020. An updated version of the test not only identifies people with amyloid in their brains but pinpoints how far the disease has progressed.

By providing some of the scientific knowledge that makes early diagnosis feasible, the DIAN families have given the rest of us a priceless gift. After all, they don't need any fancy tests to tell them they're at risk of developing dementia. They live under the shadow of that risk every day.

STEP NO. 2: TREAT THEM

"My patients care about thinking, about memories and about taking care of themselves," says Bateman, the founding director of DIAN-TU, DIAN's clinical trials unit (Bateman also succeeded Morris as principal investigator of DIAN). "The goal was always not only to understand the process, but to intervene. In medicine, the way we intervene starts with a clinical trial."

The logic was this: If amyloid sets the whole pathological cascade in motion, then removing amyloid early, when symptoms are mild or undetectable, should cut the cascade short. For the DIAN families, this would be their first chance to participate in a clinical trial.

They were routinely excluded from other Alzheimer's trials, as they were deemed outliers who might skew the data. But for a prevention trial, they were ideal. Researchers knew who was going to develop cognitive symptoms and when, so it would be relatively easy to tell if the experimental treatment made a difference. Plus, there was already an international network set up that could help perform the trial.

Still, it was a hard sell. A prevention trial had never been conducted in Alzheimer's disease. More than 100 treatment trials had been done, with a success rate of essentially zero. With so much uncertainty, Bateman concluded that their best chance of success lay in testing multiple drugs at once. He designed a novel trial platform with three drug arms and a shared placebo group. But this created a new problem: All drug trials have a single sponsor responsible for running the trial, normally a pharmaceutical company. With three drugs, there were three potential sponsors, none of which was willing to give up control to a competitor. Washington University was the only neutral party.

"It was really fortunate that the university leadership at the time — Chancellor Mark Wrighton, Provost Holden Thorp and others — backed this very innovative and, frankly, risky idea," Bateman says. "And they did it for the right reasons. They said, 'This is our mission. We should be trying to improve human health.' If they hadn't been willing to take that risk, DIAN-TU would have never existed."

DIAN-TU launched in 2012 as the first Alzheimer's prevention trial in the world, using two drugs that attack amyloid in different ways. A third drug was added in 2017, but it was discontinued the following year due to safety concerns. Participation required serious commitment: injections or IV drug infusions once every four weeks, plus annual brain scans, spinal taps, blood draws, and cognitive and clinical evaluations.

Even as DIAN-TU got underway, its foundational hypothesis — that targeting amyloid was the key to stopping Alzheimer’s — began to crack. Throughout the 2010s, amyloid drug after amyloid drug failed in clinical trials. Pharma companies started shutting down their amyloid drug-development programs. Funders stopped supporting amyloid approaches. Two noted Alzheimer’s researchers famously published a letter in *The Wall Street Journal* in 2015 decrying the “groupthink mentality” that compelled scientists to continue focusing on amyloid despite evidence the approach “performs at or worse than a placebo, coconut oil or marijuana.” The DIAN-TU’s top-line results, reported in 2020, were just as disappointing as other clinical trials of the time: No benefit was found for either drug in terms of cognitive function.

“People were somber, deflated,” Bateman says. “We tried so hard for so long, and we had nothing to show for it. And then, just a few years ago, we saw a glimmer of hope. Data started coming in from other trials that showed the amyloid hypothesis wasn’t dead after all. You see one trial, but it’s a small trial, with some benefit, and you think, ‘Maybe?’ And then there’s a second trial, and you think, ‘Wow, maybe this is something.’ And then the third trial is a big one, and by this time, everyone knows it’s working.”

On the heels of a frustrating and demoralizing decade, the Alzheimer’s community suddenly found itself with a win. The long-delayed success was the result of years of incremental improvements in Alzheimer’s clinical trials. Researchers at Washington University and elsewhere identified and developed molecular markers of disease that made it possible to screen potential participants more effectively; before such biomarkers were available, up to 30% of clinical trial participants probably didn’t have Alzheimer’s at all. In addition, trials shifted from enrolling people with more advanced symptoms to enrolling those with milder symptoms, as the disease’s natural history indicated that amyloid drugs likely would be more effective when begun sooner rather than later.

“I started in Alzheimer’s research 40 years ago, and the advances of the past three years are beyond anything I had anticipated seeing in my career,” Morris says. “Finally, we have something that benefits patients. I will be the first to admit that the amount of benefit doesn’t rise to the level of a cure, but it’s a beginning.”

LOOKING AHEAD

For the Redshaws, the tide also turned in the 2020s, but for the worse. “It’s hard to say when he started showing symptoms,” Liana Redshaw says. “For the past several years, we’ve been raising babies. There’s a lot of chaos and not a lot of sleep. It’s hard to tell ordinary mistakes from unusual mistakes.”

By the summer of 2023, however, it was clear something was not right. “I’d be dressing the kids, and I’d say to Ryan, ‘Could you go get some clothes?’ And he’d go and not come back. I’d find him doing something else,” Liana Redshaw says. “He just seemed off. He was distant when we’d always had a close relationship.”

Ryan Redshaw was diagnosed with Alzheimer’s last summer while his wife was pregnant with their third child. Despite the demands on two working parents raising a young family, the couple still makes time most nights, after the kids are in bed, to document their day on TikTok. It’s a way for them to strengthen their connection with each other, process their experiences and raise awareness of early-onset Alzheimer’s.

Redshaw is enrolled in the second iteration of DIAN-TU.

A later, more thorough analysis of data from the first DIAN-TU revealed encouraging signs: One of the drugs improved molecular markers of disease and then in a follow-up study was found to delay symptom onset.

“One thing we learned from the amyloid trials is that you can’t expect to stop Alzheimer’s completely by attacking just one

The Escapee

Doug Whitney’s large extended family was one of the first identified for the DIAN study. Already past the expected age of onset when he was recruited, Whitney doubted that he carried the mutation but joined DIAN anyway, mainly to encourage his younger family members.

“We almost didn’t test him because he was fine,” says Wendy Sigurdson, a clinical nurse coordinator who works with DIAN participants. “To say everyone was surprised that he was a carrier would be an understatement.”

Today, Whitney is 20 years past the expected age of onset and still as sharp as ever. His case has become the object of intense scientific scrutiny.

“Every time we would look at the maps of how people’s brains were changing, one map always looked different,” says Tammie Benzinger, MD, PhD, a professor of radiology who leads the DIAN imaging team. “We’d think, ‘What happened here? Did we mess up?’ His brain looks like an ordinary older person’s. He doesn’t have most of the brain findings that we expect to see in mutation carriers.”

An in-depth analysis by geneticist Carlos Cruchaga, PhD, a professor of psychiatry and the co-leader of the DIAN genetics core, suggests that Whitney carries genetic variants that counterbalance the effects of the mutation in the amyloid-related gene. His brain cells seem to be unusually adept at eliminating misfolded proteins, an important ability because misfolded proteins play a role in the formation of amyloid plaques.

Inspired by Whitney, DIAN is launching a protective factors study, led by Jorge Llibre-Guerra, MD, an assistant professor of neurology and assistant medical director of DIAN, to identify the genetic, social and environmental factors that influence the age of symptom onset. The hope is that understanding the factors that delay cognitive symptoms in DIAN families could lead to new strategies to prevent or delay cognitive decline in the general population.

part of it,” says B. Joy Snider, MD, PhD, a professor of neurology at the medical school who runs the Alzheimer’s clinical trials. “We must start thinking about additive therapies. At some point, we’ll probably be giving two or three or even more drugs that may vary depending on the stage of disease and other factors.”

The second DIAN-TU trial is called Tau NexGen because it includes experimental therapies targeting tau, another brain protein that also plays a critical role in Alzheimer’s disease. The first arm of Tau NexGen, the one Ryan Redshaw is in, combines the FDA-approved amyloid drug lecanemab with an investigational tau drug. Both drugs are made by Eisai Co., Ltd., a Japanese pharmaceutical company that collaborates closely with Washington University on Alzheimer’s drug discovery projects. Two more arms featuring combinations of amyloid and tau drugs are planned.

The DIAN network also is preparing to launch a third trial. Called the Primary Prevention trial and led by Eric McDade, DO, a professor of neurology, this trial is aimed at young adults who aren’t expected to develop symptoms for 15 years or more.

“We can detect signs of pathology up to two decades before symptoms arise,” McDade says. “That opens this window of opportunity to alter the amyloid pathway at the very earliest stage. The goal is to stop the disease process before it really gets started and prevent symptoms from ever emerging.” If it works, the Primary Prevention trial will break the curse that has haunted generations of DIAN families.

Wherever these studies lead, though, they won’t get there fast enough for some members of DIAN families. At enrollment, participants are asked to donate their brains upon their deaths. Nearly everyone agrees.

“I have one young gentleman who has been in the studies and has begun to deteriorate. It’s only a matter of time now,” Sigurdson says. “I’m going to have to call his mother and work with her to arrange for his brain donation. This call is always so, so tough. But for the participants, it’s their final gift — a wonderful, precious gift — and we appreciate it so much.”

After the brain is examined by the neuropathology team, Bateman will call the family to give them the results and thank them again for all they have done for science. It is one last recognition of the enormous sacrifices they have made to provide the crucial clues that could end Alzheimer’s forever — not just for their own children, but for everyone.

ARE CLUES TO ALZHEIMER’S *hidden in our bowels?*

WashU Medicine
researchers explore the
gut-brain connection.

From a bacterium’s point of view, a person is a walking, talking ecosystem. Tens of trillions of bacteria, representing 1,000 or more different species, live on and in the human body. We couldn’t live without our microscopic companions. They help digest food, provide vitamins, modulate immune responses and ward off harmful bacteria and fungi. The chemical compounds they release as byproducts of their metabolism influence, directly or indirectly, every organ in the human body.

Especially the brain. Doctors have long been aware of a special link between gut health and brain health. Digestive issues are common among people with neurological conditions including Alzheimer’s disease, Down syndrome and autism, and people with gastrointestinal conditions such as irritable bowel syndrome are at increased risk of psychiatric symptoms such as depression and anxiety.

“I can’t tell you how often I have a patient come in and say, ‘I’m having all these digestive problems,’” says neurologist Beau M. Ances, MD, PhD, the Daniel J. Brennan, MD Professor of Neurology. “I’m never surprised because there’s probably a connection.”

Ances co-led one of a complementary pair of studies published last year that provided key evidence of the close linkage between Alzheimer’s disease and the community of bacteria that live in the gut, known as the gut microbiome. The findings open the door to new ways of addressing Alzheimer’s via the gut, such as by using stool samples to identify people at risk before symptoms arise or treating patients with probiotics to reshape their gut microbiomes.

The findings also add to the mounting evidence that the gut microbiome plays a role in every aspect of how our brains work, from development to normal function to disease and degeneration. As a global leader in the science of both the microbiome and the brain, the Washington University School of Medicine stands at the forefront of efforts to understand how our bowels influence the health of our brains.

Jeffrey I. Gordon, MD, the Dr. Robert J. Glaser Distinguished University Professor and director of the Edison Family Center for Genome Sciences and Systems Biology, has been called the “father of the microbiome.” His work on the microbiome’s role in obesity and malnutrition has revolutionized our understanding of human biology, implicating the gut’s microbial residents in orchestrating healthy growth and development when these communities work well, and in causing disease when they do not. Many of his discoveries were made using specialized mouse models that allow researchers to measure the impact of

“We can detect signs of pathology up to two decades before symptoms arise. ... The goal is to stop the disease process before it ... gets started and prevent symptoms from ever emerging.”



(Above) Researchers including Gautam Dantas, PhD (left); Beau Ances, MD, PhD (not shown); and postdoctoral researcher Aura Ferreiro, PhD (right), showed in a 2023 published study that the microbiome is already significantly different in the earliest stage of Alzheimer's disease — after brain changes have begun but before cognitive symptoms become apparent.

gut microbial communities on the rest of the body. For a study published in January 2023, Gordon teamed up with David M. Holtzman, MD, the Barbara Burton and Reuben M. Morriss III Distinguished Professor and now the director of the Charles F. and Joanne Knight Alzheimer Disease Research Center at WashU Medicine, to use such mouse models to investigate how gut bacteria affect the brain. Their collaboration revealed that gut bacteria — partly by producing compounds such as short-chain fatty acids — affect the behavior of immune cells throughout the body, including ones in the brain that can damage brain tissue and exacerbate neurodegeneration in conditions such as Alzheimer's disease.

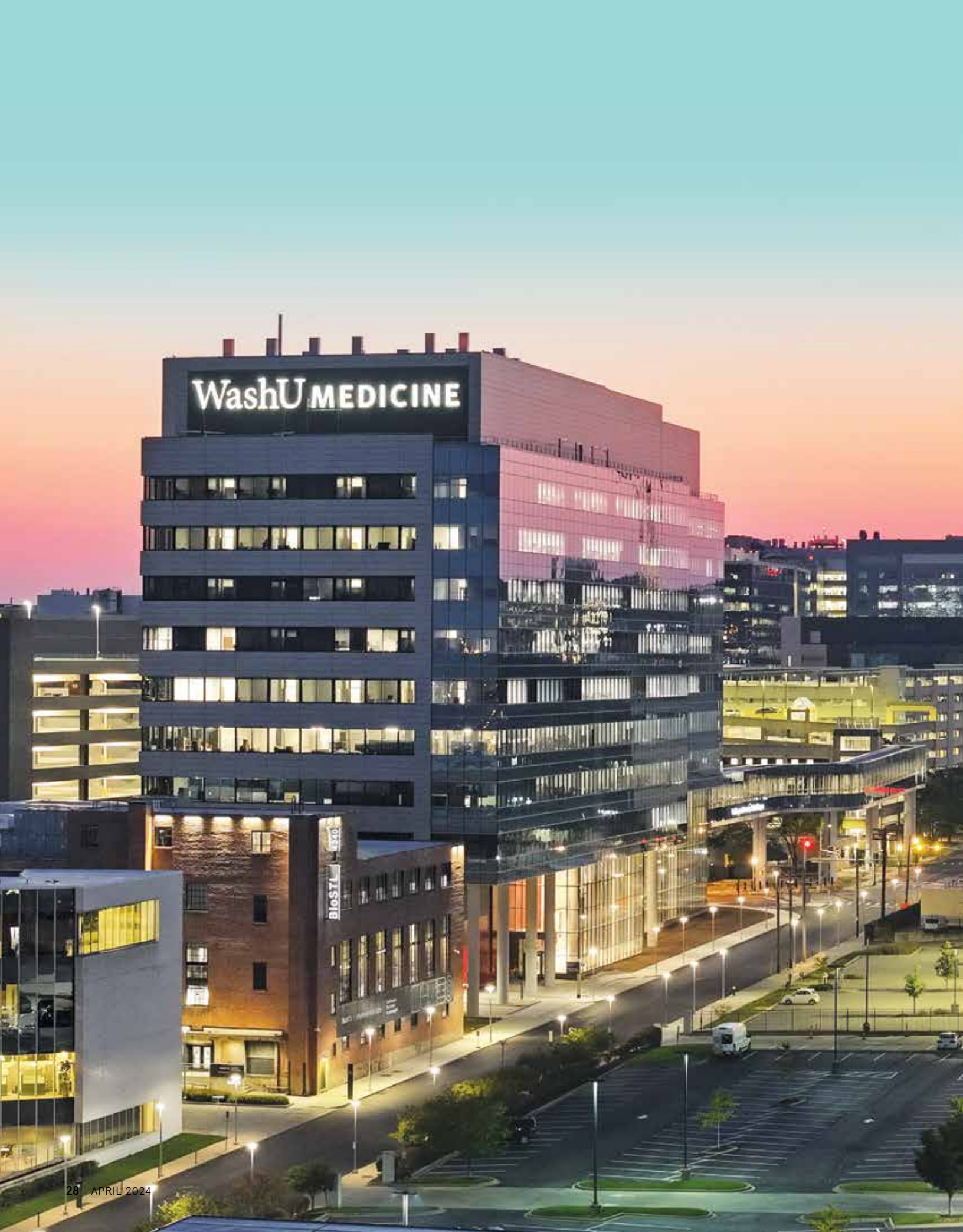
In Ances' study, published in June 2023, he collaborated with Gautam Dantas, PhD, the Conan Professor of Laboratory and Genomic Medicine and an expert on disruptions to the microbiome, to investigate how the microbiome differs in people at various stages of Alzheimer's disease. Scientists already knew that the gut microbiomes of people with symptomatic Alzheimer's differ from the microbiomes of healthy people of the same age. But Ances and Dantas showed that the microbiome was already significantly different in the earliest stage of the disease — after brain changes have begun but before cognitive symptoms become apparent.

