

REUNIONS BACK
ON CAMPUS

UKRAINIAN PHILHARMONIC'S
HOBART EARLE '83

A NEW
PRINCETON COMPANION

PRINCETON ALUMNI WEEKLY

DNA, DISEASE, & DATASETS

Alice Zhang '10
thinks artificial
intelligence can
point the way to
essential new drugs



APRIL 2022
PAW.PRINCETON.EDU

Awaken to Art

While we build a new Art Museum for Princeton, discover our two downtown galleries.



Native America: In Translation

On view through April 24

PRINCETON UNIVERSITY ART MUSEUM

ART *ON* HULFISH

aperture

Native America: In Translation is curated by Wendy Red Star. The exhibition is organized by Aperture Foundation, New York, and is made possible, in part, with generous support from the National Endowment for the Arts. Martine Gutierrez (born 1989, Berkeley, CA; active Brooklyn, NY), *Neo-India*, *Mam Going Bananas* (detail), from the series *Indigenous Woman*, 2018, printed 2021. Archival pigment print. Courtesy of the artist and RYAN LEE Gallery, New York. © Martine Gutierrez

Elizabeth Colomba: Repainting the Story

On view through May 8

ART @ BAINBRIDGE

PRINCETON UNIVERSITY ART MUSEUM

Elizabeth Colomba (born 1976, Épinay-sur-Seine, France; active New York, NY), *Four Elements, Five Senses* (detail), 2018. Collection of Jennifer Hardy. © Elizabeth Colomba / Artists Rights Society (ARS), New York

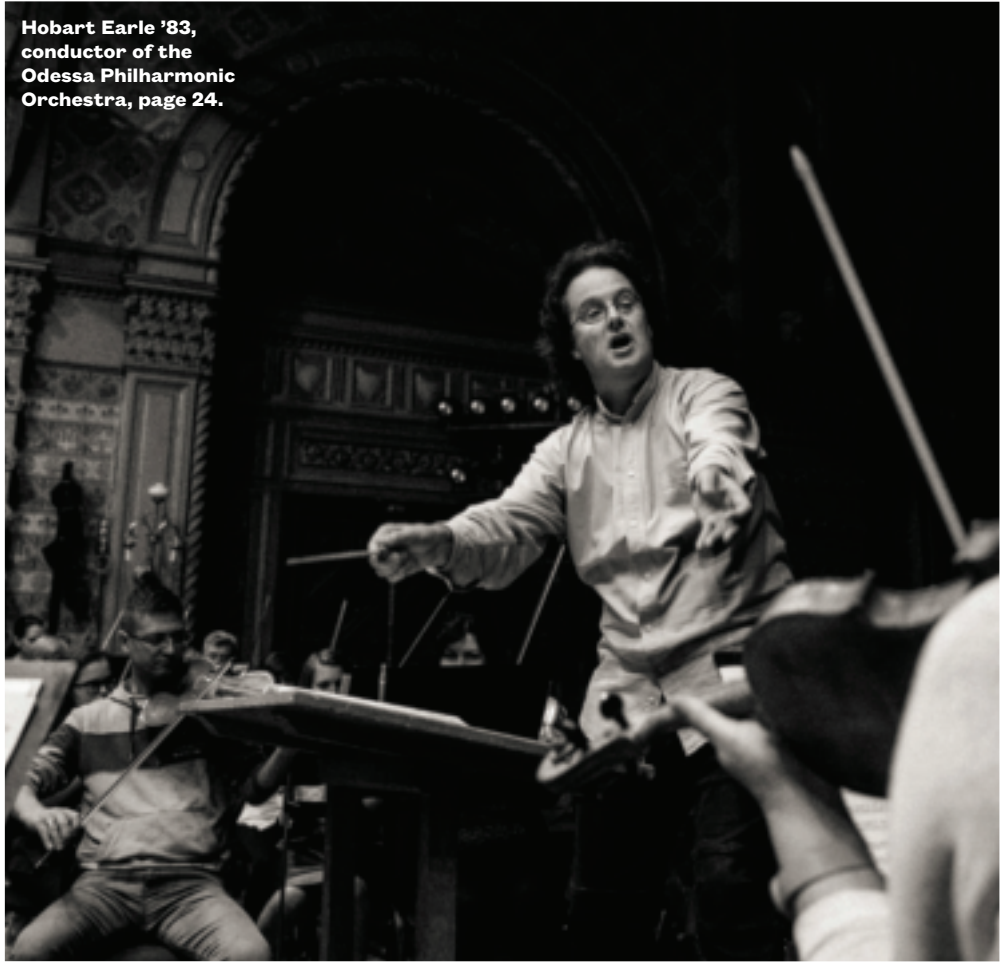
PRINCETON ALUMNI WEEKLY

An editorially independent magazine by alumni for alumni since 1900



Because of the continuing paper shortage, this issue has only half the Class Notes columns. Your column should appear here. To read the rest, see the instructions on page 26. Email paw@princeton.edu to request a PDF or a copy of the magazine.

Hobart Earle '83, conductor of the Odessa Philharmonic Orchestra, page 24.



PRESIDENT'S PAGE 2

INBOX 3

ON THE CAMPUS 7

Geo-exchange fuels sustainability • Community-college partnership • The New Princeton Companion • Graduate school dean • In Memoriam • SPORTS: Lacrosse coach Chris Sailer retires • RESEARCH: Yibin Kang on metastatic cancer • Behind the Research: Dean Moss, choreographer

PRINCETONIANS 23

NPR's Frank Langfitt '86 • Odessa Philharmonic conductor Hobart Earle '83 • Reunions planning • Journalist Catherine Saint Louis '96

CLASS NOTES 26

MEMORIALS 34

CLASSIFIEDS 39

PRINCETON PORTRAIT 40

Follow the Data 18

Could a new, data-driven approach to drug discovery lead to treatments for diseases like ALS and Parkinson's disease? Alice Zhang '10, co-founder of Verge Genomics, is betting that it can. *By Susan Reslewic Keatley '99*

PAW.PRINCETON.EDU



PAWCAST
Rosa Wang *91



Financial Power

On the latest PAWcast, Rosa Wang *91 discusses her work using cellphones and mobile banking to empower women in some of the world's poorest and most remote places.



Screen Time

Julia Storm '96 is helping parents manage screen time and online safety.

Understanding Ukraine

Politics professor Mark Beissinger recommends three books for readers who want to understand the Russian invasion.

Soviet Memories

Gregg Lange '70 recalls Princetonians in the Cold War.

Aiming for Transformation: How We Fli at Princeton

Khristina Gonzalez is Senior Associate Dean of the College and the inaugural Bob Peck '88 Director of the Emma Bloomberg Center for Access and Opportunity. She is a leader in her field and plays an integral role in advancing Princeton's commitment to an inclusive undergraduate student body. I have invited her to share a bit about her important work. —C.L.E.