Taken together, the two studies indicate that microbiome changes are closely linked to, and may even contribute to, the brain changes of Alzheimer's disease. The two pairs of researchers are now working together to figure out whether the microbiome changes of Alzheimer's disease are a cause

or a result of the brain changes. They are taking stool samples from people with symptomatic Alzheimer's disease and introducing them into mice lacking gut bacteria to see whether the gut bacteria trigger Alzheimer's-like brain changes in the mice.

"The microbiome shouldn't be thought of as an accessory to the human body; it's an organ," Dantas says. "Like any other organ, it interacts with and influences the rest of the body, and it is integral to normal development and health. But unlike other organs, the microbiome is fundamentally malleable. We can change it in ways that we cannot do with any other organ.

"That gives us an opportunity," Dantas continues. "Envision a future where we'd have a very simple stool test to identify people with disease or at risk of disease. And then we could treat them with therapies that promote a healthier microbiome or that mimic healthy changes to the microbiome. There is so much potential for new ways of promoting human health that come from understanding the gut-brain connection."



WashU MEDICINE

BIOSTL

NAVIGATE THE NEUROSCIENCES at WashU Medicine

Explore the extensive scope of neuroscience research ongoing at WashU Medicine in these examples.

Pain and addiction

BREAKING THE GRIP

Pull on any loop of the Gordian knot that is finding treatments for pain and addiction, and the whole knot just tightens. Powerful painkillers come with a daunting risk of chemical dependency. The persistent sadness, worry and inability to find joy in life that can accompany chronic pain make substance use more appealing.

“Understanding pain and addiction is one of the most pressing needs in health care,” says Michael S. Avidan, MBBCh, the Dr. Seymour and Rose T. Brown Professor of Anesthesiology and head of the Department of Anesthesiology. “The way we treat pain has exacerbated the opioid epidemic, which is one of the biggest scourges in our society. We’re not going to solve this by waging a war on drugs. We’re going to address this by understanding the mechanisms of pain, why addiction occurs and by translating scientific insights into clinical practice.”

PAIN AND PLEASURE

It’s hard to be happy when you’re always hurting. That’s one reason opioids can be so addictive — they dampen both physical and emotional pain, leaving people temporarily pain-free and euphoric. Neuroscientists Meaghan C. Creed, PhD, and Jose A. Moron-Concepcion, PhD, the Henry Elliot Mallinckrodt Professor of Anesthesiology, have identified circuitry in the brain that links pain to negative emotions such as sadness, anxiety and an inability to feel joy. The finding suggests that modulating the circuitry could treat both emotional and physical suffering, an approach that could reduce the addictive potential of opioids and improve quality of life for people with chronic pain, even when it’s not possible to completely eliminate the pain itself.

“By targeting the emotional aspects of pain, we hope to make pain less debilitating so that patients won’t crave the emotional high they get from opioids,” says Moron-Concepcion.

Sleep quality

KEEPING THE BRAIN SHARP

There’s nothing like a good night’s sleep. Apart from the pleasure of waking up refreshed and relaxed, sleep consolidates memories and enhances learning and creativity, which is why people grappling with a thorny problem are well advised to “sleep on it.” Sleep allows time for the brain’s housekeeping cells to clear away the molecular debris from the day, so the brain can start the next day fresh. And poor sleep doesn’t just make people grouchy; it has been linked to diabetes, heart disease, depression, Alzheimer’s and many other chronic conditions. WashU Medicine scientists are leaders in exploring sleep, from the fundamental question of why we do it in the first place, to how and why sleep disturbances undermine health and what can be done to address it.

SLEEP IS THE BEST MEDICINE

To Brendan P. Lucey, MD, director of the Washington University Sleep Medicine Center, the goal is to help people sleep better. After his lab and others showed that poor sleep increases brain levels of two damaging Alzheimer’s proteins, he set out to determine whether good sleep could lower the levels of toxic proteins and thereby prevent or delay the onset of cognitive symptoms. He leads an ongoing phase 2 clinical trial of suvorexant, an FDA-approved insomnia drug. Preliminary results have been promising, hinting at the potential of sleep medications to slow or stop the progression of Alzheimer’s disease.

Fast fact:
The Centers for Disease Control and Prevention estimates that more than 51 million people — 20% of U.S. adults — have chronic pain.

Fast facts:

The human brain

- Has an estimated 86 billion neurons and 100 trillion synapses.
- Doubles in size in the first year of life.
- Reaches 80% of its adult size by age 3 and 90% by age 5.

Exposure to stress and trauma can have long-term negative consequences for a child's brain, whereas talking, reading and playing can stimulate brain growth.



Brain tumors

FIGHTING WITH TARGETED TOOLS

Whether malignant or benign, a brain tumor is life-altering. Malignant tumors can spread and become deadly. And “benign” doesn’t mean harmless; benign tumors can cause serious problems such as paralysis, seizures and personality changes, depending on which parts of the brain they affect.

“Brain tumors affect the fundamental attributes of people — their personality and behavior; their ability to move, speak, see, think — that are just such essential characteristics of a human being,” says neurosurgeon Albert H. Kim, MD, PhD, the founding director of the Brain Tumor Center at Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine. “To understand and treat brain tumors, we have to attack them from different angles and tailor therapy to each person.”

ZIKA'S SILVER LINING

Zika virus made headlines worldwide in 2015, when it caused thousands of babies in Brazil to be born with tiny, misshapen brains. Neuro-oncologist Milan G. Chheda, MD, and virologist Michael S. Diamond, MD, PhD, aim to harness the virus's infamous power to kill brain cells and direct it against brain cancers. They have shown that the virus can activate immune cells to destroy an aggressive brain cancer in mice, giving a powerful boost to an immunotherapy drug and sparking long-lasting immunological memory that can ward off tumor recurrence for at least 18 months.

Human development

STARTING OUT STRONG

The first 1,000 days, from conception to around the second birthday, are a period of exponential brain growth and development. Anything that affects the process — including genetic alterations, chemicals such as alcohol or the home environment — can have lifelong consequences. WashU Medicine researchers are leading efforts to understand the factors that influence brain development to promote healthy brains and help people live their best lives.

BUILDING THE BRAIN

How do billions of neurons organize themselves into structures and networks to form the enormously complex machine that is the brain? The answer could shed light on the roots of conditions such as epilepsy, autism and intellectual disability, but studying the developing brain in utero has proved challenging.

Linda J. Richards, PhD, the Edison Professor of Neuroscience and head of the Department of Neuroscience, has pioneered the study of brain development in marsupials that are born 16 days after conception. They are born with brains little more than nubs and undergo the bulk of development after birth. Recently, Richards showed that distinct activity patterns emerge in different brain areas just weeks after conception. “Would alterations to patterned activity disrupt how brain circuits are set up, and if so, could that cause developmental disorders?” she asks.

Neurological injury

SMOOTHING THE ROAD TO RECOVERY

A car accident, a gunshot, a stroke — in an instant, everything changes. Returning to the way things were tends to be slow and difficult, with no guarantees. WashU Medicine researchers are making crucial discoveries regarding the biology of regeneration and recovery. These discoveries pave the way toward — and in some cases already have achieved — innovative new therapies and devices to help people recover from neurological injury as fully as possible.

Fast facts:
Every year in the U.S., more than 795,000 people have a stroke, which is a leading cause of serious long-term disability. More than half of stroke survivors age 65 and older have reduced mobility.

A BREAKTHROUGH DEVICE

The first FDA-approved device that helps stroke patients retrain their brains is based on research by Eric C. Leuthardt, MD, the Shi Hui Huang Professor of Neurological Surgery, and biomedical engineer Daniel W. Moran, PhD. Leuthardt's insights into motor signaling in the brain led to the development of the IpsiHand, in which patients use a brain-computer interface to control a robotic glove that opens and closes their hands. Repeated use gradually teaches patients' brains to do it on their own, restoring significant hand function. The FDA designated the IpsiHand a "Breakthrough Device," which means it meets a critical unmet need, and gave it "de novo" authorization, as there was no similar medical device on the market.

Immune-brain nexus

WIELDING A DOUBLE-EDGED SWORD

The brain was once thought to be off-limits to the immune system, too sensitive to tolerate immune cells with their sharp weapons. Now, scientists know that immune cells and molecules flow into and out of the central nervous system all the time, supporting normal brain function, fighting infections and tumors, and, yes, sometimes causing injury and disease. The nexus between the immune and nervous systems provides new opportunities to intervene to promote health and prevent or treat neuroinfectious, neuroimmune and neurological conditions ranging from COVID-19 to multiple sclerosis to autism.

IMMUNE SURVEILLANCE

The idea that the immune system surveils and protects the brain is now widely accepted, but until recently it wasn't clear how and where. In 2015, neuroscientist and immunologist Jonathan "Jony" Kipnis, PhD, found a network of vessels in the meninges — the tissues encasing the brain — that drains fluid and small molecules from the brain into the lymph nodes. Subsequent research indicated that immune cells stationed in the meninges inspect fluid as it washes out of the brain. Such cells are prepared to initiate an immune response if they detect signs of infection or injury, Kipnis says. "The immune

cells that sit on the borders of the brain could potentially be a feasible target for treating neurological diseases such as Alzheimer's, once we better understand their role in these complex diseases."

Neurodegeneration

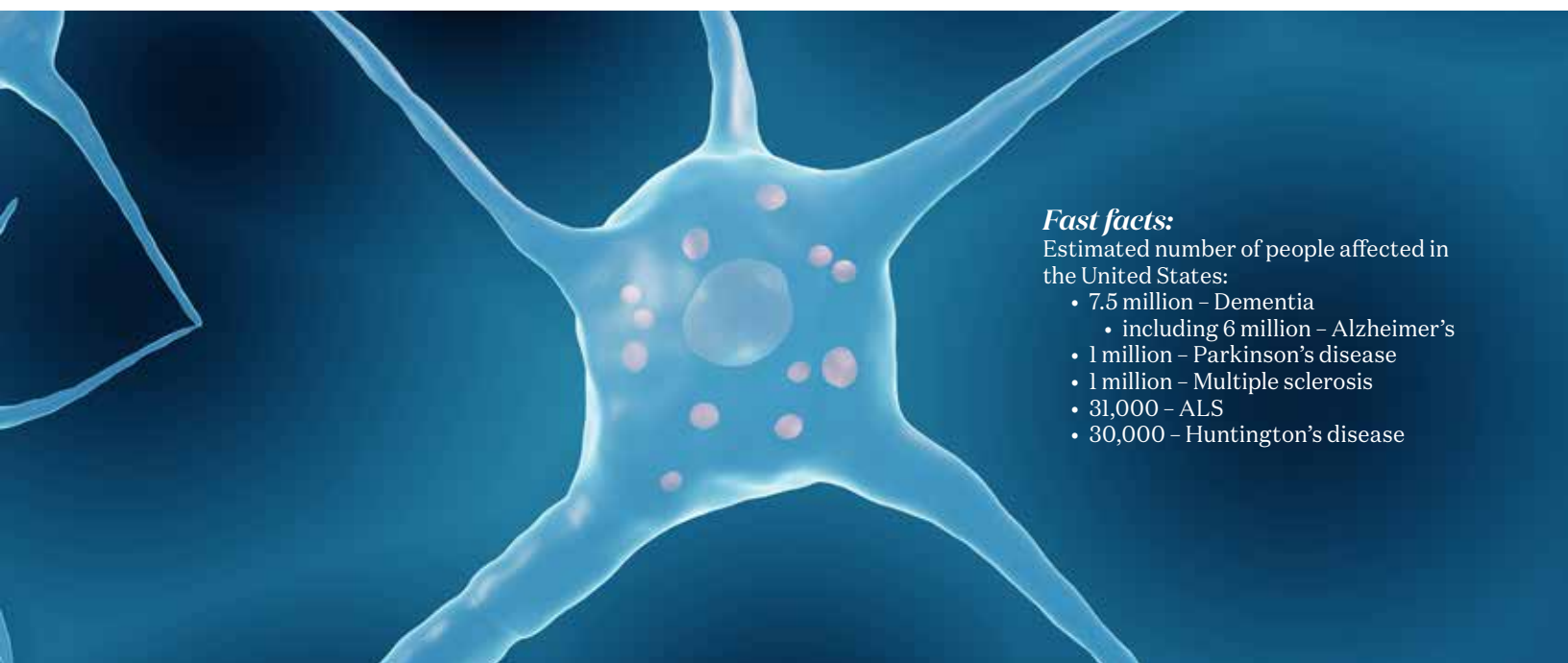
PRESERVING FUNCTION

Neurodegeneration tends to start slowly, almost imperceptibly. For a variety of reasons, neurons gradually stop functioning as well as they used to, and some start dying. In Alzheimer's disease, the most common neurodegenerative disease, signs of decay are detectable long before memory issues arise. This slow start provides an opportunity to intervene while the problem is still manageable. WashU Medicine researchers are working on detecting and healing ailing neurons, opening paths to new treatments.

THERAPY FOR FEW; HOPE FOR MANY

In April 2023, the FDA approved the drug tofersen — based on international clinical trials led by Timothy M. Miller, MD, PhD, the David Clayson Professor of Neurology — for an inherited form of amyotrophic lateral sclerosis (ALS), a paralyzing neurological disease. The drug targets a gene called SOD1, and clinical trials show that it slows disease progression in the 2% of ALS patients with SOD1 mutations. The drug's success provides new hope for disease-changing therapies for other forms of ALS, once thought to be untreatable. "My whole career has been built on the assumption that ALS is a treatable disorder," Miller says.

(Below illustration)
Lewy bodies — abnormal deposits of proteins called alpha-synucleins that can be found in brain cells (neurons) — cause both Parkinson's disease and Lewy body dementia.



Fast facts:

Estimated number of people affected in the United States:

- 7.5 million – Dementia
 - including 6 million – Alzheimer's
- 1 million – Parkinson's disease
- 1 million – Multiple sclerosis
- 31,000 – ALS
- 30,000 – Huntington's disease



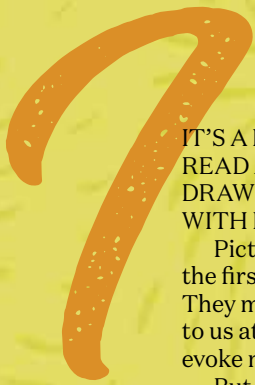
Dreamer

WashU alumni are writing and illustrating the books you wish you could have read as a kid — increasing diversity one picture book at a time.

■ BY ROSALIND EARLY, AB '03



ILLUSTRATIONS FROM DAN RUBIN'S DRAGONS LOVE TACOS AND DRAGONS LOVE TACOS 2.



IT'S A RITE OF PASSAGE GROWING UP: ONE DAY, YOU WILL READ A BOOK THAT HAS NO PICTURES. NOT EVEN A LINE DRAWING. EVEN THOSE WHO GREET THIS MILESTONE WITH EXCITEMENT FEEL A TWINGE OF LOSS.

Picture books bring the world of letters alive for us for the first time. They are the books we learn to read with. They mark the end of each day, as a beloved adult reads them to us at bedtime. Long after we've given them up, they still evoke nostalgia.

But what does it take to craft those cherished picture books? A lot of effort, ingenuity and imagination, it turns out.

"I think people think it's easy until they try to write one," says award-winning children's author Anne Wynter, AB '06.

Fortunately, two programs at Washington University are preparing students for the field. The Communication Design program at the Sam Fox School of Design & Visual Arts teaches students about the world of commercial art by having them learn design and illustration.

"Design and illustration are really interconnected," says John Hendrix, the Kenneth E. Hudson Professor of Art at the Sam Fox School and a *New York Times*-bestselling children's book author himself (*The Faithful Spy: Dietrich Bonhoeffer and the Plot to Kill Hitler*; *Miracle Man: The Story of Jesus*; and *Drawing Is Magic*, to name a few). "Illustration does not exist separate from the act of reading. In the world of children's books, it is also a design problem. It is the illustrator who decides where text and images fit on each spread.

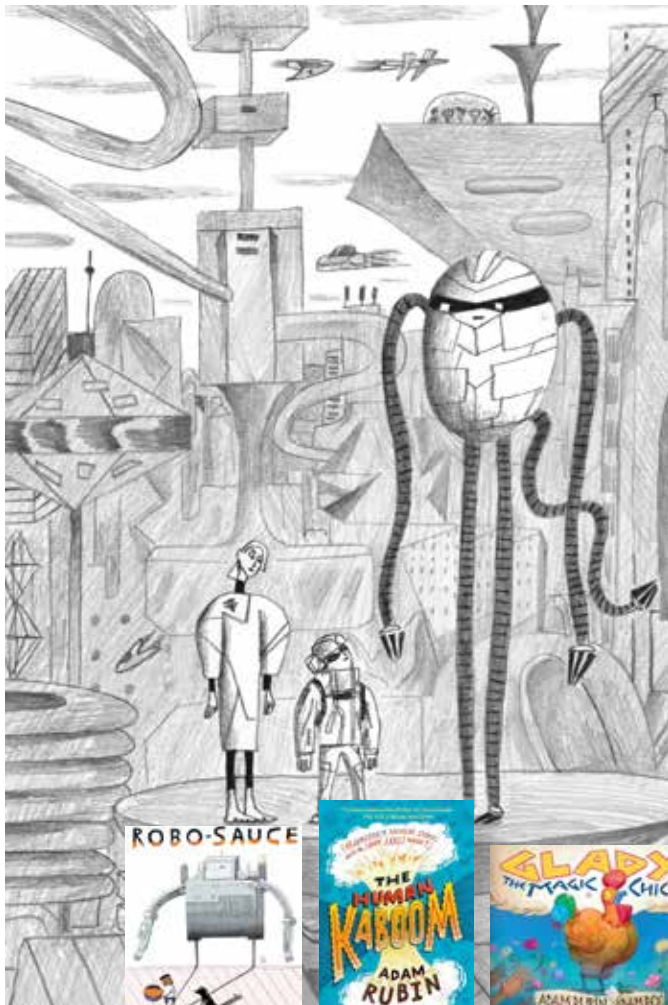
"At the Sam Fox School, we treat an illustrator not as someone just waiting for the phone to ring to get an assignment, but as an author and the person who can also write the ideas and the stories they will then illustrate," says Hendrix, who is also founding chair of the MFA in Illustration & Visual Culture program.

Over in Arts & Sciences, the Children's Studies minor is helping students learn "what has been done in literature for children," says Amy Pawl, the program's director and a teaching professor in English. One thing students learn is to see how young readers of color have long been ignored in children's literature.

"The minor helps students feel the imperative to create really good, representative, inclusive, powerful literature for all children now," Pawl says.

The results are children's books that have won awards, inspired birthday parties, paid tribute to trailblazing historical figures and increased representation. And they have been the stars of many, many bedtimes.





“It’s so important to encourage creativity in kids. A kind word from an authority figure goes a long way. That was something that inspired me as a young writer and what I’m trying to do for as many kids as possible now.”

MAGIC IN A BOOK

Adam Rubin, BFA ’05, is something of a play expert. He’s a partner at Art of Play, where he makes real-life optical illusions. One such illusion pairs two dishes that seem to grow and shrink when laid next to each other.

He has also crafted magic tricks for the likes of David Blaine and Derek DelGaudio. He founded the long-form improv group Suspicious of Whistlers at WashU, and during the pandemic, he created Bizarre Brooklyn, a “magical mystery and history tour” of the Brooklyn Heights neighborhood.

“Some people lose their connection with the childlike sense of wonder they had when they were young,” Rubin says. “I try very hard to hang onto that.”

It definitely shows up in his writing as the author of children’s books including the juggernaut *Dragons Love Tacos* and its sequels. *Dragons Love Tacos* has sold more than 5 million copies and inspired legions of devoted fans (as well as a few birthday parties).

“It’s very exciting for kids when things go haywire if there’s no actual danger,” Rubin says. In the book, dragons accidentally burn a house down.

At WashU, Rubin wasn’t sure what he would study. He had always loved writing, but he was also interested in art. His willingness to take classes in both led him to work in advertising and then later to create, with illustrator Daniel Salmieri, his first picture books.

Another WashU alum, Corey Mintz, BFA ’05, introduced the duo, and their first effort was *Those Darn Squirrels*, about a man battling squirrels at his birdfeeder. It was based on Rubin’s dad.

“It was fun to watch a grown man engage in a battle of wits with a bunch of rodents and lose,” Rubin says. “Now that I’m grown, I’m having the same problem.”

Rubin and Salmieri later got agents and created a bunch of other books including *Robo-Sauce*, which turns into a robot at the end. Rubin has also worked with other artists, such as Adam Rex, who illustrated *Gladys the Magic Chicken*.

After years of creating picture books, Rubin recently pivoted to middle school readers with his books *The Ice Cream Machine* and *The Human Kaboom*. Each book contains six stories with the same title. Both became *New York Times* bestsellers. And in each one, he encouraged young readers to mail him stories that riffed on the book titles.

The result: Rubin received hundreds of stories for each book and selected six to appear in the paperback versions. The idea was to encourage kids to be not just readers, but writers, too.

“It’s so important to encourage creativity in kids,” Rubin says. “A kind word from an authority figure goes a long way. That was something that inspired me as a young writer and what I’m trying to do for as many kids as possible now.”



“I wanted to write children’s books because I wanted to see characters who look like me and my friends and family.”

PLANTING THE SEED

To make Rubin’s point, Anne Wynter, AB ’06, studied drama at WashU, but she took a course on writing for children and remembers getting an encouraging note from the professor on her portfolio. “He wrote that I should keep writing, and that I have what it takes to be a professional writer one day,” Wynter says. “That was really, really encouraging.”

The professor, Gerald Early, the Merle Kling Professor of Modern Letters in Arts & Sciences, planted a seed that by 2017 had grown into a full-blown picture book.

“What made me decide to work on picture books specifically was when I had my children and we were reading a ton of picture books,” Wynter says. She wrote *Everybody in the Red Brick Building* about a baby in an apartment building who cries and starts a chain reaction, waking up one neighbor whose noise then wakes up another.

“I was definitely inspired by the fact that we lived in an apartment, and my second child had a really loud cry,” Wynter says. The book landed Wynter an agent and an Ezra Jack Keats (EJK) Award Honors in 2022. Each year, the EJK Foundation recognizes early career illustrators and writers who create “books that reflect our diverse population, the universal experience of childhood and the strength of family and community.”

“It was amazing seeing people’s reactions, and it’s a really fun book to read aloud,” Wynter says.

Wynter also has written a series of board books about a mischievous toddler. “One of the most fun times I have writing is when I’m writing board books,” she says. “I enjoy creating a rhyming scheme and a story that will appeal to all ages.”

Her second picture book, however, was not as fun. “It was my hardest book to write,” Wynter says. “It went through a lot of iterations and a ton of drafts. But early one morning, a pattern of the words just hit in the right way. And I was like, ‘This is it. I’ve finally found it.’”

The result is *Nell Plants a Tree*, a book about a young girl who plants a pecan tree that she then gets to watch her grandchildren play under and climb. The book, which recently earned Wynter an Ezra Jack Keats Award for writing, features an African American family, as do Wynter’s toddler books.

“I wanted to write children’s books because I wanted to see characters who look like me and my friends and family,” Wynter says. “When I was young, and I was reading a ton of books, I felt like I almost never saw books with protagonists who were Black. So, I wanted to write books that were more representative. It’s really important to me, maybe the most important thing.”



ADDING TO THE TAPESTRY

The first book that Julia Kuo, BFA '07, illustrated was *Clara Lee and the Apple Pie Dream* by Jenny Han. You know, the Jenny Han of *To All the Boys I've Loved Before* and *The Summer I Turned Pretty* fame, both now Netflix series.

Kuo, who found her agent through that project, was brought on by Little Brown editor Alvina Ling, who is known for pioneering Asian American authors, illustrators and other creatives.

As a Taiwanese American, Kuo has a similar aim for her own work, which includes illustrations for *I Dream of Popo*, about a young Taiwanese girl who moves away from her maternal grandmother (Popo) in Taiwan, and *I Am an American: The Wong Kim Ark Story*, about a Chinese American man's fight to have his U.S. citizenship recognized.

"While I'm working toward representation in a basic sense — simply portraying Taiwanese Americans and Asian Americans existing — my goal is specificity: We are not a monolith, and so every additional story that shows nuance and diversity makes a difference," Kuo says.

Kuo came to WashU because she wasn't sure if she wanted to major in business or art. Able to study both, she started leaning toward art. The Communication Design program teed

her up for a career in art, and through Linda Solovic, a Sam Fox School senior lecturer who owns her own studio, Kuo landed a job at American Greetings right after graduation.

In 2010, Kuo found freelance work with such outlets as *The New York Times* while continuing to create public art, run a paper goods shop and do illustration.

"I was pretty open to whatever opportunities came my way," Kuo says of her career.

She recently published two show-stopping picture books that she also wrote: *Let's Do Everything and Nothing* and *Luminous: Living Things That Light Up the Night*.

Let's Do Everything and Nothing is about a girl and her mom doing, well, everything and nothing together. "It juxtaposes the beauty of going on these fabulous adventures with the experience of being still and being at peace and at rest at home together," Kuo says.

Both books have Asian protagonists, and Kuo often hears from fans that they're excited to see themselves in a book. "It's a novel thing for many readers," she says. "So every additional story told by a person of color adds to the richness of who we are — not only for ourselves, but also for others to see and to know us a little bit better."



"So every additional story told by a person of color adds to the richness of who we are — not only for ourselves, but also for others to see and to know us a little bit better."



Unsurprising.

Knicks fans cheered, "Go Wat!"
Other fans booed, "Go home!"

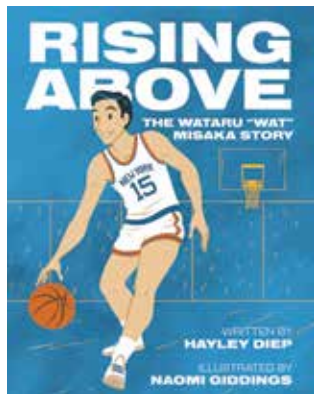
Three games later, Wat was cut from the team without any explanation.

Wat walked away from professional basketball and never looked back. Instead, he returned to Utah, obtained his mechanical engineering degree, and raised his family with the love of his life.

For many years, his name remained unknown.



"The idea of adding to our history of people of color in sports ... was really exciting. I felt honored to be chosen for the project."



DRAWING HISTORY

When Naomi Giddings, BFA '16, received her first children's picture book commission, she wasn't familiar with her subject, Wataru "Wat" Misaka, a Japanese American who broke the NBA's color barrier. But she knew someone who was.

"My grandfather actually remembers back in the 1940s reading about Wat in the Japanese American newspapers of the time," Giddings says. Misaka played for the New York Knicks during the 1947-48 season. Anti-Japanese sentiment was so high, though, that the team let him go after just three games.

This was a post-Pearl Harbor America, where Japanese people were interned in camps for years if they lived on the West Coast, losing all of their personal possessions in the process.

"My grandparents were actually incarcerated during that time," Giddings says. The experience was so harrowing that their families (her grandparents were kids at the time) didn't return to California, but instead moved to Chicago. So illustrating *Rising Above: The Wataru "Wat" Misaka Story* by Hayley Diep was "deeply personal."

The project was personal for Misaka's kids, too, who enhanced Giddings' illustrations by sharing personal details about their dad. "They said, 'He was really good friends with this one athlete,

so if you could feature him on this page, that would be great,'" Giddings recalls.

Giddings had only four months to do the illustrations (a normal timeline is six), but she says she was up for the challenge after her time in the Sam Fox School of Design & Visual Arts.

"The Communication Design program was really wonderful for me because it was so geared toward becoming a professional by working with clients while also getting to do creative things," Giddings says. "There was a point where I got to do a mock-up of a spread for a picture book. That work influenced the picture book that I just did."

Telling the story of a forgotten trailblazer of color also resonated with Giddings. At WashU, her thesis project involved adding diversity to children's books — mostly chapter books, such as *Matilda* or *Esperanza Rising*. Sometimes she'd just depict the characters of color in the book, but when a book didn't have any, she would "reimagine other characters" to "add diversity to the literary canon."

The Misaka story didn't require a reimagining. "The idea of adding to our history of people of color in sports and more largely just people of color being trailblazers and barrier-breakers was really exciting," Giddings says. "I felt honored to be chosen for the project."



Even on bright, sunny days, Eleanor could spot the moon's pale outline high in the sky. She and Grandpa played a game to see who could find it first.

A FAMILY STORY

Twenty years ago, Maggie Knaus, MFA '95, wrote a children's story about her first child, Eleanor.

"My daughter and my father were really close," Knaus recalls. And when Eleanor was still young, she and her family moved from Washington, D.C., where Knaus' father lived, to Canada. But he'd given young Eleanor something to remember him by: the moon. Their shared love of the moon was the touching connection that inspired Knaus to write a story.

"When we moved, a lot of things in the world reminded Eleanor of the moon and of my father," Knaus says.

Her father and daughter both loved the story, but Knaus never had any plans to make it into a book, much less publish it. She was a photographer by trade. In Washington, D.C., she'd operated an art studio that was open to the public. Through people strolling in off the street, Knaus had met her husband and gotten a job at the White House Historical Association.

She focused on photographing White House staff, such as the woman who was in charge of the White House mail and the gardener who took care of the Bushes' dogs. "It was so much fun," Knaus says.

After the family's move to Canada, an accident made Knaus reconsider the story she'd written.

"I had a 110-pound dog, and I used to take him for walks and throw a Frisbee for him. One day, I went to reach for the Frisbee, and he came charging into me to get it and, unfortunately, gave me a concussion," she says. For months after, she couldn't read or look at screens.

"The only thing I could do was paint," Knaus recalls. "So, I started painting. And when the concussion got better, I joined a board at the Toronto Public Library. A lecture by a visiting author made me think, 'That's what I can do with my painting now. I can illustrate that old story.'"

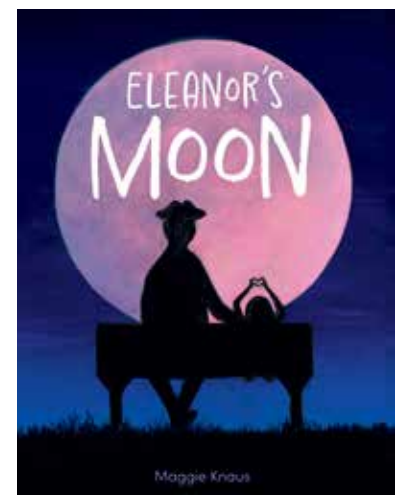
Knaus shared her story with another author, who said it had to be published. "She got me in touch with her agent, and it took off from there," Knaus says. The result was *Eleanor's Moon*, about a young girl who has a special connection with the moon and her grandpa.