In April 2020, at the height of COVID-19's first wave, The New York Times published an article titled "College Made Them Feel Equal. The Virus Exposed How Unequal Their Lives Are." It painted the different experiences of two Haverford students following campus closures. No longer residing in the same dorms or learning in the same classrooms, the socioeconomic realities of their families bore greater effect on their college lives—and became visible to their faculty, staff, and peers. The pandemic, the article concluded, revealed that despite their access initiatives, elite colleges simply "paper over" persistent inequality in their student bodies. And, in plucking high-achieving students from their hometowns, they leave the structural inequities affecting those communities untouched.

As the Director of Princeton's newly-established Emma Bloomberg Center for Access and Opportunity, a unit dedicated to forging paths to educational equity, I've been kept awake many nights by this article. Over the past fifteen years, Princeton's access initiatives have truly changed our community. Our first-generation, lower-income (or Fli) students now comprise around one third of the undergraduate population—up from 7 percent of the Class of 2008. We've revived our Transfer Program, welcoming community college graduates and military veterans. In short, we have undergone what President Eisgruber has called "the greatest transformation of Princeton's undergraduate student body since co-education." But have these initiatives merely disguised inequity? Have we been content with pursuing "access" alone, changing our demographics but leaving our institution—and the world—fundamentally the same?

I've worked with our Princeton Fli student community for nearly a decade, and can confidently say that, no, our change has not been a mere façade. In fact, our Fli students themselves have helped us transform not only who a Princeton education is for, but what it can do in society.

At Princeton, our access initiatives do not exist to simply get students in the door; they commit to ensuring that all students, regardless of their background, have the opportunity to thrive. This commitment requires us to do more than meet their basic needs on campus. It requires us to work in partnership with them to address the broader social realities that shape their lives, both on and off campus.

In principle, this commitment has meant operating with a transformational, rather than assimilative framework. We must ensure our students' experiences—and those of their communities—remain visible, rather than shrouded in obscurity outside FitzRandolph Gate.

This visibility is a gift from our students, allowing us to work to reform lingering inequities in our institution and the world.

In practice, this commitment is evident in many of the programs we offer through the Emma Bloomberg Center. Our Scholars Institute Fellows Program (SIFP) brings campus awareness to our Fli students' experiences while providing them with mentorship and support. Established

PHOTO BY DOOLEY/FOTOBUFFY



Fli students in front of Nassau Hall.

with 40 students in 2015 and now 450 members strong, SIFP empowers students to bring their backgrounds to bear upon their academic, professional, and social journeys at Princeton.

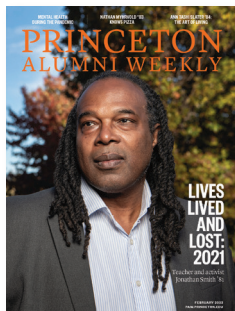
As a result, not only have we been able to craft more equitable institutional policies, like ensuring that students have access to necessary emergency funds through our Office of Campus Life, we've also been able to engage more deeply with students' home communities. For instance, with Princeton's Pace Center, Kelton Chastulik '21 began a book drive to deliver quality literary materials to people in his hometown of Chambersburg, PA. That project continues with the support of another Chambersburg-born SIFP student, Madison Mellinger '23, and has distributed over 7,500 books to over 15 local organizations. Post-graduation, Kelton works for the College Advising Corps in Chambersburg, improving college awareness and closing the gap between his rural community and selective colleges.

This transformational approach can only be achieved in collaboration with our students. If we hope to address emerging needs, we must take their ideas seriously. For example, student advocacy led us to hire a case manager to connect families with social support in their own towns, and a family engagement specialist to equip parents with the information they need to be partners in their child's educational journey.

Our work, though, is certainly not complete. Last year, President Eisgruber posed an urgent question to our campus: how might Princeton, with its robust resources, "extend its educational mission to reach underserved populations around it?" With the generous support of Bloomberg Philanthropies, our Center can innovate new ways to expand the scale of our initiatives, even beyond current Princeton students. In sharing our learning and programs with colleges across the country, we can further offer a broader platform to the experiences of our Fli students.

Despite all of our talk about "independent work" at Princeton, our students never come to us alone. Like us all, they are embedded in networks and identities that shape their lives. Rather than pretending that these connections end when they enter the "orange bubble," we must learn from the experiences they bring to Princeton, experiences that help us improve our institution—and the world. From Kelton and Madison, to the hundreds of future Fli graduates, the Emma Bloomberg Center has plenty of good teachers—and we're eager to learn from them all.

Inbox



REMARKABLE LIVES

Thank you for honoring Marianna TePaske Daly '79, M.D. ("Lives: An Appreciation," February issue).

I met her at a UNC Internal Medicine meeting in the 1990s. She and I attended that conference for the next 20-plus years, sharing remembrances and also Princeton basketball NCAA appearances (the conference is held in mid-March). In March 2019, Marianna was telling me about the chemo and radiation ahead of her. When an acquaintance asked her about me, she said simply, he is a college friend, not revealing what had occurred seconds before.

Marianna was a front-line doctor, and her work in Madison County, North Carolina, has saved many lives from HIV, hepatitis C, and opiate use disorder. One dedicated person (and Princeton grad) can make a great difference in a rural setting.

Bill Casp '76, M.D.
Forest City, N.C.

Thank you for the exquisite memorials in the February issue. The essay on Jonathan Smith '81's inspiring teaching and

leadership struck me particularly deeply.

Jonathan was my first-year RA in 1901 Hall. When this very naive, very white poetry fan asked whether I could attend a meeting of his poetry group, Kuumba, he invited me along. I worked and performed with the group during that whole year.

Thanks to Jonathan, poems like Gil Scott-Heron's "The Revolution Will Not Be Televised" are now a visceral part of me. Thanks to Kuumba members' nonjudgmental welcome, I became gradually aware — without their telling me directly — how toxic Princeton often was for them and how much they needed times and spaces of retreat from white students. The next fall I knew I couldn't and shouldn't return to the group. Any boundary-breaking from me would have to take other forms.

None of them owed me this education, which was costly to them, and which I should not have needed. But thanks to Jonathan's quiet example, they gently taught me, nevertheless. I am grateful to them all.

Cristina Traina '83
New York, N.Y.

Every year your section on "Lives Lived and Lost" fascinates me, but I seriously urge you to drop it. The reason is that it is so frustrating to read about these people and sometimes wish to write to them or even meet them, but that is impossible because every single one of them is deceased. I think you should replace the section with a section of equal length dealing with living alumni/ae. It could emphasize alumni

from older classes as does the present section. I cannot see any downside to my recommendation. It even would be better for those written about; they'd actually get to read about themselves. A year from now prepare a section and call it "Fascinating Lives Honored in 2022" — or "Lives Being Lived."