Knaus says that she "did everything backward" with her children's book. Typically an editor will greenlight a story and then find an illustrator. But Knaus' agent wanted to sell the illustrations and book as a package, and it worked.

But the book also left Knaus with a small debt to pay. "I'm working on a new book now for my second daughter, Jane," she says with a smile.



"That's what I can do with my painting now. I can illustrate that old story."





“In second grade, I wrote an essay titled ‘What do you want to be when you grow up?’ And in it, I said I was going to write and illustrate children’s books.”

FROM CARDS TO BOOKS

After graduating from Washington University, Dana Gustafson Regan, BFA '83, landed at the Midwest's mecca for artists: Hallmark.

At the time, “There were 800 artists working there,” Regan recalls. “That was bigger than my hometown.”

Working at Hallmark, where Regan designed stuff for kids like Advent calendars and birthday cards, was like a master's program in being an artist. But after five years, she was ready to fulfill her lifelong dream of being a children's book illustrator.

“In second grade, I wrote an essay titled ‘What do you want to be when you grow up?’ And in it, I said I was going to write and illustrate children's books,” she says.

So Regan traveled to New York from Kansas City to show publishers her portfolio. But she soon realized she was never going to book enough jobs to make it as a freelancer that way. So Regan found an agent.

“On my fourth trip, I finally decided to make all my appointments with agents instead of publishers,” she says.

And that decision paid off. Today, after 30+ years' experience, Regan has published 70+ books and illustrated titles such as the Messy Bessey series and the ASPCA Kids Pet Rescue Club series. And her *Night Before Christmas* board book has been her longest-selling book, in print since 1992.

One of Regan's favorite jobs over the years has been creating the hidden pictures for *Highlights Magazine*, where an image that looks perfectly normal has a dozen or so hidden items in it. “I love doing hidden pictures,” she says, “but it's hard.”

Early in her career, Regan wrote her first book: *Monkey See, Monkey Do*. She also illustrated it with rosy-cheeked monkeys. The story rhymes, a feature that Regan likes in books for early readers.

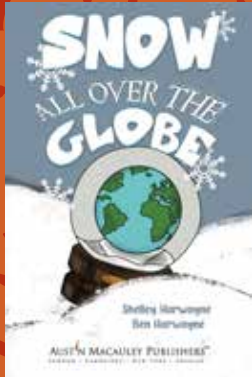
“My dad was the high school band director,” she says. “So I was writing in four-four time. It helps kids get the words because kids can hear rhymes even before they can read them.”

Regan tapped into that rhyming scheme again for her latest early reader series, *Mike Delivers*. It's about a delivery hedgehog that lives in a friendly small town.

“I was thinking about my small town in northern Wisconsin,” Regan says, “how everybody knows everybody, and everybody helps everybody.”

Unlike *Monkey See, Monkey Do*, Regan didn't illustrate the *Mike Delivers* series. Instead, the publisher suggested an artist from Spain. “I loved it because she brought a whole different sensibility to it,” Regan says. “I'm picturing Wisconsin, and she's got sidewalk cafés and fountains and scooters. I thought, ‘You're leveling this up.’”

MORE TITLES FOR YOUNG READERS BY ALUMNI



Snow All Over the Globe

By Shelley Harwayne and Ben Harwayne, Arts & Sciences Class of '26

In *Snow All Over the Globe*, Shelley Harwayne and her grandson Ben Harwayne pay tribute to these treasured collectibles. Readers discover what snow globe makers have done to prevent the water in the globe from freezing, how they experimented with different materials to make realistic fake snowflakes, and how they managed to make those snowflakes fall slowly.

Jollof Rice With Grandma

By Vanessa Okwuraiwe, EMBA '19
Illustrated by Olamide Ojo

In *Jollof Rice With Grandma*, Ada is a 6-year-old girl who loves cooking and learning. She is also part of an international family. And when her grandparents from Nigeria come to visit, Ada spends precious time with her grandmother and learns how to cook jollof rice — a popular dish enjoyed by millions.

This Is Not My Home

By Eugenia Yoh, BFA '22, and Vivienne Chang, BSBA '23

When Lily's mom announces their family must move back to Taiwan to take care of their elderly Ah Ma, Lily is devastated to leave behind her favorite foods, friends and life for a place that is most definitely not her home. But Lily soon realizes, through the help of her family and friends, what home means to them.

The Cloud Lasso

By Stephanie Ellis Schlaifer, AB '99, BFA '99

Illustrated by Melodie Stacey

Big gloomy clouds have hung over Delilah's head and heart since her beloved grandfather died. But remembering an old trick he taught her on the farm, she lassos all the clouds out of the sky to navigate her feelings of sadness and isolation. *The Cloud Lasso* is a poetic meditation on loss, memory, and paying homage to those we've loved but lost.

One Snowy Morning

By Kevin Tseng, AB '96, BFA '96

Illustrated by Dana Wulfekotte

In this picture book, a squirrel and a chipmunk find the oddest things stuck in a giant pile of snow one morning. Readers will recognize a snowman, but the two friends have their own ideas about the various individual items in the snow pile. When they take them home, they figure out just what to do with what they've found.



Next

Next-gen testing

Erica Barnell, MD/PhD '23, is the chief science officer of Geneoscopy, a company she co-founded as a medical student that has developed a noninvasive test to detect colorectal cancer. As the magazine went to press, the company was awaiting FDA approval. Read her story online at source.wustl.edu/2024/4/next-gen-testing.

Photo: Whitney Curtis



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Interplanetary rock star

Meenakshi Wadhwa has built a formidable career studying our solar system.

How and when did the solar system and planets form? Is there other life out there? Many have pondered these questions, and planetary scientists like **Meenakshi Wadhwa, PhD '94**, are getting closer to answering them and many more.

For Wadhwa, it all started where she grew up, in India, in the foothills of the Himalayas. She spent much of her time as a kid outdoors collecting rocks and wondering how mountains were formed. This interest inspired her to study geology at Panjab University in Chandigarh, India, where she became interested in the geology of other planets. After graduating, Wadhwa began researching doctoral programs and decided to move to the U.S. to attend Washington University because of its strong earth and planetary sciences program. When her PhD adviser, Ghislaine Crozaz, introduced her to Martian meteorites, Wadhwa was hooked.

"She and her late husband, Robert Walker [founding director of the McDonnell Center for the Space Sciences], were both hugely influential on my development as a scientist and on my career path," Wadhwa says. "Not only did they provide me with professional mentorship, but they also treated me like family, which was so important to me as an international student whose family and friends lived half a world away."

"Even after I graduated, they were my sounding board before I made any significant decisions, and I will always be grateful for their mentorship and support that put me on the path to where I am today."

At WashU, Wadhwa studied Martian meteorites to learn about the planet's evolution and had the opportunity to travel to Antarctica as part of the U.S. Antarctic Search for Meteorites (ANSMET) program. "Both Ghislaine and Bob had previously gone to Antarctica as part of the ANSMET program, and hearing about their fantastic experiences there inspired and motivated me," Wadhwa says. "It was a life-changing experience."

After graduation, she headed to the University of California San Diego as a postdoctoral researcher and studied planetary materials to better understand the time scales of events occurring in the earliest history of the solar system. Six months later, Wadhwa was offered the position of curator of meteorites at the Field Museum in Chicago, which houses one of the world's best collections of meteorites.

Yet she was hesitant about accepting the position. "The museum had few analytical facilities, and, as a geochemist, I needed analytical tools for my research," Wadhwa says. She turned to her lifelong mentors for advice. "Bob said, 'Treat this opportunity as your blank canvas and paint your own picture!' They both encouraged me to consider this an opportunity to create something from the ground up."

During her time at the Field Museum, Wadhwa built a state-of-the-art geochemical laboratory, where she could conduct research to understand the processes and time scales of events in the early solar system and on planetary bodies.

Eleven years later, in 2006, Wadhwa headed to Arizona State University (ASU) to serve as director of the Center for Meteorite Studies. Today, she is director of the School of Earth and Space Exploration. Her main goal? "I want to propel ASU to be among the leading institutions in the world for exploring the Earth and space," she says.

While on sabbatical in 2012, Wadhwa returned to Antarctica with the ANSMET program. "It was just as amazing as I remembered," she says. "Antarctica is one of the most breathtakingly beautiful and wondrous places on our planet."

Having first studied Martian meteorites in graduate school, Wadhwa has long dreamed of studying actual Martian rocks returned by a spacecraft mission. An out-of-this-world opportunity emerged in 2021 when she was offered the position of principal scientist for the Mars Sample Return (MSR) program, a collaboration between NASA and the European Space Agency to return Mars samples currently being collected by the Perseverance rover to Earth.

"By bringing back these samples and studying them in detail in laboratories here on Earth, we can try to understand the formation history of Mars and the geologic context of where, when and how life might have originated there," Wadhwa says. "This could give us insights into how life might have originated on Earth."

"The MSR program gives us an opportunity to answer that fundamental question we have as humans — 'Are we alone in the universe?' — and will pave the way for astronauts to explore Mars someday."

■ BLAIRE LEIBLE GARWITZ



WHO

Meenakshi Wadhwa,
PhD '94

FULL CIRCLE

Nearly 30 years after earning her doctorate under the tutelage of Ghislaine Crozaz, Wadhwa returned to WashU Oct. 26, 2023, to deliver the Robert M. Walker Distinguished Lecture, a series named after another mentor from the McDonnell Center for the Space Sciences.

OUT OF THIS WORLD

An asteroid was named after her, "8356 Wadhwa," a distinction awarded by the International Astronomical Union in 1999.

LOVE ON THE ICE

Wadhwa's husband proposed in Antarctica. "He was there overseeing health care for the U.S. Antarctic Program, and I was there with the ANSMET program. He brought an engagement ring with him on the small chance we might run into each other, and we did!"

Courtesy photo: Arizona State University



Photo: William MacFarland

Helping every dog have its day

Lisa Lunghofer advocates for animals in need.

WHO

Lisa Lunghofer, AB '88

WASHU MAJORS

Psychology and history

RES-LIFE CONNECTION

"My role as a resident advisor at WashU helped me realize the importance of relationships, whether with people or other living beings," Lunghofer says. "That experience informs my work today with the human-animal bond."

PUPPY LOVE

Lunghofer met her husband, Bill MacFarland, when his dog approached her at a party. They now share a rescue dog, Cameron.

In July 2008, **Lisa Lunghofer, AB '88**, helped search for a lost pet. In the process, she found her life's work.

Lunghofer, who lives in Gaithersburg, Maryland, heard a news story about a dog named Jeddah that had bolted from Washington Dulles International Airport while she and her "human dad" were departing for his next tour of military service. Searchers were gathering to locate the missing pup.

With three dogs of her own at the time, Lunghofer felt compelled to help. She showed up the next day and continued helping whenever she could for the next three months. In the group, she met a woman who trained dogs to track missing people and animals; this led to her discovering "an amazing world of jobs and programs that included animals: animal-assisted therapy, search

and rescue, and dog-training programs for at-risk youth."

Lunghofer had a doctorate in social policy from Case Western Reserve and worked as a federal contractor, evaluating programs for children and families in need. "I was struck by the connection between my work on behalf of vulnerable people and the healing power of the human-animal bond," she explains. "I'd found my new passion."

Drawing on "inner moxie," she recalls, "I reached out to executive directors of animal programs and said, 'I'm an animal lover and a researcher. Would you like to collaborate?'" To gain experience in the new field, she offered volunteer assistance with grant proposals, program development and evaluations. For several years, she focused her spare time on this work, which included projects nationwide.

In 2012, she decided to make a professional leap. The next year, she founded Making Good Work, LLC — through which she helps nonprofits, especially those highlighting the human-animal bond, to work most effectively. In 2014, she added work with The Grey Muzzle Organization; and in 2015, she became its first executive director. "I was scared," she admits of changing gears mid-career. "But I didn't let that stop me."

The largest national nonprofit focused on senior-dog well-being, Grey Muzzle supports programs for the adoption, medical care and long-term foster care of dogs seven years and older. It also provides resources to help owners who might otherwise have to surrender their older dogs address veterinary expenses.

With Making Good Work, Lunghofer collaborates with groups addressing issues such as animal-abuse prevention and the benefits of canine companionship for those with PTSD. The organization's Pay It Forward program chooses one nonprofit per quarter for pro bono help, with the agreement that the group will then volunteer for another group in need. This assistance has extended as far as Tanzania, where two burgeoning nonprofits became beneficiaries. Thanks to Lunghofer's continued commitment to animal advocacy, a mission to save one pet now benefits animals around the world.

■ PAMELA RAFALOW GROSSMAN, AB '88

Conversing with canvas and paint

Inspired by global travel, Lavar Munroe creates dreamlike versions of our world.

“Make ugly paintings.” That was the advice that **Lavar Munroe, MFA '13**, received from his professors in the Sam Fox School of Design & Visual Arts.

“My graduate experience was simultaneously challenging and fulfilling,” he says, as he recalls his days as a graduate student and burgeoning artist.

Munroe, who originally trained at the Savannah College of Art and Design, arrived at Sam Fox to pursue graduate work after a few years spent as a freelance illustrator. “At that point, I probably hadn’t painted for two or three years because I was doing mostly digital work,” he says. “It’s like I had to relearn how to paint.”

At heart, the advice was to allow imperfection into his work. “I would take a knife, stab the canvases and cut out the areas that I didn’t like,” he says. He would then sew the canvases back together, often incorporating objects like old shoes or hair pieces found in the streets of St. Louis. Today, his work includes mixed-media painting, cardboard sculpture and drawings, all of which he says evoke an “otherworldly, dreamy, theatrical space.”

Munroe’s upbringing in the Bahamas introduced him to color, line and shape early on. “I come from a culture of decoration,” he says. As a child, he participated in the Junkanoo festival, an annual event that features elaborate cardboard costumes embellished with materials like glass, sequins, feathers, glitter and synthetic silk flowers. “These are Junkanoo materials, but these are also the materials that happen in my work now,” he says.

A prestigious 2023 Guggenheim Fellowship will aid his travel to Zimbabwe, where he has recently turned his attention. “I’m doing a project about an all-night ceremony I witnessed called a ‘bira,’ through which the spirit of a recently deceased person is called back home,” he says. The ritual ends when the spirit speaks to the community through a mediator, who is usually able to channel the deceased’s voice. Munroe has already exhibited paintings based on the ritual at the Jack Bell Gallery in London and the Monique Meloche Gallery in Chicago.

Travel has served as a crucial source of inspiration throughout his career. Five years spent on and off in Senegal — particularly in smaller cities and villages like Saint-Louis, Tambacounda and Sinthian — culminated in a series of paintings titled *Red Bones*. “During this time, I would gather material in Senegal and then come back to the studio in the United States to make work about those experiences. Instead of writing in a journal, I made paintings,” he explains.

Munroe thinks of his process as akin to anthropology. “Research, in my instance, is travel research,” he says. “I go into a space to observe and learn.”

Yet the visual inspiration collected during his travels soon transforms into something larger. “When I’m painting, any sort of reference goes away, and it becomes like a conversation between myself, the paint and the canvas.”

■ SARA BRENES AKERMAN, MA '18

WHO

Lavar Munroe, MFA '13

SAM FOX SCHOOL IN THE WORLD

Two paintings completed at WashU — “Boy Predator, Boy Prey” and “To Protect and Serve” — were included in the 2015 Venice Biennale, curated by the late Okwui Enwezor. Munroe was honored with the Sam Fox School’s Recent Alumni Award in 2018.

POINTS OF PRIDE

- Being awarded John Simon Guggenheim Memorial Foundation Fellowship
- Being included in the survey exhibition *When We See Us: A Century of Black Figuration in Painting* at the Zeitz MOCAA in Cape Town, South Africa
- Being awarded both a Joan Mitchell Painters & Sculptors Grant and a Joan Mitchell Foundation residency

Photo: Alyssa Schukar



Photo: Elaina Finkelstein/Library of Congress

Bridging humanities research and federal legislation

As director of the Kluge Center at the Library of Congress, Kevin Butterfield plays a key role in educating lawmakers.

WHO

Kevin Butterfield, PhD '10

WHERE

At the Kluge Center, he oversees a fellowship program that also provides research presentations to members of Congress.

PATH TO D.C.

After earning a doctorate, he taught history and constitutional studies at the University of Oklahoma for eight years before heading to the George Washington Presidential Library at Mount Vernon, in Virginia.

When **Kevin Butterfield, PhD '10**, organizes presentations for members of Congress and their staffs, he leaves journalists off the guest list.

Butterfield oversees the John W. Kluge Center at the Library of Congress, a humanities research center that houses more than 100 scholars selected annually to mine the library's vast resources. As director, one of Butterfield's duties is to organize two series of dinners — for both members of Congress and Capitol Hill staffers to meet with the scholars and learn about new research related to domestic and foreign policy.

“Without media present, members of Congress don't have to worry about sound bites,” Butterfield says. “We always try to move quickly to Q&A. There's a lot of genuine intellectual curiosity on display. They're eager to learn.”

Butterfield understands the deep connections between intellectual communities and government in American history. At WashU, he wrote a dissertation about the rise of American voluntary associations like churches, fraternities and labor unions, which would later become the award-winning book *The Making of Tocqueville's America*. “I was interested in how people in the post-Revolutionary period came together to pursue shared goals and become more collectively than they could be individually,” Butterfield says. “At the Kluge Center, we're creating a scholarly community that strengthens the work of our individual scholars while also impacting policy.”

Butterfield came to the Library of Congress in September 2022 from Mount Vernon, where he oversaw George Washington's presidential library. Now a mentor to junior scholars, Butterfield draws on his transformational experience of working with dissertation adviser David Konig, emeritus professor of law and history. “Anytime I went to David's office, he always made me feel like I had his undivided attention,” Butterfield recalls. “I try to emulate that at the Kluge Center.”

As an early American historian, Butterfield quickly found that his understanding of Capitol Hill needed an update. “It's no exaggeration to say that when I started, I knew far more about the First Federal Congress than I did about the 117th Congress that was then in session,” Butterfield says. “There are a lot of staff here at the library who know everything about Congress and can help me navigate professional relationships.”

WashU gave Butterfield the language he needed to cross disciplinary and political boundaries, integrate the center within the library's complex collections, and create the kind of intellectual community that lets Capitol Hill ask difficult questions about history and society.

“At WashU, I learned how to converse with literary theorists, sociologists and anthropologists in ways that I wouldn't have been able to master otherwise,” he says. “As a civil servant, I use that knowledge to bridge the gap between research and legislation.”

■ JOHN MOORE

Shifting the beauty standard

Christine Chang, BSBA '04, found freedom to explore multiple majors during her time as a student at WashU. Her experiences learning from other students and growing as a person gave her the confidence to take on her first job leading a small team at L'Oréal Korea.

After finding her way in the beauty industry, Chang co-founded the highly successful Glow Recipe beauty brand and skincare line. Here, she discusses her multicultural upbringing, how she stays true to her Korean heritage and her greatest inspiration as an entrepreneur.

► **I grew up in multiple places, first in the South in the United States, because my parents were attending graduate school in Louisiana.** After that, we moved to Korea when I was in middle school, and then I went to boarding school in Australia. I eventually returned to the States to attend WashU. I like to call myself a “third-culture kid.” A common theme running through my life has been the fluidity and understanding of different cultures and different spaces. That theme has continued to inform my career.

► **Beauty has always been a very present part of my life.** When I would go back to Korea as a child, my mother, my aunts and I would regularly go to the public bathhouses to splash milk or tea-steeped water on our faces. I didn't really understand why at the time, but scientifically, milk has lactic acid, which is what helps to smooth the skin. It was this ritualistic experience that we all enjoyed together. Self-care for me has always been associated with those moments of sharing and gathering.

► **A lot of our products are made globally.** That was always the goal with Glow because we want to create a safe space, both with our products and our social media platforms, for everyone to feel welcome. The approach around inclusivity for us really started from real

skin acceptance. We haven't retouched our model imagery in years. When we do a skincare campaign, our models are not wearing makeup, and photos are never retouched. We try to pick diverse models with different skin types, so that we are reflecting back at our very diverse community of customers.

► **There are certain aspects about the way skincare was introduced to me that could be relevant for everyone.**

When I returned to the States for college, I realized that skincare is a chore for most people. If skincare was enjoyable and sensorial, it could deliver hard-hitting benefits for your skin and give you a slice of time for yourself. I think that was the inspiration behind both glowrecipe.com, which is the business we started with, and eventually Glow Recipe skincare, which is what you see today.

► **I started the business when my daughter was very young.** I've been cognizant of how conversations around appearance, beauty and even social media can potentially affect her. That perspective has helped drive a lot of my decisions around how we approach certain things, because I want to create a brand where everyone of every age can feel comfortable and included, and it feels approachable. She's been a big inspiration for that.

► **I always say, “Don't shrink yourself.”** Very often you're taught to not rock the boat or not ask the hard questions. You have to take up space. You have to raise your hand. You have to sometimes ask for things that might be a little challenging to bring up. Without taking up space, it's hard to make sure that you're giving yourself room to shine. I feel like everyone deserves to shine in their own way.

■ BRITTNEY WHEELER

WHO

Christine Chang, BSBA '04, co-CEO of Glow Recipe

THE BRAND

Glow Recipe, the company Chang co-founded with Sarah Lee in 2014, is a line of fruit-extract-infused skincare products.

THE BRAND PHILOSOPHY

“Glow Recipe is about combining clinically proven, effective ingredients and results with enjoyable experiences,” Chang says. “I compare it to *Legally Blonde*. You can wear pink and feathers, and you can ace it at Harvard Law. In the same way, your products can give you results without being taken too seriously.”



Courtesy photo



Photo: Max Morse



Global talent, proud advocate

As an architect and as co-chair of Make Way: Our Student Initiative, Carrie Johnson seeks to construct places of belonging.

Throughout her multifaceted career in architecture and design, **Carrie Johnson, AB '89 (architecture)**, has used her talents to help lead global companies. Most recently, she is applying the tools of design to address equity issues affecting low-income and minority communities in Baltimore. The Sam Fox School of Design & Visual Arts alumna credits her success in part to her parents, her education and the university's robust alumni network.

The recipient of a full-tuition merit scholarship at WashU, Johnson knew from day one that she wanted to pay the generosity forward for others. In 2020, after years of hard work and professional growth, she endowed the Etta Green Johnson Scholarship in memory of her mother. She's also served as a member of the Sam Fox School's national council and through additional advisory roles. And in July 2023, she joined Washington University's Board of Trustees.

Johnson also serves as a co-chair of Make Way: Our Student Initiative, a fundraising effort launched in October 2022 that seeks to remove financial barriers for qualified students and enhance the student experience. Here, she speaks from the heart about the influence of her WashU education — both on campus and after graduation — and acting as an ambassador for Make Way.

HOW DID YOU CHOOSE ARCHITECTURE AND WASHU?

My mother was a social activist. She would bring me along to different neighborhoods in Montgomery County, Maryland, and Washington, D.C., while volunteering for a fair housing organization. I was struck by the

differences in design in lower-income areas, and it really bothered me that homes were arranged differently depending on the ZIP code. I believe that good design can exist at every socioeconomic level. Driven by what I saw, I decided at age 8 that I wanted to become an architect.

My mother also helped me find my path to WashU. She took me to a college fair in Maryland, where I happened by the WashU table. When I learned that the university offered both architecture and Mandarin Chinese, I was hooked. I wanted to double major, but I ended up putting down Mandarin after one year to focus on architecture. It's still a dream of mine to become fluent.

WHAT DO YOU VALUE MOST ABOUT YOUR WASHU EDUCATION?

The relationships I built at WashU have been an integral part of my life since I stepped on campus in 1985, and they continue to guide me. Throughout my career, I have been able to pivot at crucial junctures to expand my craft and expertise. The biggest pivot took me from a New York architecture firm, Handel Architects, to the Estée Lauder Cos. I can tie it all back to interactions at WashU alumni events.

For instance, I met fellow architecture graduate Risa Honig at one such event. She had worked at the Gap Inc. group and pivoted to serve in a New York City government entity. I told her how much I love the construction administration phase of architecture. She referred me to a recruiter for retailers, and that connection opened up my world. I got a job as project manager of store construction at Estée Lauder. The

experience eventually helped me land a position at Apple, where I stayed for a decade: seven years implementing the design, development and standards of retail stores around the globe followed by three years on Apple's corporate construction team executing the bespoke, highly innovative Foster + Partners-designed Apple Park campus.

WHAT DOES MAKE WAY MEAN TO YOU?

Being onstage at the Make Way launch event last fall, I was immensely proud for my parents. They've passed, but my role with the initiative would be deeply meaningful to them. In chatting with young people at the event, I also realized how important it is for me to step out and be visible, to show students that we people of color occupy leadership roles.

I have even more pride in the university now. Wearing my WashU swag, I start conversations with total strangers and promote my alma mater and its commitment to students. I love that the phrase "Make Way" implies a sense of engagement for every student coming in and every alum going forward: "Make way because I'm here. I'm somebody." WashU wants to support you, whatever your background.

Donors who provide funding for scholarships make way for outstanding young people to come to WashU. The knowledge and skills they gain while here continue to open doors for them after graduation. With this level of support, students can follow their internal compass and their deepest passions. This greatly enhances their impact on our world. In this way, I believe education is a game changer for all.

■ GINGER O'DONNELL



Rat tales

More than two decades since its closure, the **Rathskeller** remains gone but not forgotten.

The Rathskeller's path to becoming a Washington University legend was paved with potholes. In 1974, the university shuttered Karl D. Umrath Cafeteria to make way for a new underground eatery modeled after a traditional German biergarten. Students were mostly irritated by the disruption, which left them with only two dining options on campus. The project faced multiple construction delays, including a local sheet metal workers strike, which *Student Life* documented with comic exasperation.

Despite its slow rollout, the Rathskeller, dubbed the "Umrathskeller" after a contest, turned out to be a smash hit. Affectionately nicknamed "the Rat," it evolved into a campus fixture, slinging burgers, pizza, beer and more to WashU students – and even a few faculty. Cheap beer certainly helped buoy the Rat's popularity. But ultimately, an ineffable alchemy of carbs, convenience and community kept students coming back for nearly 30 years. More than two decades since the Rat poured its final pint, the beloved spot remains a supporting player in the fondest, fuzziest memories of many WashU alumni.

PRIME REAL ESTATE

Nestled in the basement of Umrath Hall, the Rat was a quick stroll from Brookings Quadrangle, Olson Library and the Athletic Complex. Visitors entered through a main door at the bottom of a ramp or a semi-unauthorized entrance in one of the tunnels running beneath campus. Inside was a food counter, a bar and five adjoining rooms for seating. A stage with a projector anchored one of the largest rooms, while a grand antique wooden table accommodating bigger parties filled another.

Walking into the Rat was a sensory experience for **David Simpson, AB '80, AB '80**. "Your eyes had to adjust to the darkness," he says. "Then you immediately smelled the burgers and onions frying



on the grill." As an undergraduate, Simpson frequently popped into the Rat to grab a sandwich or a burger topped with molten Cheez Whiz.

"The Rat was convenient but also unique," he says. Unlike WashU's other two cafeterias, it felt like a real sit-down restaurant with made-to-order fare. Although some students came to eat, others merely settled in to relax and watch soap operas like *General Hospital* and *Days of Our Lives*. "You couldn't even talk because people were so riveted by the drama," he remembers.

CHEERS TO THE WEEKEND

The mood was mellow during the daytime, but the energy ratcheted up considerably in the evenings. Thursdays at the Rat, otherwise known as "Rat Night," marked the unofficial start of the weekend for many undergraduates. In 1975, students could score a 12-ounce glass of Budweiser for just 40 cents and a pitcher for \$1.85.

Entertainment was also a big draw, and Simpson recalls seeing bands like St. Louis stalwart Jake's Leg play the Rat's stage. Even without live music, the place was consistently abuzz with jukebox tunes, televised sports games and conversation. "People were neck and neck, body to body, yacking away," he says. "It was a great way to kick off the weekend."

HISTORY IN THE MAKING

During its nearly three-decade run, the Rat became an unwitting backdrop to major events like the death of John Lennon, the fall of the Berlin Wall and 9/11. There were celebratory moments, too, as when the United States beat the Soviet Union in the "Miracle on Ice" hockey game at the 1980 Winter Olympics.

For WashU Trustee **Nick Somers, AB '84**, and his wife, **Barrie Somers, AB '84**, the Rat was the site of a more personal milestone: their first date.

From the mid-1970s through the early 2000s, the Rat was a social hub where WashU students could get a quick bite in between classes or a beer to kick off the weekend.



Photos: Washington University Archives



As sophomores, they were introduced by mutual friends at the Rat. The couple married six years later and have maintained strong ties to WashU since graduation, first as alumni and then as volunteers and proud parents of **Payton Somers, AB '13**, and **Caroline Somers, AB '16**.

Even today, the Rat's allure remains simple to Nick Somers. "It was a comfortable, welcoming hangout right in the middle of campus," he says. "It wasn't a fraternity or a dorm room. It was a neutral ground where everyone could be together and have fun."

LONG LIVE THE RAT

The idea of a campus bar seemed revolutionary to **Ian Withers, BS '02**, when he visited his older brother, **Ted Withers, BSBA '01**, as a 17-year-old high schooler. "The Rat signaled to me that WashU respected its students and gave them the freedom to make smart decisions or learn from bad ones," he says.

By the time Ian Withers arrived at WashU in fall 1998, the Rat was in its twilight. The prior semester, the bar had lost its liquor license, and Rat Night attendance began to plummet. Although the Rat regained the right to serve alcohol months later, management was leery about restoring Thursday

night programming. Withers says he and several fraternity brothers and buddies in the Campus Programming Council helped orchestrate the return of Rat Night.