James William Anderson '70
Wilmette, Ill.

FOSSIL-FUEL INVESTMENTS

Princeton's unofficial motto, "In the nation's service and the service of humanity," and Princeton's endowment are in conflict with each other, and President Eisgruber '83's recent page (February issue) describing the Venture Forward campaign does little to untangle the contradiction of words and actions.

Princeton's endowment invests in fossil fuels. This means that Princeton supports the network of actions that puts buried, fossilized carbon into our air. In pursuit of financial profit, Princeton hopes for the successful expansion of fossil-fuel use. This only furthers climate change and the destruction of life as many know and cherish it. Surely Princeton and Eisgruber recognize that vigorously working to put more carbon in our atmosphere is not a service to humanity.

Financial success that comes from fossil-fuel investment comes with costs that do not offset possible benefits. What is the use of an even more amazing Princeton if our coastal cities and communities collapse from rising waters or if more people starve because crops fail due to dramatic weather shifts?

Eisgruber's Venture Forward campaign has admirable, forward-thinking goals that include "innovative thinkers [who] respond to the climate crisis with a roadmap for achieving a carbon-neutral economy." An immediate step Princeton can take towards a carbon-neutral economy is to disinvest from the fossil-fuel economy. This would eliminate our investments in a product

WE'D LIKE TO HEAR FROM YOU

   @pawprinceton

Email: paw@princeton.edu

Mail: PAW, 194 Nassau Street,
Suite 38, Princeton, NJ 08542

PAW Online: Comment on a story
at paw.princeton.edu

Phone: 609-258-4885

Fax: 609-258-2247

Letters should not exceed 250 words and may be edited for length, accuracy, clarity, and civility. Due to space limitations, we are unable to publish all letters received in the print magazine. Letters, articles, photos, and comments submitted to PAW may be published in print, electronic, or other forms. *The views expressed in Inbox do not represent the views of PAW or Princeton University.*

PRINCETON ALUMNI WEEKLY

An editorially independent magazine by
alumni for alumni since 1900

April 2022 Volume 122, Number 8

Editor

Marilyn H. Marks *86

Managing Editor

Brett Tomlinson

Associate Editor

Carlett Spike

Digital Editor

Elisabeth H. Daugherty

Class Notes/Memorials Editor

Nicholas DeVito

Senior Writer

Mark F. Bernstein '83

Writer/Assistant Editor

Julie Bonette

Art Director

Matt Cole

Publishing Director

Nancy S. MacMillan p'97

Allison Sullivan

Administrative Coordinator

Brielle McArdle

Advertising Director

Martin Page '16 (interim)

Student Interns

Evelyn Doskoch '23; Jack Hartman '24;

Azi Jones '25; Tina A. Stanley '22

Proofreaders

Joseph Bakes; W. Raymond Ollwerther '71

Webmaster

Steven Wolock

PAW Board

Marc Fisher '80, Chair

Nancy Cordes *99, Vice Chair

*Alexandra Day '02

*Courtney Coleman Everson '03

Daniel R. Fuchs '91

Joshua Katz

Andrew Madden '92

Naomi Nix '10

Hilary Parker '01

Jessica Stahl '06

*Monica Moore Thompson '89

Nicholas Wu '18

*ex officio

Local Advertising/Classifieds

Phone 609-258-4886, PAWads@princeton.edu

Ivy League Magazine Network

Heather Wedlake, phone 617-319-0995

heatherwedlake@ivymags.com

Address Changes

alumnecs@princeton.edu, phone 609-258-3114

Princeton Alumni Weekly (I.S.S.N. 0149-9270) is an editorially independent, nonprofit magazine supported by Princeton University and paid advertising. Its purpose is to report with impartiality news of the alumni, the administration, the faculty, and the student body of Princeton University. The views expressed in the *Princeton Alumni Weekly* do not necessarily represent official positions of the University. The magazine is published monthly with a combined July/August issue.

Princeton Alumni Weekly, 194 Nassau Street, Suite 38, Princeton, NJ 08542. Tel 609-258-4885; fax 609-258-2247; email paw@princeton.edu; website paw.princeton.edu.

Printed by Fry Communications Inc., Mechanicsburg, Pa. Annual subscription: \$22 (\$26 outside the U.S.), single issue: \$2. Copyright © 2022 the Trustees of Princeton University. All rights reserved. Reproduction in whole or in part without permission is prohibited. Periodicals postage paid at Princeton, N.J., and at additional mailing offices.

Postmaster: Send Form 3579 (address changes) to PAW Address Changes, 194 Nassau Street, Suite 38, Princeton, NJ 08542.

Inbox

and process that literally fuel the loss of humanity. It is not, as Eisgruber wrote in September 2017, a question of making “political statements,” but a question of aligning our investments with being in “service of humanity.”

Marie Betts Bartlett '79

Shelburne Falls, Mass.

COMPLEX POLICY ISSUES

In her interview with PAW (On the Campus, February issue), SPIA Dean Amaney Jamal notes that when it comes to mainstream policy decisions or the results of high-profile trials, her students should always ask “whether systemic racism was at play.” In the aftermath of the George Floyd killing, issues surrounding race in America should be reexamined with a sense of urgency that is long overdue. But to suggest students and faculty should examine every area of domestic policy through such a lens is difficult to square with her commitment to “academic excellence [and] rigor in research and teaching.” If you are constantly on the lookout for something, you are predisposing yourself to find it.

It wasn't that long ago that public-policy programs in Princeton and elsewhere examined issues domestic and foreign through the lens of a global struggle against communism. As George Kennan 1925 said at that time, the results of policies undertaken under the rubric of “containment” were not always pretty. A little bit of Olympian detachment on the part of even public-policy academics can go a long way toward fostering more creative solutions to what are always complex problems.

Paul C. Atkinson '74

Bonita Springs, Fla.

ROWING AT PRINCETON

The December issue of PAW asked readers to write in with memories of crew at Princeton (From the Archives). Where to begin? Much of the writing about the first days of women's crew focuses on the hardships: lack of facilities, equipment, or support from the men's coaches. I would like to comment on the joys, some of which were stronger because of the deprivations, some of which are no doubt common to all who row.

TRAINING ON THE LAKE



Two women's lightweight rowing alumnae wrote to identify the members of the crew pictured in our December “From the Archives” photo. They are, from left, Karen Lin '06, Alison Barnes '05, Alex Lajoie '06, Amelia Robertson Parrett '04, Kim Nakamaru '06, Vasanta Pundarika '06, Lu Lu Waterhouse '04, Elisabeth Henderson Ference '06, and Caroline McCarthy '06.

In those early days, most of us were “walk-ons.” We had never rowed before; some of us had not been athletes before. But we found common purpose, endorphins, and companionship on Lake Carnegie. The physical and psychological benefits of two hours on the lake at the end of a hard day in classrooms got me through Princeton. The friendships formed with teammates as we strolled down to the boathouse or back up to campus in damp sweatsuits have endured for nearly five decades, and those bonds are stronger than the ones formed with roommates or classmates. The “career advice” from those teammates was more significant than anything gleaned from Career Services. Issues of feminism were explored more fully than could ever have happened at the Women's Center. The mentorship of coach Al Piranian '69, a selfless gentleman, was more meaningful than any interaction with professors.

My affiliation with Princeton women's crew was truly life-altering.

Cathy Brown Peinhardt '76

Gearhart, Ore.

FOR THE RECORD

The caption for Steven Weinberg *57's photo in the February issue (“Lives: An Appreciation”) misidentified King Carl XVI Gustaf. He is king of Sweden.

The Princeton Portrait about George Strawbridge 1802 (March issue) mischaracterized the timing of his break with Princeton, which came after the College affirmed its support for abolitionism in the years leading up to the Civil War.



2022 ALUMNI TRUSTEE ELECTION

IN OCTOBER OF 1900, Princeton's Board of Trustees adopted a plan to ensure alumni representation on the University's board. At that time, the board was enlarged by the addition of five alumni trustees. The board has amended the plan for elected trustees several times over the course of the decades, designating regional, at-large, and graduate ballots, and creating the positions of young alumni trustee and recent graduate school alumni trustee.

Now, 13 of the 40 trustees, or nearly one-third of Princeton's board, are alumni who have been elected to their positions. Four of these are young alumni trustees, elected by the junior and senior classes and the two most recently graduated classes. The other nine have gone through a nomination and election process overseen by the volunteer committee known as the Committee to Nominate Alumni Trustees (CTNAT), a special committee of the Alumni Council.

On the right are the two slates of candidates for the 2022 Alumni Trustee Election. Polls will open on April 5 and will close on May 11 at 6 p.m. EST. For more information visit: alumni.princeton.edu/ctnat.

AT-LARGE ALUMNI TRUSTEE CANDIDATES



James M. Garland '95
Washington, DC



Jackie Yi-Ru Ying *91
Singapore

■ *The third candidate has withdrawn from the election.*

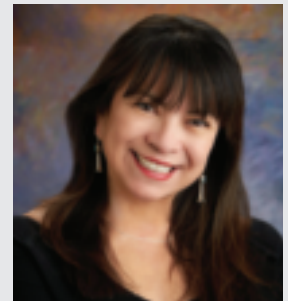
REGION III ALUMNI TRUSTEE CANDIDATES



Anthony P. Lee '92
Burlingame, CA



Annabel S.H. Soutar '94
Montreal, Quebec, Canada



Yolandra Gomez Toya '88
Bernalillo, NM

REUNIONS 2022: TOGETHER AGAIN

Come back to campus and reconnect with your friends and classmates at the **Best Place of All!**

Attend the Alumni-Faculty Forums, watch the spectacular fireworks and march in the one and only P-rade!

Visit reunions.princeton.edu often for the latest Reunions information.



There are many ways to stay connected to Princeton.

To learn more, contact Alumni Engagement at 609.258.1900 or visit alumni.princeton.edu/volunteer.



YOUR ALUMNI ASSOCIATION



DEAR TIGERS,

ON FEB. 1, for Lunar New Year, we ushered in the Year of the Tiger, and what a year it will be.

Alumni Day is one of my favorite days because of the way we celebrate each other and our shared Princeton connection. This year's Alumni Day, held Feb. 19, was particularly moving, uplifting, and memorable. Not only were we able to celebrate together in-person for the first time in two years, but also we honored two phenomenal alumnae — Pulitzer Prize-winning composer Julia Wolfe '12 and Nobel laureate Maria Ressa '86 — with the highest awards conferred upon both a graduate and undergraduate alumna or alumnus. Their awe-inspiring accomplishments can literally be seen, heard, and felt around the world. Later in the day, we honored those we lost in our community at the very moving Service of Remembrance, which reminds us that we are always remembered, always valued, always connected, always Tigers.

As spring unfolds, we have many opportunities to continue to celebrate that shared Princeton connection. President Eisgruber is traveling to see alumni in the regions beginning in San Francisco on March 23 and New York City on April 12. For all undergraduate and graduate alumni who graduated in the last decade, we hope you might join us in San Francisco and New York for a special post-party to connect with other recent alumni in the area.

Then, in May, you simply won't want to miss Reunions 2022! Get your very best orange and black ready for what promises to be an epic in-person on-campus celebration from May 19-22. In addition to the incredible Alumni-Faculty Forums, the traditional fireworks display, and the wide variety of class and group gatherings, this year we have the special honor to welcome in-person the Classes of 2020, 2021 and 2022 to our incredible community at the one and only P-rade.



Photo: Fotobuddy

Mary Newburn '97
President of the Alumni Association
and Chair of the Alumni Council

The Alumni Council continues its work to inspire connectivity among alumni around the theme of Tigers Rising, intended to capture the optimistic and tireless spirit of our community. We invite you to join us at any of these events or as your time allows — we are always grateful, always connected, always *Tigers Rising*.

Three cheers,

Mary Newburn '97



Photos by Fotobuddy and Andrea Kane

On the Campus



Jaelin Llewellyn '22, with ball, scored a season-high 29 points in his final game at Jadwin Gym, a 74-67 win over Harvard Feb. 25. The men's basketball team won the Ivy League regular season championship but fell to Yale in the league tournament final. Princeton women's basketball was unbeaten in Ivy play — 16-0, including the postseason — and defeated Kentucky in its NCAA Tournament opener, never trailing in the second half of an impressive 69-62 win. The Tigers fell to third-seeded Indiana in the second round, losing by one point. Read coverage of the women's games at paw.princeton.edu.
Photograph by Ricardo Barros



The thermal piping installed near Jadwin Gym will help to heat and cool campus buildings.

ENERGY UPDATES

Laying the Groundwork

University invests in geo-exchange, aiming to significantly cut emissions

Princenton University is investing hundreds of millions of dollars below our feet, digging holes 600 and 850 feet deep for two new state-of-the-art geo-exchange systems. They make up one of the biggest components of the University’s plan to achieve net-zero carbon emissions from campus by Princeton’s 300th anniversary in 2046.

Currently, the University runs a steam distribution plant and a cogeneration system within the central energy plant to produce electricity and steam for the campus, but some parts predate World War I. Rather than rebuilding what is now considered mediocre technology, the University sought out something newer and better.