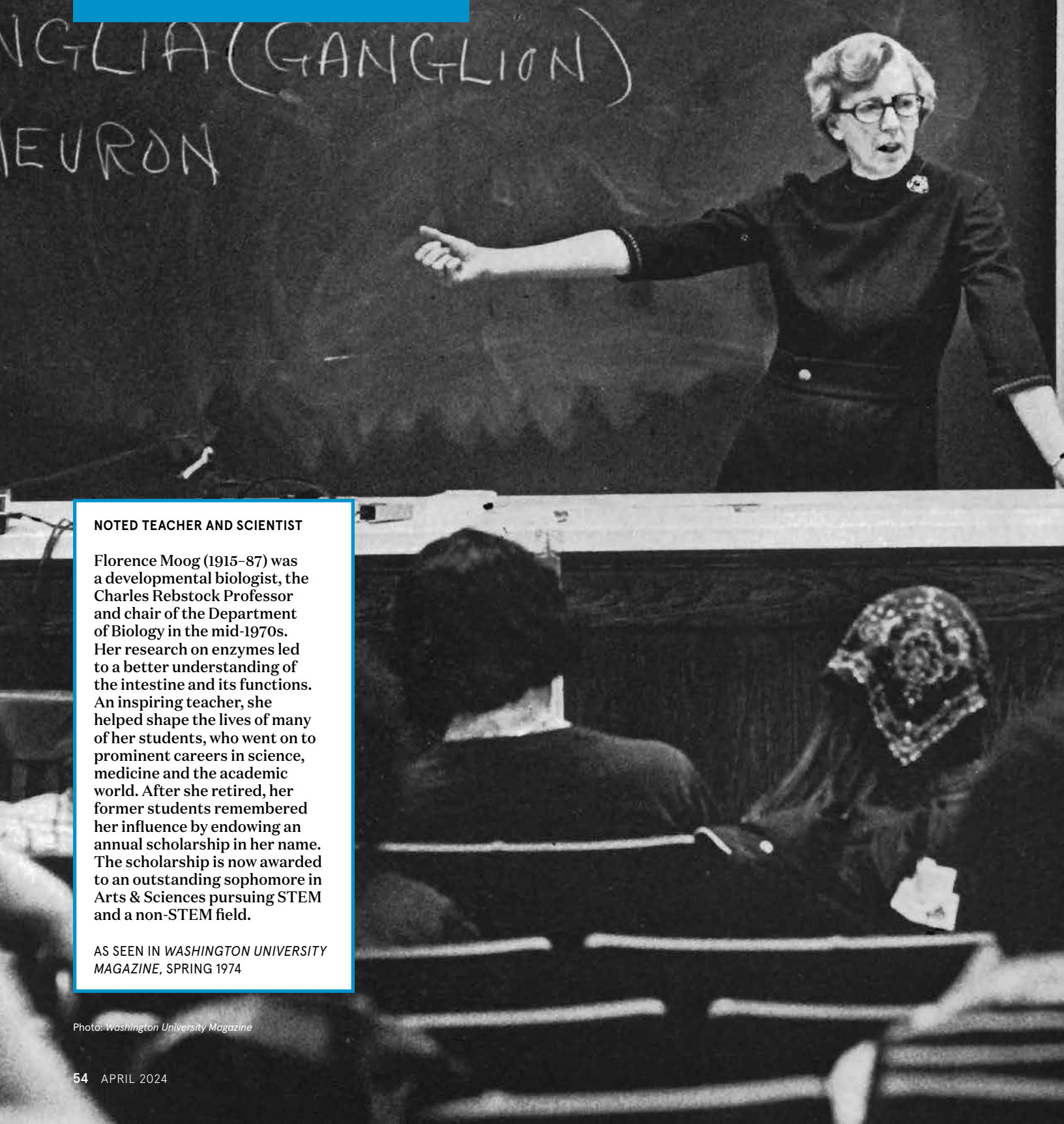
The group arranged security and staffing. One of Withers' friends assumed bartending duties on those nights, eventually passing the baton to him. The pay — just beer and tips — was paltry, but the memories were priceless. When not behind the bar, he remembers crowding into booths or hitting the dance floor. A quiet kid growing up, he says he came alive at WashU. "At the Rat, I connected with people that I would've been too shy to talk to before, and I realized I had a lot to add," Withers says.

The Rat permanently ceased operations in early 2003. A Subway restaurant occupied the space for a time, and today, it is home to university administrative offices. A new crop of WashU students calls for its revival every few years, and university leaders have recently hinted at the possibility of opening a new watering hole on campus. So far, no concrete plans are in place. But who knows? Alumni and students can only hope the Rat has more lives than a cat.

■ EMMA DENT, AB '09

Next

Class Notes



NOTED TEACHER AND SCIENTIST

Florence Moog (1915–87) was a developmental biologist, the Charles Rebstock Professor and chair of the Department of Biology in the mid-1970s. Her research on enzymes led to a better understanding of the intestine and its functions. An inspiring teacher, she helped shape the lives of many of her students, who went on to prominent careers in science, medicine and the academic world. After she retired, her former students remembered her influence by endowing an annual scholarship in her name. The scholarship is now awarded to an outstanding sophomore in Arts & Sciences pursuing STEM and a non-STEM field.

AS SEEN IN WASHINGTON UNIVERSITY MAGAZINE, SPRING 1974

Photo: Washington University Magazine

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

1964

Carol Diaz-Granados, FA64, UC66, GR80, GR93, wrote her sixth book, *Explanations in Iconography: Ancient American Indian Art, Symbol, and Meaning* (Oxbow Press London, October 2023). The book is an edited volume that covers interpretation of various American Indian arts and artifacts. Her previous book, *Transforming the Landscape: Rock Art and the Mississippian Cosmos*, was published by Oxbow in 2018, and she has two books published by University of Texas Press and two by University of Alabama Press.

1967

Susan Wilson Krechel, LA67, HS75, has written two additional books on dementia: *Two Childhoods? Ollie Explains!* and *The Dementia Caregiver's Survival Guide*, both published by Palmetto Publishing, May 2023.

1968

Dennis Bolazina, AR68, GA70, continues to be involved in the practice of architecture in St. Louis. Coupled with a law degree from Saint Louis University, he has managed a varied consulting practice with clients that include architects, contractors and Fortune 500 companies — the largest a \$4.5 billion casino in Las Vegas. For 2024, he will be the president of the St. Louis Chapter of the American Arbitration Association. He also serves on the national committee of the AIA-AGC. At WashU, he was part of the School of Architecture class that first installed the ribbon and bow on the McDonnell Planetarium.

Charles M. "Mel" Gray, GR68, GR78, co-author of *The Economics of Art and Culture*, had its third edition published by Cambridge University Press (September 2023). It features a new co-author, Karol Borowiecki of the University of Southern Denmark, adding a European perspective that extends the book's global reach. Gray is professor emeritus of business economics in the finance department at Opus College of Business and a senior fellow at the Center for the Common Good, both at the University of St. Thomas, Minneapolis.

Deborah Kasdan, LA68, GR70, published *Roll Back the World: A Sister's Memoir* (She Writes Press, October 2023), which was named to *Kirkus Review's* Best Indie Books of 2023. The book's plot centers on Rachel Goodman, who seems to be in glowing health when she returns from a gap year working on a kibbutz in 1963. But three years later, she is committed to a state hospital in St. Louis with a diagnosis of schizophrenia. *Kirkus Review* stated, "The author delves deeply into memory and family dynamics to understand her sister's diagnosis and, in doing so, finds self-forgiveness for being unable to save her. Intricate and affecting, Kasdan's debut finds hope in the saddest of stories."

John Liebson, GR68, helped fund and build the Crested Butte (Colorado) Fire Protection

District (CBFPD) in 1971 and was appointed its first volunteer fire chief and its first career chief. The district recently celebrated its 50th anniversary. Liebson sent a framed letter to the current chief documenting how the district came about after he "responded to his first fire there and saw two hand-drawn hose carts and a hand-drawn ladder cart, but no fire engine." Liebson reports the chief will hang the letter in the fire house and will make sure it gets relocated to CBFPD's new headquarters.

1969

Carolyn Grew-Sheridan, LA69, had her 1995 work "Pierced Hope" posthumously juried into *Telling Tales*, a catalogued and juried exhibition at the Wharton Esherick Museum in Paoli, Pennsylvania, last summer. "Pierced Hope" is a mitered box made of Sierra Pine, a twig, shavings and recycled paper referencing mortality and deforestation. Grew-Sheridan died in 1996.

Larry Katzenstein, LA69, was the 2023 recipient of the National Association of Estate Planners & Councils (NAEPC) Hartman Axley Lifetime Service Award, honoring those who have been highly active in the estate planning community and crucial to the development of NAEPC. Katzenstein, a partner with Thompson Coburn, serves clients in the firm's private client services practice and is a nationally recognized authority on estate planning. He is active as a board member and as general counsel to several St. Louis charities.

1971

Joan Baron, FA71, had her work titled "Illuminations, 2022-2023" on display as part of the *Some Kind of Nature* art exhibit at FOMA Gallery, in Santa Fe, New Mexico, in September 2023. Baron's work was a floor/wall installation including mesquite wood, soda and wood-fired ceramics. The exhibition focused on the changing climate and the role artists can play in having conversations about how humans are affecting planetary species survival for generations to come.

1972

Harry S. Jonas III, LA72, SW74, GR74, is looking forward to going to Bordeaux and Dordogne, France, as part of an upcoming alumni trip.

Jean Volgo, GR72, works part time at Tempe Preparatory Academy, where he teaches methods for solving problems in applied math to students preparing for standardized tests such as the SAT and ACT. Volgo's academic background is in modern analytic philosophy.

1973

Lawrence J. Altman, EN73, is an adjunct professor at Avila University in Kansas City,

Missouri, and teaches an undergraduate class for the business school that focuses on diversity, civil rights laws and equity. Altman recently had an American Indian from the Choctaw Nation as a guest speaker to help explain some of the problems diverse people face when growing up, while at school and in the workplace. At the end of his presentation, the guest speaker gave Altman and his class a Choctaw Tribal Flag for the honor to speak to the class. Altman considers the flag one of his greatest honors.

Kenneth Haugk, GR73, the founder and executive director of Stephen Ministries, co-authored the organization's newest book, *The Gift of Empathy: Helping Others Feel Valued, Cared for, and Understood* (Stephen Ministries, 2023), with longtime colleague Joel Bretscher. The book equips readers with practical knowledge and skills for making empathy a bigger part of their lives, including chapters on empathizing with spouses, siblings, parents, co-workers, friends and others.

Bonnie Korte, FA73, was promoted by the United States Judo Association (USJA) to Kudan, Ninth Degree, in judo. She is the first living woman promoted to this rank in the United States. Korte was a world-level competitor in sport judo in the 1970s, winning five international medals. She was a U.S. Champion in Shiai and Kata 12 times and team captain of USJA international teams four times. Considered a pioneer in women's judo, Korte started judo in 1963 and has been active in the sport for 60 years. She is currently a member of the USJA board of directors.

1974

Javier Alanis, LA74, retired from an academic career after serving as an associate professor of contextual theology and director of the Lutheran Seminary Program in Austin, Texas. Alanis, who also served as the pastor of his home church in San Juan, Texas, retired from that position as well in May 2023.

John Chatlos Jr., MD, LA74, completed a research study to demonstrate how a specific psychotherapeutic intervention promotes spiritual experience and awakening with mystical characteristics without the use of drugs. Data are now under analysis, and publication is scheduled to occur sometime in 2024.

Clifford Titus, UC74, is now semiretired in Miami after numerous years of working in the finance, brokerage and private equity world in New York and London. He spends most of his time organizing and financing numerous projects across Africa (and other places) that have a positive impact on people's lives. Titus sends his best wishes to all the graduates of 1974 and writes they can connect with him through LinkedIn.

1975

Stephen R. Frenkel, AR75, GA77, has written and published *Clara's Secret*, the true story

of Clara Prinz, a woman forced to leave her native Berlin in 1939. Frenkel was inspired to write the creative nonfiction narrative as a result of an album of more than 150 autographed original portrait cards and personal postcards collected by his paternal grandmother during the early 20th century, the time of the Belle Époque or "Beautiful Era." Frenkel writes that the story took six years to research, write and develop, and it is "ultimately a compelling story of the advancement of humankind and the survival of its decline in the first half of the 20th century."

1977

Karl L. Buschmann, GR77, was appointed to the Illinois District Export Council by the U.S. Secretary of Commerce.

1978

Joan Saniuk, SI78, retired after 25 years of active ministry in the Metropolitan Community Churches in Hendersonville, North Carolina. She continues to volunteer with PFLAG (Parents and Friends of LGBTQ+ Folks) in Hendersonville.

Joseph Stahl, GB78, published *Faces of Union Soldiers at Culp's Hill: Gettysburg's Critical Defense* (Arcadia Publishing, July 2023), the latest book in his Faces of Union Soldiers series.

1979

Scott C. Staub, LA79, was appointed to the board of directors of Alternative Family Services (AFS), a nonprofit dedicated to improving the lives and outcomes of Northern California foster youth, their families and their communities. Staub led the search for AFS's chief executive officer and writes that he was delighted to be invited to join the board after the search ended.

1980

Peter G. Longley, GA80, chief operating officer of CBT Architects, Boston, is a father of three and grandfather of six, and has enjoyed writing several books. His works of historical fiction include *Captive*, *Compelled*, and *A Most Fatal War*. Longley's true-history books include the WWII-era *To Elena: The True Story of Elena Bondar* (co-authored with Bondar's daughter) and the co-edited collection *Journeys: From the Cambodian Killing Fields to New Life in Christ*. He also authored *My Favorite Pink Bird: A True Story* in memory of his beloved pet Kramer, a rose-breasted cockatoo.

Susan Miriam Seglin, LA80, retired in July 2023 after a long career as a psychotherapist with Kaiser Permanente in Northern California.

1981

April D. Nauman, LA81, penned *Down the Steep* (Regal House Publishing, October

2023), a literary coming-of-age story set during the Civil Rights era in southeast Virginia, where she mostly grew up. The protagonist is a white girl who learns to recognize and challenge the racist, misogynistic beliefs of the culture she was born into. Writing under the name "A.D. Nauman," Nauman has published many short stories as well as a previous novel. She is a professor of literacy education at Northeastern Illinois University in Chicago. At WashU, she was editor-in-chief of *Student Life* from 1979-80. She'd love to hear from old classmates through her website, adnauman.com.

1982

Jon M. Althoff, GB82, was named president of the Dakota County Regional Chamber of Commerce after serving as the chamber's interim president. He also has served on the board as an active member and chair, helping revitalize the charitable foundation and working within Dakota County for over a decade. Althoff owns his own boutique marketing and sales consultancy, Parachute Consulting Group, LLC.

1986

Alexander S. Douglas II, LA86, was named to the advisory board of the Professional Fiduciary Council of Florida. Douglas practices in the area of fiduciary litigation, with experience in trust and probate litigation and contested guardianship cases. The board was created to identify for the public qualified individuals who are available to serve as fiduciaries and have demonstrated a commitment to a high level of fiduciary service.

1989

Michelle Kibby, OT89, is a professor at Southern Illinois University-Carbondale in the clinical psychology and brain and cognitive sciences programs. She serves as faculty ombudsperson as well. Kibby is also a child-clinical neuropsychologist, a wife and a mother.

1991

Margaret Beckley, UC91, SW98, earned a doctor of education degree in educational practice in August 2023 from the University of Missouri-St. Louis.

Pedro Jaime Torres-Díaz, BU91, was featured in the 11th edition of the *Best Lawyers* in Puerto Rico. Torres-Díaz is the office managing principal in the Miami office of Jackson Lewis P.C., and a principal in the San Juan, Puerto Rico, office.

1994

Sean O. Ervin, GR94, SI94, retired from his architectural practice in Sioux Falls, South



Photo: Washington University Magazine

NOTES FROM THE UNDERPASS

“ In the early '60s, to protect the students who had to cross Forsyth, the university built a ... well-lighted underpass. The concrete walls of the underpass hadn't even dried before they were covered with graffiti. ... As quickly as possible, university authorities would erase or paint over those attempts. ... In recent years ... the usual graffiti has been replaced by birthday greetings, get-well wishes, philosophical observations, still lifes, portraits, abstracts and news bulletins. The underpass has become the wall newspaper of the campus.”

AS SEEN IN WASHINGTON UNIVERSITY MAGAZINE, SPRING 1974

Dakota, after 38 years and has taken a position at South Dakota State University as program coordinator for architecture in the School of Design. He has both administration and faculty roles and is enjoying the transition to mentorship for 130 students at a time.

1995

Howard P. Goodkin, GM95, MD95, was elected as first vice president of the American Epilepsy Society at its annual meeting in December 2023. Goodkin is the Shure Professor of Neurology and Pediatrics at the University of Virginia and serves as the chair of the Department of Neurology and the director of the Division of Pediatric Neurology.

1996

Alan Griswold, LA96, FA96, and his Clio Award-winning production company, Monkey Deux, celebrated its 20th year in business last October and was shortlisted for the 2023 Clio Entertainment Awards for a piece they did for the film *Dungeons & Dragons* called “The Bestiary.” While they didn't bring home

any trophies in 2023, the company has won two gold, four silver and two bronze Clios in past years.

Robyn (Abeles) Silverman, LA96, wrote *How to Talk to Kids About Anything* (Sourcebooks, October 2023). The book is the culmination of six years of conducting research, interviewing, writing and editing. In it, Silverman — who also hosts a popular parenting podcast, also called “How to Talk to Kids About Anything” — provides parents tips, scripts, conversation starters and talking points to make even the toughest conversations easier. For a profile on Silverman, visit source.wustl.edu/2024/02/the-scripts-every-parent-needs.