Enter geo-exchange. Thousands of holes, or bores, are being dug underneath the south side of campus near Fitzrandolph Road and across Lake Carnegie at the new Lake Campus. Once the bores are in place, long tubes bent in a U-shape will be inserted and filled with water to capture and store heat in the ground. That stored heat, along with heat pumps and thermal energy storage tanks, will be used to heat and cool buildings.

Also underway is the conversion of campus buildings to utilize this hot-water system rather than steam.

The Thermally Integrated Geo-Exchange Resource (TIGER) facility on Fitzrandolph is expected to be completed in May 2023, while the Central Utility Building (CUB), which will distribute hot and cold water to the new Lake Campus buildings, should be finished this fall. The Lewis Center for the Arts, Lakeside Graduate Housing, and the Lawrence Apartments are already operating on geo-exchange.

The systems are extremely energy efficient, and, since most of the equipment is housed underground, the land above can be used for other purposes, including athletic fields and a parking garage. Part of a burgeoning trend of geo-exchange systems in higher education, Princeton’s system is one of the largest, according to a February article on the *Energy News Network* website.

“We always talk about Princeton as a lighthouse institution that people pay attention to,” said Forrest Meggers, an associate professor of architecture and

the Andlinger Center for Energy and the Environment, who also serves as co-chair of the Princeton Sustainability Committee. As a result, the University was “willing to take the more expensive pathway, because it’s important.”

An exact figure for Princeton’s new systems was unavailable, according to Thomas Nyquist, executive director of facilities engineering, though he said it was “hundreds of millions of dollars.”

This doesn’t mean the old infrastructure is going away, according to Ted Borer, Princeton’s energy plant manager, who noted that having on-site power generation during Superstorm Sandy in 2012 was vital.

Meanwhile, students and faculty are testing and measuring the old and new systems as part of the Campus as Lab initiative, which uses Princeton’s campus for sustainability research and experiential learning. Meggers’ research was key in determining the depth at which to dig for the most efficient and cost-effective geo-exchange bores.

“Some of my colleagues complained about how noisy the geo-thermal drilling was in the summer. And I’m like, ‘Are you kidding me? Do you know how important this is to carbon emissions?’” Meggers said. “I think there needs to be a little more ‘we’re going to save the world’ attitude about the project.”

Not all of the University’s neighbors agree. Last July, Helen Nissenbaum, a local resident, filed a lawsuit, which is ongoing, to prevent the construction of the TIGER facility due to noise concerns and zoning issues.

University spokesman Michael Hotchkiss said, “We are confident that the Planning Board reached the correct legal conclusion when it approved the University’s application to build the TIGER geo-exchange facility. ... We anticipate that the court will uphold the Planning Board’s decision.”

Assuming plans aren’t impeded, Princeton will be on track to achieve net-zero by 2046, according to a November article on the University homepage. By that milestone 300th anniversary, Princeton expects to require roughly one-fifth or one-sixth of the energy it used last year to heat and cool its buildings, even as the campus expands. ♦ By J.B.

GRADUATE SCHOOL

Princeton Grad Students Hone Teaching Skills at Local Community Colleges

By her own admission, Sophie Brady, a fifth-year musicology graduate student, did not go to a rigorous high school. Having grown up in a small town in Ohio where most of her peers didn't attend college, Brady wanted additional support before applying to four-year institutions. So she started taking courses at her local community college while still in high school.

"It was really essential for filling in some of the gaps that my high school education just couldn't provide," she said.

A decade later, things came full circle when Brady was accepted into Princeton's Community College Teaching Partnership, in which University graduate students spend a semester shadowing a faculty member at Mercer County Community College, Camden County College, or Rowan College of South Jersey (RCSJ) before teaching a course of their own.

This academic year, 20 Princeton students are taking part, the largest group since the program was reestablished during the 2016-17

academic year. The late Professor Theodore Rabb '61 conceived a previous iteration in 1974, but over the decades it changed and participation dwindled. In the new version, Princeton provides a stipend to students while they shadow community college faculty, and then the community colleges pay the students to teach.

It's a win-win-win, according to Nataalka Pavlovsky '01, an RCSJ professor of music who serves as a faculty mentor. Not only do Princeton students get guidance and real-life teaching experience, but their mentors can discuss teaching methodologies with up-and-coming scholars. And community college students "get fantastic instructors out of it," Pavlovsky said.

Cathy Carsley '93, who took part when she was at Princeton, has been a faculty member at Montgomery County Community College in Pennsylvania since 2008. She's glad to see Princeton reviving and expanding the program, especially because there is a perception of a divide in higher education between

two- and four-year schools. But Carsley doesn't want that to deter graduate students.

"If you're really interested in becoming a leader in higher ed, there is no better place to start than in community colleges because there's so much opportunity," Carsley said. She encourages graduate students to "keep an open mind about your career pathways."

Since the program was reimaged, 35 Princeton students have participated, and of those, 10 have completed their graduate education. All 10 have gone on to be employed within the education sector, including one who teaches at a community college.

For Brady, who shadowed Pavlovsky during the spring 2021 semester before leading her own "Music Appreciation" course for about 20 students last fall, teaching at RCSJ felt different than her previous experiences teaching at Princeton. She realized that community college students often don't receive the same kind of support as Princeton students.

"I think it made me appreciate how much we take for granted at an institution like Princeton, because there are so many resources for students," Brady said. "In terms of my own teaching, it's really helped me to become more aware of that and really think, 'What do the students need from me in order to thrive?'"

For example, she learned to schedule emails so they would be delivered when students were most likely to read them, usually late at night. That was just one method she used to reach a diverse group of students who often face a different set of challenges, including a lack of financial resources, family obligations, and competing priorities, such as jobs.

Though Brady didn't anticipate the amount of time and effort involved, she relished her time at RCSJ and found the work meaningful and important. She believes programs like this one are key in allowing Princeton to "give back to the broader community and share resources, because we have graduate students who really want to teach, who love to teach, and we have these opportunities to participate in and get to know members of our community that we might otherwise not meet." ♦ By J.B.



Nataalka Pavlovsky '01, right, has mentored Princeton graduate student Sophie Brady, who taught a music-appreciation course at Rowan College of South Jersey last fall.



REVIEW

Updating History: New 'Companion' Collects Fascinating Stories

By Elyse Graham '07

The definitive encyclopedia of all things Princeton, *A Princeton Companion*, was written in the 1970s. Sooner or later, the ever-flowing current of time, as F. Scott Fitzgerald 1917 described it, had to be acknowledged. This month sees the publication of *The New Princeton Companion* (Princeton University Press), a vastly updated and expanded edition for the readers of today.

The task of writing a compendium dedicated to a university is audacious, maybe foolhardy, because universities are in the business of producing knowledge: Nobody could ever stagger to the top of the mountain of art, books, discoveries, laws, patents, technologies, and more that Princeton's denizens and alumni produce every year. Nonetheless, 50 years is enough time to demand a new history. The University is making, today, more efforts to address ugly parts of its history that earlier administrations may have wanted to

keep buried. The student body is more diverse, and so is the alumni community. Historical avenues that didn't seem worth exploring at length in the '70s — *Computers? Those big industrial appliances that only specialists ever see?* — have become superhighways of the modern world. And on top of all that, Princeton has continued to make new history.

The editor of *The New Princeton Companion*, Robert Durkee '69, is a former vice president and secretary of the University. As someone who attended Princeton as an undergraduate, covered it for *The Daily Princetonian*, and then spent more than 47 years as an administrator in Nassau Hall, Durkee thought, when he started work on the book, that he knew the University's history fairly well. Nonetheless, he said, "I certainly came away from the project with a more textured, more expansive view of the University."

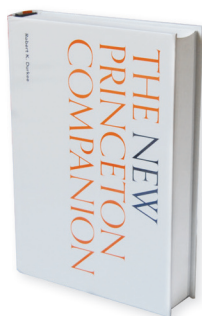
The book opens with longform essays on the history of the University, the

history of the changing physical campus, and the University's informal motto, "Princeton in the nation's service and the service of humanity." It also includes a calendar that lists an event in Princeton's history for every day of the year.

"The idea of the calendar came late," Durkee said. "I tell you, the month of August was a challenge. For an institution that operates on an academic calendar, not much happens in August."

Interesting tidbits about Princeton's history abound in the book's pages. Jonathan Belcher, an 18th-century governor of New Jersey, gave such generous support to the University (the College, at the time) that the trustees proposed to give the name Belcher Hall to what is now Nassau Hall. Belcher suggested the name Nassau Hall instead, after King William III of the House of Nassau. From there, by way of our baseball team and a student named George Ward 1869, who petitioned mightily for the College to have colors as other schools did, came the school colors of orange and black, inspired by the colors of the House of Nassau. (Belcher's coat of arms featured stripes of yellow and red; had we gotten Belcher Hall, we might today have the same colors as McDonald's.)

More: Nathaniel FitzRandolph, an 18th-century Quaker whose grandson donated the funds for FitzRandolph Gate, lies buried with his family under the



Princeton University Press; Entertainment Pictures; Michael Svoboda/Stock; Denise Applewhite/Princeton University; bauhaus1000/Stock; Chuck Kennedy; Alexander Glaser

archway of Holder Hall. ... During the Civil War, the University alienated a generation of Southern alumni by loudly declaring allegiance to the Union. ... During the Great Dinky Robbery of 1963, students on horseback, wearing cowboy hats and bandana masks, stopped the Dinky en route to Princeton and spirited train passengers away to the eating clubs. The roll of Princetoniana extends seemingly forever: Dean's Date, the Dillon dodgeball tournament (inaugurated 2005), the "Dirty Bicker" of 1958 (when, shamefully, the eating clubs refused to admit a large group of Jewish students).

New or expanded content includes entries on Jewish, Black, and Hispanic/Latinx students at Princeton; the Frist Campus Center; the University's pioneering history in computing; the historic case on the Deferred Action for Childhood Arrivals (DACA) program that Ramona Romero, the University's general counsel, helped to win at the U.S. Supreme Court; Toni Morrison; Michelle Obama '85; entrepreneurship and innovation on campus; pranks; "Princeton in the Movies and on Television"; Sally Frank '80's successful fight to win admission for women into all eating clubs; and LGBTQIA students at Princeton. An entry on "Epidemics" was motivated by the COVID-19 pandemic.

The book faithfully honors the names of many major donors. John Insley Blair, a railroad baron whose generosity built Blair Hall in 1897, remarked, upon becoming a University trustee, that "his own formal education was limited; he had spent most of his life learning addition and now, he said, 'I have come to Princeton to learn subtraction.'" An entry on Cyrus Fogg Brackett, a brilliant eccentric in the science faculty, comes with a story about three of his students — David B. Jones 1876, Thomas D. Jones 1876, and Edgar Palmer 1903 — whose fond memories of their teacher led to the creation of Jones Hall and Palmer Physical Laboratory.

All of which is right and proper, given that, as *The New Princeton Companion* records, the official list of "Princeton University's Defining Characteristics and Aspirations" ends with this: "an intensely engaged and generously supportive alumni community." Take note, dear reader. ♦



BROWN

College Experience for High School Students

At Brown Pre-College, students get a feel for what college life is like and leave prepared for their next steps. More than 200 courses are available on campus and online.

Now accepting summer
2022 applications.

precollege.brown.edu/paw



Calling All Princeton Authors!

Reach **135,000** readers by advertising your book in the **Princeton Bookshelf, Summer Guide to Princeton Authors** in the June & July/August 2022 issues of PAW.

Ad space reservation:
April 14

Book cover and ad copy due:
April 26



Contact Advertising Director
PAWads@princeton.edu
609-258-4886

STAY CONNECTED

follow
[@princetonalumni](https://twitter.com/princetonalumni)
on
social
media



THE DEFINITIVE SINGLE-VOLUME COMPENDIUM OF ALL THINGS PRINCETON

The New Princeton Companion traces Princeton's history, the development of its campus, and manifestations of its commitment to service, and includes a "this day in Princeton history" calendar.

Its 404 encyclopedia-style entries cover all the academic departments; all varsity teams; all 20 Princeton presidents; and many student organizations. They also include histories of African American students, Asian American and Asian students, Hispanic/Latinx students, Jewish students, LGBTQIA students, Native American and Indigenous students, and women at Princeton.



Attend a session featuring the book at Princeton Reunions: Friday, May 20, at 4 p.m. in McCosh 50
Sponsored by the Princetoniana Committee of the Alumni Association

“Rich in history and chock full of little nuggets that will surprise and delight you. Anyone interested in Princeton should own a copy.” –Bill Bradley '65



May 3, 1894

The group formerly known as the Princeton College Dramatic Association puts on its first show, *The Honorable Julius Caesar*, under its new name, the Triangle Club.



November 19, 1969

Astronaut Charles “Pete” Conrad Jr. '53 becomes the third man to walk on the moon; he takes five Princeton flags to the moon with him.



June 9, 1970

In connection with its graduation, the Class of 1970 permanently opens FitzRandolph Gateway, inscribing its class motto, “Together for Community,” in the gate’s east pillar.



July 14, 1970

Larry Ellis is named head coach of track, the first African American head coach in the Ivy League; he later coaches in the Olympic Games of 1984.