1998

Christine (Galofre) Allen, BU98, opened a new school building for Ark of the Rainbow, a school in India that she co-founded to help families overcome extreme poverty and prevent human trafficking.

Jennifer Sloop, LW98, was named senior director of legal recruiting and integration at the national law firm Quarles & Brady. She is based in the firm's recently opened

St. Louis office. Sloop leads the legal recruiting department, setting its strategic direction and objectives, while maintaining and strengthening its culture, diversity and quality standards.

1999

Shyam Bishen, PMBA99, was appointed head of the Centre for Health and Healthcare at the World Economic Forum. Bishen is a senior health-care executive and board member with over 25 years of global experience in health-care public-private partnership and strategy development. He joined the World Economic Forum in early 2022 from the Bill and Melinda Gates Foundation, where he was a regional/deputy director for seven years and was responsible for partnering to harness advances in health care to save lives. For a profile on Bishen, visit source.wustl.edu/2024/02/a-global-view-of-human-health.

2001

Tobias T. Gibson, GR01, GR06, co-edited *Red Reckoning: The Cold War and the Transformation of American Life* (LSU Press,

November 2023) with Mark Boulton. The book explores an array of topics, including the Cold War's impact on national security, race relations, gun culture and masculinity, law, college football, advertising, music, film, free speech, religion and even board games. One review says, "Red Reckoning brings an important era back to life for those who lived through it and for students and scholars wishing to understand it."

2002

Tescha Hawley, SW02, was a finalist for the CNN Hero of the Year award in 2023. She was nominated for founding the Day Eagle Project, a nonprofit started to help Native Americans living on a reservation fight cancer. The nonprofit has since expanded to help with other medical needs and a food pantry to promote better nutrition. Hawley founded Day Eagle Project after she was diagnosed with breast cancer and faced the daunting challenges of navigating and receiving the health care she needed. She is a member of the Gros Ventre tribe.

Robin Weneker, EMBA02, was elected chair of the University of Missouri Board of Curators, on which she has served since being appointed in 2020 by Missouri Gov. Mike Parson. Weneker is managing partner of CPW Partnership, a family business that owns commercial, residential and agricultural land holdings. Earlier, she worked for Procter & Gamble, the 1996 Paralympic Games and Marketing Mix.

2003

Renée Robichaux, LA03, penned a debut novel, *Agent Gatz: A Great Gatsby Prequel* (Loredan Publishing, September 2023). In the book, which Goodreads called "amazing historical fiction," a young Jay Gatsby finds himself working as a foreign spy. The unexpected appearance of a woman from his past, famed journalist Ella Kaye, soon complicates his mission. Robichaux lives in Los Angeles and writes under the pen name R.M. Spencer.

Jason Simon Sheinkopf, EN03, is completing a master's degree in computer science at Georgia Tech with a specialization in machine learning.

Ashwin Unnikrishnan, LA03, was awarded an inaugural "Breakthrough Fellowship" by the Leukemia Foundation to support his lab's research to develop more effective treatments for the blood disease. The valuable funds will help his lab pursue cutting-edge research for acute myeloid leukemia (AML) by targeting RNA slicing, a molecular pathway that Unnikrishnan's lab has discovered is frequently altered in people with AML. Unnikrishnan is a renowned cancer researcher and the head of the molecular mechanisms in the leukemia laboratory at the Lowy Cancer Research Centre at the University of New South Wales.

2004

Alison Small, LA04, is head of film at Brownstone Productions and helped the studio produce *Cocaine Bear* and *Bottoms*. The successful movies helped Brownstone play a significant role in bringing back the R-rated comedy, which has struggled to gain traction in the past years. Small told *Variety* magazine that the challenge of an R-rated movie "is that whenever there's something that's perceived as a failure, it just makes it harder and harder to get similar types of movies made." Small had previous roles at Paramount Pictures, DreamWorks SKG and Warner Bros. Television Group.

2005

Katherine Karr-Cornejo, LA05, was promoted to professor of Spanish at Whitworth University in Spokane, Washington. She has been at the university since 2012.

2006

Faye Raquel Gleisser, LA06, was promoted to associate professor of contemporary art and critical theory at Indiana University, Bloomington. Additionally, she wrote *Risk Work: Making Art and Guerrilla Tactics in Punitive America, 1967-1987* (University of Chicago Press, October 2023).

2007

Shreepada Tripathy, LA07, was promoted to associate professor of medicine at Southern Illinois University School of Medicine in Springfield, Illinois, in May 2022. He joined SIU in 2016 as an assistant professor and is board certified in pediatrics.

2008

David Addison, EMBA08, recently joined Guy Carpenter & Co. as managing director, head of life and annuities, Americas. Guy Carpenter is the insurance brokerage arm of the Marsh McLennan group of companies.

Emilie Boone, GR08, had her first book, *A Nimble Arc: James Van Der Zee and Photography* (Duke University Press, September 2023), published. The book explores Van Der Zee's photographic work over the course of the 20th century, showing how it foregrounded aspects of Black daily life in the United States and in the larger African diaspora.

2009

Stephen Hoeplinger, LW09, was named as counsel in the Capes Sokol litigation practice group. He has legal background in real estate and employment litigation, representing businesses and individuals. Previously, Hoeplinger served as an assistant attorney general with the Office of the Attorney General for the State of Missouri.

2011

Ashley (Pearson) Hoolihan, AIA, GA11, SI11, was named to *Building Design + Construction's* (BD+C) elite 40 Under 40 class of 2023. She is LEED green associate and project manager and associate at Trivers, a St. Louis-based architecture, planning, urban design and interiors firm. Hoolihan worked on several WashU building projects including the Women's Building renovation, which won a Merit Award from AIA St. Louis. She also worked on the January Hall and Umrath Hall renovations. Hoolihan served as the Society for College and University Planning 2023 North Central Regional Conference chair and previously as an adjunct lecturer at WashU.

Arif Soto, GR11, advises clients on capital-raising transactions, general corporate and securities matters, corporate governance, stock exchange listings, mergers and acquisitions, and federal and state securities law compliance. In addition, he counsels public company clients on 1933 Act compliance and ongoing 1934 Act reporting obligations, stock exchange rules and other compliance matters.

2014

Alexandra Deeley, LW14, and **Aaron C. Trump**, LW14, celebrated the birth of their first child, William Foster Trump, in 2023. They are excited to share that Foster is healthy and quickly growing.

2015

Chris Taurasi, GA15, is a co-founder of Level Studio Architecture. The firm began recording its meetings a few weeks into the startup of the practice and has since used the audio to produce the inaugural season of the podcast "Emerging." The goal is to provide an educational resource to young professionals in the architecture, engineering and construction industries who are interested in starting their own practice. The first 10 episodes are available at <https://www.lvl.studio/podcast>.

2016

Jill Teitelbaum, LA16, and **Jason Lese**, LA17, were married in 2023, with a large contingent of WashU alums in attendance. The newlyweds gathered the more than 40 WashU alumni for a group photo to celebrate the occasion.

Tansel Baran Yasar, LA16, defended his doctoral thesis in October 2023 at ETH Zurich in Switzerland. The thesis was on the topic of ultra-flexible brain implants for the stable and minimally invasive recording of brain activity from single cells in multiple brain areas.



Photo: Washington University Magazine

THE HONORABLE WILLIAM H. WEBSTER TURNS 100

On March 6, William H. Webster, JD '49, an American attorney and jurist, turned 100. A devoted public servant throughout his life, Webster served as chair of the Homeland Security Advisory Council from 2005–20. A former U.S. district judge of the U.S. District Court for the Eastern District of Missouri and U.S. circuit judge of the U.S. Court of Appeals for the Eighth Circuit, Webster served as director of the FBI (1978–87) and the CIA (1987–91). He is the only person to hold both positions. Webster also provided volunteer leadership at WashU for many years. An honorary emeritus trustee and former chair of the Washington, D.C., Regional Cabinet, he still serves on the law school's national council. Webster is also a longtime supporter of scholarships at the law school, and the school's Webster Society Scholarship for students committed to public service is named in his honor.

AS SEEN IN WASHINGTON UNIVERSITY MAGAZINE, SPRING 1981

2017

Amanda Palucki, LA17, was chosen by the Knowles Teacher Initiative as a member of its 2023 Cohort of Teaching Fellows. The Knowles Teaching Fellows Program is an intensive five-year program for early career high school mathematics and science teachers who are collaborative, innovative leaders working toward improving education. Palucki, who is in her second year at Herbert Hoover High School in San Diego, teaches biology, chemistry and physics.

2019

Anirudh Gururaj, LA19, was traveling in Seoul, South Korea, and happened to stay at a unique Buddhist temple/hostel called JustBe Temple that was founded by two WashU alums and Buddhist monks. JustBe Temple's CEO is also a WashU alum, **Ji-Woong Yoon**, FA07.

Libby Jubas, LA19, married Nathan Katz in September 2022. She graduated from Case Western School of Medicine with a master's degree in anesthesiology and currently works as an anesthetist assistant at Ahuja Hospital in Cleveland, Ohio.

2022

Yuhan Li, GB22, completed her first year of work as a website analyst.

Kasey Nelson, EN22, is building an app and looking to adopt a pet after he finishes traveling to Europe and New York.

2023

Benjamin Adam Bookstaver, LA23, is working as a freelancer with HOF Sports LLC, a name image and likeness sports agency. Additionally, Bookstaver, who previously worked in health care and telehealth at GoodRx, was investigating the effects of psychedelics and ketamine on abstract cognitive architecture and presented his findings to the New Center for Psychoanalysis on cognitive transdimensionality in October 2023.

Alexandra Fenton, SW23, won the national competition "Realest Person on Earth" sponsored by the BeReal photo sharing app — just one week before earning a master's degree from the Brown School. The contest called for users to post a

photo of themselves during their "wildest, rawest, most embarrassing, unhinged" moments. Among more than two million submissions worldwide, Fenton made it to the top 50 as a finalist and was ultimately voted winner. Her moment: a visit to a gynecologist. Following graduation, she relocated to her hometown of Des Moines, Iowa, to be closer to family and friends.

Minju Lee, EN23, SI23, was named to the 2023 "Inno Under 25" list (*Inno* is a spinoff publication of *St. Louis Business Journal*). Lee is the founder of Mozi, a startup focused on creating an app to bring people together for events and hangouts. He also recently started as a management consulting analyst with World Wide Technology and has served as chief financial officer for student medical technology incubator program Sling Health.

Cathy Wiesinger, LA23, was hired as digital media director for U.S. Rep. Adriano Espaillat of New York's 13th congressional district.

Maya Yildirim, AR23, is pursuing a master's degree in architecture at Columbia University Graduate School of Architecture, Planning and Preservation.



Photo: James Byard

Mark Rollins served on or chaired virtually every major academic committee and held numerous administrative roles in his three-plus decades at WashU.

Mark Rollins, professor emeritus of philosophy in Arts & Sciences and former dean of University College, died Nov. 24, 2023, in Columbia, Missouri, from cancer. He was 76.

Rollins joined Washington University in 1987 as an assistant professor of philosophy, becoming chair of the department in 2002 and professor in 2006. During his three-plus decades at WashU, Rollins served on or chaired virtually every major academic committee and held numerous administrative roles, including associate dean in Arts & Sciences, one of the first faculty fellows in the Office of the Provost and dean of University College (now the School of Continuing & Professional Studies).

He served as the chair of philosophy from 2002–10, which was a time of impressive growth for the department, including the addition of 14 full-time faculty. Rollins was also a professor in the Philosophy-Neuroscience-Psychology (PNP) program, which he helped create in the early 1990s, and he served as chair of the Performing Arts Department from 2012–18.

Rollins' academic interests included topics at the intersection of aesthetics and cognitive science, including theories of picture perception, the role of attention in aesthetic experience and a cognitive psychology of artistic style.

While dean of University College from 2016–19, he helped increase enrollment of adult learners in St. Louis through a variety

of initiatives, including new avenues of student support, new academic programming and a strategic marketing effort. Previously, he had served as associate dean of University College and director of its Summer School from 1997–2001.

At the university, he also served as chair of the Faculty Senate Council, the Faculty Council for Arts & Sciences and the Arts & Sciences Curriculum Review Committee.

"Mark was a terrific person and a distinguished member of our faculty," said Mark S. Wrighton, the James and Mary Wertsch Distinguished University Professor and chancellor emeritus. "He was remarkably talented in very different roles, including his core contribution in philosophy but also in leading the Performing Arts Department and then University College. I very much enjoyed working with him as an academic leader."

He is survived by his wife, Cynthia Richards; daughter, Alison Lee Rollins (Valerie Lee Rollins); and his sister, Jenibel Rollins. In honor of Rollins, memorial donations may be made to TREE House of Greater St. Louis or the Physicians Committee for Responsible Medicine.

Salvatore P. Sutera, former dean of the McKelvey School of Engineering and the Spencer T. Olin Emeritus Professor, died Nov. 7, 2023, in St. Louis. He was 90.

For more than 40 years, Sutera was an academic leader at what was then the School of Engineering & Applied Science,

serving as dean from 2008–10. Sutera was an internationally recognized scholar in biomechanics, and he and his collaborators made many contributions to the understanding of blood flow in the mammalian micro-circulation, flow-induced trauma to blood in artificial organs, and mechanical properties of the red blood cell in health and disease.

Under his leadership, the school set new records in the quality, size and diversity of the student body. Sutera recruited faculty and oversaw the launch of several new master's programs and interdisciplinary undergraduate minors. Perhaps the most visible development during his tenure as dean was the construction of Stephen F. & Camilla T. Brauer Hall.

Sutera joined the WashU faculty in 1968 as a professor of mechanical engineering and served as chair of mechanical engineering from 1968–82, then again from 1985–97. After the university created the Department of Biomedical Engineering in 1996, Sutera also served as the founding and acting chair during the department's first year.

"An accomplished scholar, wise mentor and supportive colleague, Sal was a golden role model for any professor or department chair," said Philip V. Bayly, chair of the Department of Mechanical Engineering & Materials Science and the Lee Hunter Distinguished Professor. "He recruited and nurtured a generation of faculty in mechanical engineering at Washington University, building outsized strength in biomechanics, fluids and materials research, along with an uncompromising commitment to undergraduate education."

Outside academia, Sutera held several industrial positions, including at Glen L. Martin Co., Baltimore; North American Aviation, Downey, California; E.I. duPont de Nemours & Co., Newark and Wilmington, Delaware; and Electro-Optical Systems Inc., Pasadena, California.

Throughout his career, Sutera was active in numerous professional societies, including the American Society of Mechanical Engineers, American Society for Engineering Education, American Association for the Advancement of Science, Biomedical Engineering Society and North American Society of Biorheology.

In 1956, Sutera spent the year as a Fulbright Fellow in Paris conducting research in a French government laboratory. He also spent a semester as a visiting professor at the University of Paris in 1973. He was an active member of the Alliance Française of St. Louis for decades, served on the board of directors of St. Louis-Lyon Sister Cities Inc., and was an active board member of the Italian Club of St. Louis for many years.

Sutera is survived by his wife, Celia; brother, Tom; daughters Marie (Bob) Woodruff, Annette Sutera, and Michelle (Danny) Ludwig; four grandchildren and one great-granddaughter. Memorial contributions may be made in his honor to the Sutera Family Endowed Scholarship for Engineering at Washington University.

Kathleen K. Dixon, a retired emeritus instructor in the Program in Physical Therapy at the School of Medicine, died Nov. 5, 2023, at a retirement center in Richmond Heights, Missouri, following a long illness. She was 90.

Dixon was a faculty member in the physical therapy program for 19 years, during which time she contributed to the development of the program's curriculum and instruction.

Her work helped elevate the program to one of the nation's most elite such programs.

She retired in November 2002 and was granted instructor emeritus status the next month.