Other topics include:

Annual Giving, Princeton University Art Museum, Civil War, Coeducation, The Dinky, Eating Clubs, Endowment, Carl A. Fields, Financial Aid, Graduate School, Hoaxes and Pranks, Honor System, Sir Arthur Lewis, Toni Morrison, Nude Olympics, “Old Nassau”, Princeton in the Movies and on Television, Princeton and Slavery Project, Princeton in Space, Protest Activity, Residential Life, Reunions, Senior Thesis



MĀORI POINT
CENTRAL OTAGO ★ NEW ZEALAND

Ringed by the Southern Alps, Māori Point makes award-winning Pinot Noir, Rosé, Chardonnay and sparkling wines based on natural, low-intervention winemaking. Winemaker Matt Evans '99 and team meld old world tradition with innovation.

Free shipping available to USA

To learn more, visit www.maoripoint.com

WANTED

PAW'S NEXT EDITOR

The *Princeton Alumni Weekly* is searching for its next editor — someone who can continue its strong tradition as an editorially independent print magazine while building PAW's digital presence.

The ideal candidate is flexible and curious, has journalism experience and an interest in Princeton, and is comfortable in all media platforms. A commitment to promoting a vigorous exchange of ideas is essential.

Sound like you? For a full job description and information on how to apply, go to bit.ly/3rWSA4J

PRINCETON ALUMNI WEEKLY

An editorially independent magazine by alumni for alumni since 1900

On the Campus / News

Priestley Named Graduate School Dean

Rodney Priestley, a chemical and biological engineering professor



Priestley

with expertise in materials science and Princeton's inaugural vice dean for innovation, has been named dean of the University's graduate school, effective June 1.

Priestley's priorities as dean will include diversifying the student body, cultivating a more inclusive and welcoming environment, broadening professional and career development, and innovating in the humanities,

according to a University announcement.

Priestley joined the faculty in 2009. Since 2021, he has been co-director of the National Science Foundation Innovation Corps (I-Corps) Northeast Hub, a job that he will continue as dean. He earned a bachelor's degree from Texas Tech University and a Ph.D. from Northwestern University, and completed a postdoctoral fellowship at École Supérieure de Physique et de Chimie Industrielles in Paris.

Deputy Dean Cole Crittenden '05 has served as acting dean since last July, when philosophy professor Sarah-Jane Leslie '07 left the position. ♦ *By J.B.*

IN MEMORIAM

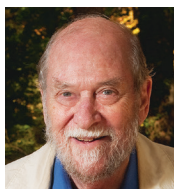
JAMES SEAWRIGHT, an artist known for interactive sculptures



and an early faculty member of Princeton's visual arts program, died Feb. 12. He was 85. Starting in 1974, Seawright spent

35 years teaching in the studios of 185 Nassau Street, mentoring generations of artists and filling leadership roles in Princeton's arts community. In a University obituary, longtime friend and colleague Emmet Gowin described Seawright as a "comprehensively intelligent" person who "retained [his] sense of wonder throughout a long and full life."

EDMUND KEELEY '48, a renowned novelist, poet, and translator



who directed the University's creative writing program for 15 years, died Feb. 23 at age 94. A longtime professor of English, Keeley

earned acclaim for his translations of Greek poetry and helped to create the Program in Hellenic Studies. As head of creative writing in the 1960s and '70s, he brought the workshop model to Princeton, aiming to expose students to the process of writing and "how writers themselves think about literature and talk about it," as he later told PAW.

HALE F. TROTTER '56, a mathematics professor and former department



chair, died Jan. 17. He was 91. Trotter was associate director of Princeton's Computer Center (and later, Data Center) for more

than two decades. He also served as chairman of the CPUC's Resources Committee, including in 1978, when the group made its first proposal for a new policy on University investments in South Africa. Trotter's research interests included probability, group theory, knot theory, and number theory, according to a family obituary.

BRUCE ARDEN, a computing pioneer who oversaw the creation



of Princeton's computer science department, died Dec. 8, 2021, at age 94. Arden, whose early career included

service in the U.S. Navy and mainframe research at the University of Michigan, joined the University's faculty in 1973. He chaired the electrical engineering and computer science department for more than a decade until it split into two departments in 1985. Arden left Princeton in 1986 to become engineering dean at the University of Rochester, a post he held until 1994. ♦



Women's lacrosse
coach Chris Sailer

WOMEN'S LACROSSE

A Legacy in Culture and Championships

After 36 years at Princeton, coach Chris Sailer is retiring

As Princeton women's lacrosse coach Chris Sailer enters the 36th and final year of her hall-of-fame career, perhaps one game best epitomizes her approach: the 2002 national championship. Sailer was facing off against her former player and national-championship-winning captain Kim Simons Tortolani '94, then coach of the Georgetown Hoyas, and after a hard-fought first half there was seemingly no advantage to be had.

Tortolani knew otherwise. Reflecting on the experience, she ruefully notes that "we went into halftime tied, and I knew I was in trouble." Sailer used the break to fire up her squad, and the Tigers went

on to a 12-7 victory and Sailer's second national title.

Sailer has led the women's lacrosse program to 12 final fours, seven national title games, and three national titles,

To play for Sailer is to be pushed to the absolute highest standards, both athletically and personally, players say. However, those tough expectations come with rock-solid support, backed by her ever-present belief in her team.

and she was inducted into the National Lacrosse Hall of Fame in 2008. She leaves behind a legacy of unprecedented success, both in trophies and in culture. She has been hailed by her former players not just as a great coach, but a master motivator and a steward of the program's history and prestige. Tortolani says Sailer instilled a real sense of "honor to be playing for the team and the program, and [that] you owe something to those who have played before you."

Program alumni recognize Sailer's gift for reaching her players. Tortolani says that Sailer "made it very clear that we were good enough and instilled a great belief in us." To play for Sailer is to be pushed to the absolute highest standards, both athletically and personally, players say. However, those tough expectations come with rock-solid support, backed by her ever-present belief in her team.

Asked about her philosophy of coaching, Sailer said she always believed in how "important [it is that] players know how much you believe in them and watch them succeed."

Reflecting on how her approach has evolved over the years, Sailer says that "you have to change — times change, culture changes." Program alumni even say there is a Chris 1.0 and a Chris 2.0, charges to which Sailer pleads guilty: "Chris 2.0 is a little softer around the edges," she admits with a laugh.

All-American Gillian Thomson '92 says Sailer was always quick to support athletes who had played under her at Princeton, even long after they graduated. While Thomson was coaching high school lacrosse, she once emailed her old coach with a question about game strategy; Sailer called her immediately to offer detailed advice.