Raymond W. Ewing, a well-known bartender at WashU's Whittemore House and a retired employee of the Division of Comparative Medicine at the School of Medicine, died Nov. 4, 2023, in St. Louis. He was 80.

Virginia Herrmann, MD, a distinguished breast cancer specialist and past co-director of the breast surgery program at the School of Medicine, died Oct. 16, 2023, in St. Louis from cancer. She was 73.

"Dr. Herrmann had a distinguished career, with many leadership positions and honors for her extraordinary contributions to the field of breast cancer surgery and her dedication to patient care," said Victoria J. Fraser, MD, the Adolphus Busch Professor and head of the Department of Medicine. "She was beloved by her patients and admired and respected by her colleagues. Her wisdom, grace and generosity were unparalleled."

Herrmann earned a medical degree in 1974 from Saint Louis University School of Medicine, where she also completed surgical residency training. She then completed a research fellowship at Harvard University Medical School and returned to St. Louis to join the faculty of Saint Louis University in 1980.

In 1998, she joined the faculty of Washington University School of Medicine's Department of Surgery in the Section of Surgical Oncology, where she co-directed the breast surgery program. In recent years, Herrmann focused on medical care and genetic counseling for patients with high-risk breast cancer syndromes and a type of breast cancer called ductal carcinoma in situ.

Stanley Paul Hmiel, MD, PhD, a pediatric nephrologist at the School of Medicine, died Aug. 28, 2023, from colon cancer. He was 64.

A professor of pediatrics in the Division of Pediatric Nephrology, Hypertension & Pheresis, Hmiel was medical director of the pediatric kidney transplant program and director of the fellowship program in pediatric nephrology for more than 25 years.

Hmiel came to St. Louis in 1989, when he became a resident at St. Louis Children's Hospital. He remained in St. Louis for his fellowship and in 1994 joined the faculty at Washington University, where he remained his entire career.

Hmiel is survived by his wife of 39 years, Roberta Miljus Hmiel; his son, Stephen (Emma); his daughter, Laura; and two grandchildren.

Gena Gunn McClendon, director of community engagement at the Brown School's Center for Social Development (CSD), died Oct. 21, 2023, in St. Louis from cancer. She was 65.

McClendon also served as director of CSD's voter access and engagement initiative and co-director of the financial capability and asset-building initiative. Her work primarily involved policy research analysis and consultation with community-based programs, academic institutions, state and federal policymakers, and advocacy groups.

McClendon began working at the university in 2001 as a project associate at the CSD.

"Throughout her career, Gena was interested in evidence and positive action toward racial equity, democracy and full participation in society," said Michael Sherraden, the George Warren Brown Distinguished University Professor and director of the CSD. "Her work has resulted in substantive and continuing changes, including asset-building policies in U.S. states, and regional asset-building coalitions in the South."

Carlos A. Perez, MD, an internationally renowned cancer researcher and professor emeritus of radiation oncology at the School of Medicine, died Aug. 21, 2023, in Springfield, Missouri, where he had retired. He was 88.

In a career that spanned nearly 60 years, Perez made numerous contributions to the field of radiation oncology, especially in the care of patients with gynecologic cancers and tumors of the breast, prostate and lung.

Perez joined the WashU faculty in 1964 and became director of the Mallinckrodt Institute of Radiology Radiation Oncology Center in 1976. He began a training program for radiation therapy technologists in 1966 and led a strong research program that made significant contributions to the advancement of cancer radiation therapy. This included playing key roles in establishing strategies to amplify the effects of radiation treatment with the use of chemotherapy and with hyperthermia — or the application of heat to enhance radiation treatment. In 2001, the Radiation Oncology Center became a new academic department at the School of Medicine, and Perez was named its first head.

A tireless advocate for patients, Perez helped found WashU's Cancer Information Center in 1977. One of the first resource facilities of its kind in the U.S., the center provides medical information, resources and emotional support for cancer patients and has served as a model for similar facilities around the world.

Peter R. Phillips, professor emeritus of physics in Arts & Sciences, died Dec. 1, 2023, in St. Louis. He was 92.

Phillips was born in what is now South Sudan, where his father was a missionary. He was raised in England and earned a bachelor's degree in physics at Cambridge University. He came to the United States to attend Princeton University as a Charlotte Elizabeth Procter Fellow, then earned a doctorate in physics at Stanford University in 1961. His thesis adviser was Wolfgang (Pief) Panofsky, the first director of the Stanford Linear Accelerator Center (now the SLAC National Accelerator Laboratory).

After working for two years at Argonne National Laboratory in Chicago, Phillips joined the WashU faculty in 1963. He stayed for the rest of his career, retiring as a professor emeritus in 1999. For many of those years, Phillips taught an introductory physics course. His research in high-energy physics was supported by the National Science Foundation; he later studied the physics of unexplained phenomena and parapsychology.

Phillips is survived by his wife, Hongwen Xu; daughter, Valerie Phillips Drake; former wife, Elizabeth Van Vorst; and grandson, Calvin Philip Drake.



For more than 60 years, Gerry Virgil was a supporter and friend of Washington University.

REMEMBERING A TRUE PARTNER

Geraldine "Gerry" Virgil, longtime supporter and friend of Washington University, died Nov. 6, 2023. She was 88.

Virgil met her husband, Robert L. "Bob" Virgil, while attending Beloit College in Wisconsin, where she earned a bachelor's degree in government. The couple married in 1958 and moved to St. Louis so Bob could attend Washington University. He earned both master's and doctoral degrees in business administration at WashU and then began teaching accounting at the university.

Gerry was a partner to Bob in many ways, especially as he began serving in several administrative roles at WashU, including dean of Olin Business School from 1977-93; vice chancellor for student affairs from 1974-75; and executive vice chancellor for university relations from 1992-93.

She joined him in hundreds of lunches and dinners with alumni, friends, faculty and staff. Many still remember and comment on the backyard receptions and dinners that Gerry and Bob hosted. Gerry did all the cooking. Her lasagna, seven-layer salad and other delicacies were legendary.

She had a legion of friends everywhere she went and in everything she did. People naturally were drawn to her infectious smile and sparkling personality, and she was perpetually upbeat and optimistic.

In honor of the couple, the Gerry and Bob Virgil Ethic of Service Award was established in 2003. Friends and colleagues established the Geraldine J. and Robert L. Virgil Professorship in Accounting and Management in 2004, along with the Robert and Gerry Virgil Endowed Scholarship Fund.

The couple received the Dean's Medal from Olin Business School in 1993, and in 2010, they received the Jane and Whitney Harris St. Louis Community Service Award for their involvement with countless organizations and institutions in the St. Louis region.

Gerry is survived by her husband, Bob; daughters Karen (Matthew) Weaver, Kim (Paul) Blake, and Kate (Robert) Price; and son, Matthew (Kelley) Virgil. She had 12 grandchildren and three great-grandchildren. Memorial contributions may be made to the WashU Scholarship Fund.

Janis Lea Morris Schade, a 25-year employee in Facilities Planning & Management, died Dec. 1, 2023. She was 63.

A native of Alton, Illinois, and a U.S. Army veteran, Schade joined the university as a custodial contract services coordinator in 1998 and eventually was promoted to contract services manager. She was responsible for coordinating and directing the housekeeping program and contract compliance of outsourced building services on the Danforth, West, South and North campuses, the Lewis Center and other off-campus facilities. She worked closely with contractors and campus partners to implement best industry and sustainability practices in cleaning products and processes. Schade also played a key role in planning and logistics for major university events such as Commencement, Thurtene Carnival and presidential debates.

Dan Shea, professor emeritus of English in Arts & Sciences, died Oct. 23, 2023, while in hospice care at his St. Louis home. He was 86.

A specialist in early American literature as well as an accomplished stage actor, Shea was born in Minneapolis but experienced a nomadic childhood, moving a dozen times by the age of 13. In 1958, he graduated summa cum laude from the College of St. Thomas, then earned a master's degree and a doctorate from Stanford University, in 1962 and 1966, respectively.

Shea joined the WashU faculty in 1962. His first book, *Spiritual Autobiography in Early America*, explored writings by Quakers and Puritans in 17th- and 18th-century New England. Other publications include *Journeys in New Worlds: Early American Women's Narratives*, which he co-edited, as well as numerous essays on writers including Thomas Morton, Jonathan Edwards, B.F. Skinner and Pennsylvania Quaker preacher Elizabeth Ashbridge, whose autobiography he also edited.

Shea was named chair of English in 1978, serving until 1984 and resuming the role in 1995.

Jocelyn Bess (Friedman) Steelman, AB '99, of New York, New York, passed away suddenly on Sept. 30, 2023, at the age of 46.

Steelman was raised in Great Neck, New York. During her time in college at WashU, she took advantage of all the university offered: She was a member of AEPi and studied everything from fine art to economics. At WashU, she met her devoted husband, Elliot Steelman, AB '99. They became friends as first-year students and started dating during their junior year studying abroad, Jocelyn in Florence and Elliot in London.

Following graduation, the couple moved to New York, where Jocelyn began what would be a multidecade career at Moody's. During her tenure, she ascended the ranks and most recently served as GM-product strategy.

She was also a founder of the Women's BRG (business research group) at Moody's and a mentor to many. She was a star performer, a loved and respected colleague, and considered a leader among leaders. After her passing, Moody's announced the creation of an annual award to be given in her memory.

While in New York City, she would also build a home with Elliot, with the couple marrying in 2003. Despite her business achievements,

Steelman's most-prized title was that of mom. She loved her two boys, Jacob and Felix, and was so proud of the young men she was raising.

She was a devoted baseball mom, traveling extensively to watch her sons play, always encouraging them and their teammates to do their best. With her family, she also savored vacationing in Nantucket in the summer and traveling to the Galapagos, London, Italy and Paris.

Steelman also was a philanthropist, always looking to help others and give back. She served on various boards of directors and actively supported many charitable causes, including, with Elliot, establishing a need-based scholarship for students at WashU.

She is survived by her husband, Elliot Steelman; children, Jacob and Felix; parents, Mitchell and Jill Friedman; sister, Pam Ollendorff (Scott); brother, Jeffrey Friedman; five nieces and nephews; and father- and mother-in law, Barry and Sheila Steelman.

Sue Taylor, a longtime teacher of applied music in harp in the Department of Music in Arts & Sciences, died peacefully at home Oct. 30, 2023. She was 85.

Born in Hannibal, Missouri, Taylor earned a bachelor's degree from the University of Arkansas at Little Rock in 1976. From WashU, she earned a master's degree of music in harp in 1978, a master's degree in musicology in 1981 and a doctorate in 1988. From 1991-2007, she directed the department's Friends of Music group and served with the applied music faculty from 1997-2022.

A principal harp for the St. Louis Philharmonic Orchestra, Taylor performed with Winter Opera St. Louis, Union Avenue Opera, Opera Theatre of St. Louis and many others. She is survived by her children, Gena and John, and grandchildren, Ethan and Jackson. Memorial contributions may be made to the St. Louis Symphony Orchestra.

Barbara P. Turner, a longtime staff member in the Division of Comparative Medicine at the School of Medicine, died Sept. 26, 2023, at her home in Belleville, Illinois, from breast cancer. She was 58.

Turner was a coordinator of procurement and accounting in the division and had worked as a procurement specialist at the school for more than 40 years.

The following death notices were submitted from Sept. 1, 2023-Dec. 31, 2023. Please contact Advancement Services at WUADDataChange@wusm.wustl.edu to report the death of an alumnus or alumna. Please submit full obituaries for consideration to wustlimgclassnotes@wustl.edu.

1940-1949

Lois (Marting) Estes, BU46; Nov. '23
James R. Bridwell, LA49; Sept. '23

1950-1959

David L. Globus, LA51, MD54, HS; Sept. '23
Wolff M. Kirsch, HS, LA51, MD55; Nov. '23
Carl H. Sjoberg, BU52; Oct. '23
Shirley (Pierce) Bierer, NU53; Sept. '23

Robert C. Packman, LA53, MD56; Sept. '23
Philip A. Bresnick, LA54; Sept. '23
George E. Broman, LA54, MD58; Nov. '23
Frank Kuenz, AR54; Sept. '23
Donald R. Strobach, LA54, GR59; Nov. '23
Betty (Frenkel) Steinweg, LA55; Oct. '23
Ethel (Knight) Adam, NU56; Oct. '23
J. Dale Perkinson, EN57; Oct. '23
Sheldon M. Enger, BU58, GB61; Sept. '23
Mary (Haake) Klonoski, LA59; Oct. '23
Juanita R. McNeely, FA59; Oct. '23

1960-1969

Shirley (Swanson) Blumenfeld, GR60; Sept. '23
Jeanne Hoff, LA60, HS76; Oct. '23
Armida (Heslep) Lindsey, LA60; Sept. '23
Jane (McCoy) Broadbooks, GR61; Sept. '23
Richard Claybour, AR61; Nov. '23
Eugene Brull, LA62; Dec. '22
Bonnie (Frederich) Halls, LA62; Sept. '23
Frank M. Rembert, MD62; Nov. '23
Donald L. Curlovic, GR63; Sept. '23
Loretta (Walter) Seltzer, GR63; Sept. '23
Edwin Dale Wolfgram, HS63; Sept. '23
Franklyn B. Hupperts, UC64; Sept. '23
Nancy (Baer) Kessler, LA64; Sept. '23
Dennis J. Davis, UC65; Dec. '23
James R. MacMillan, UC65; Oct. '23
James R. Montgomery, UC65; Oct. '23
Joseph R. Soraghan, LW65; Oct. '23
F. Gilbert Bickel, BU66; Dec. '23
Susan (Reheis) Iaccarino, LA66; Dec. '23
Melissa (Powers) Kreishman, AR66, GA68; Nov. '23
Michael B. Rumelt, MD66; Sept. '23
Valluru B. Rao, SI67; Sept. '23
Randall Rosenthal, MD67; Sept. '23
Nelson E. Kolaski, UC68; Nov. '23
Dwight L. Shoemaker, LW68; Nov. '23
Michael L. Cowan, MD69; Dec. '23

1970-1979

Douglas G. White, LW72; Sept. '23
Steven J. Steiner, LA74; Dec. '23
Mary K. Carruth, PT76; Sept. '23
Virginia (Plumlee) Taylor, GR77, GR80, GR88; Oct. '23
Matilda (Glidewell) Chase, GB78; Oct. '23
John R. Hurst, UC79; Oct. '23

1980-1989


John J. Reible, GR80; Nov. '23
Sandra (Rowe) Riggs, UC82, BU83; Nov. '23
Susan V. Whitworth, LA82; Sept. '23
Nam (Paik) Jack, LW83; Sept. '23
Neil R. Sandvold, AR83; Aug. '23

1990-1999

Alex F. Bornstein, SW94; Sept. '23
Deborah (Gratz) Gordon, SW95; Oct. '23
Kimberly A. Doran, LW96, HA97; Dec. '23
Jocelyn (Friedman) Steelman, LA99; Sept. '23

2020-2029

Maha E. Tiimob, LA20, LA20; Sept. '23
Nikhil Khanna, EMBA23; Nov. '23
James A. Cayley, SW24; Oct. '23
Rayan Al bakr, GL27; Nov. '23



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Photo: Washington University Archives



May Day tradition

University women hosted their first "McMillan Day," or "May Fete," May 1, 1909. The festivities featured dramatic presentations, comedy skits (as demonstrated here by alumnae Enid Siegfried, Mae Cella and Lois Bader in 1936) and a dance to wind ribbons around the maypole outside the women's dorm (McMillan Hall). The annual event continued until Athletic Director Alice Shriver canceled it in 1943, so "women students could use their time for Red Cross and other war activities on campus."



Designing solutions

Students in the McKelvey School of Engineering showcase a prototype for a device that could help environmental engineers monitor the air quality impact of factory farms in Missouri. In the upper-level “Multidisciplinary Design & Prototyping” class, students built their prototypes in the Spartan Light Metal Products Makerspace.

Photo: Joe Angeles