Given her reputation for intensity and hard-won success, players say people might not know about Sailer's hidden talent: She is notoriously both "fantastic and horrible at karaoke, especially bus karaoke," Tortolani says. (Sailer acknowledges a "few classic performances" in her time at Princeton.) At the final celebration of Sailer's career, Tortolani says, "I hope a microphone is presented to Chris Sailer for us all to enjoy." ♦ *By Jack Hartman '24*

MOLECULAR BIOLOGY

Fighting Metastatic Cancer

Disabling a troublesome gene could improve cancer outcomes

Metastatic cancer is a deadly puzzle. Once cancer spreads to more than one part of the body, it is far more likely to result in death. Researchers have struggled for decades to find effective ways to prevent, treat, or reverse metastasis once it begins.

When Princeton molecular biology professor Yibin Kang was a postdoctoral researcher at Memorial Sloan Kettering Cancer Center in the early 2000s, he thought of metastasis as “the elephant in the room.”

“Nobody knows how cancer cells become metastatic,” he says. Now, after more than 15 years of research on a gene known as metadherin, or MTDH, Kang believes he has made a breakthrough.

In November 2021, Kang and his co-authors published two papers in *Nature Cancer* demonstrating that in mice, blocking the interaction between MTDH and another protein disables its function and prevents metastasis. Kang hopes his findings will lead to new therapeutic interventions for treating common

Kang hopes his findings will lead to new therapeutic interventions for treating common cancers, including breast, lung, colon, liver, and prostate.

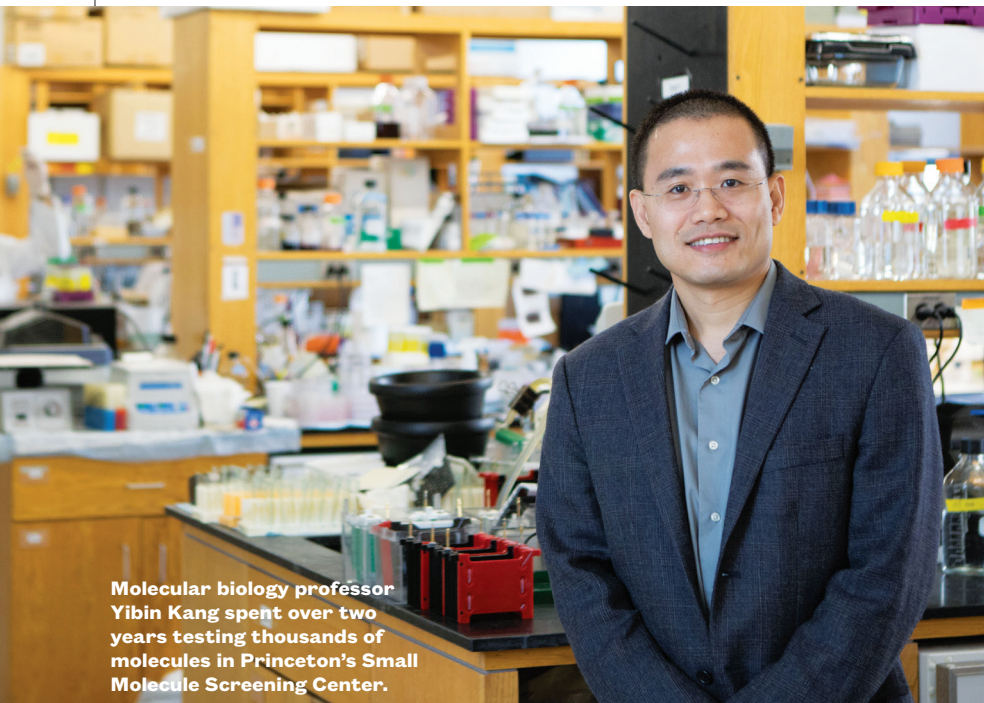
cancers, including breast, lung, colon, liver, and prostate.

Kang says MTDH plays two key roles in helping cancer flourish: It helps tumors resist stress as they grow and suppresses the body’s immune response to cancer — which he compares to having “a house on fire, [but the] fire alarm is disabled.”

He hopes to begin clinical trials on humans in two to three years. An important step in the process will be substantially reducing the concentration of the MTDH-blocking compound to prevent unwanted side effects. ♦

By Joanna Wendel '09

 **READ MORE** about Kang’s cancer research at paw.princeton.edu



Molecular biology professor Yibin Kang spent over two years testing thousands of molecules in Princeton’s Small Molecule Screening Center.

FACULTY BOOKS

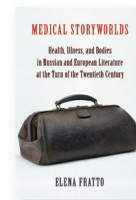


South to America (Ecco Press) by **Imani Perry**, professor of African American studies, aims to correct the stereotypes and misconceptions commonly associated with the American South and explore its histories, rituals, and landscapes. Perry argues that understanding the South is key to building a more humane future for the entire United States.



In *Only the Clothes on Her Back*, professor of history **Laura F. Edwards** explores what dresses, waistcoats, shoes, and other clothing can tell us about the legal status of

the least powerful Americans in the 19th century. The book (Oxford University Press) offers a new understanding of society by linking material culture and social history.



Elena Fratto, professor of Slavic languages and literatures, spotlights the narrative side of medicine in *Medical Storyworlds* (Columbia University Press). She investigates the interplay

between medicine and literature in the early 1900s by highlighting the perspectives of Russian authors, European writers, and medical practitioners.



Recitatif (Knopf) by **Toni Morrison**, the late novelist and professor emerita of creative writing, follows the lives of Twyla and Roberta, two women who differ

in one key way: One is Black and one is white. By removing all racially coded language in the story’s text, this rereleased version of a short story first published in a 1983 anthology challenges readers to confront their own stereotypes and biases. ♦

Moss' Work: A Sampling



DRAWING IN THE AUDIENCE

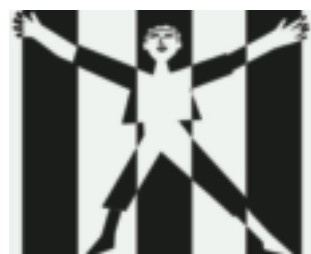
Starting in the mid 2000s, Moss became fascinated with the ways in which the audience shapes a performance. He created several pieces that played with this theme, including “figures on a field” (2005), a collaboration with visual artist Laylah Ali in which part of the audience is led on a “tour” of the dance by a docent and invited to snap photos with the dancers while they perform. A second piece, “johnbrown” (2014), based on the white abolitionist, recruited teenagers of color from each stop on its tour to serve as production assistants, making them “the lens through which the audience watched the work.”

several racial, and social movements over time. It asks: How can I stop using you to see me?” In the dance, Moss moves dynamically with a large, black-and-white striped theatrical curtain that “is used to emphasize presence and absence” as well as “distressed manipulation.” Ultimately, the audience perceives that the “body, over time, disappears.”



SUBJECTIVE SPACE

Moss has been experimenting with video since the early 1990s. A recent project is “Untitled (perfect human),” based on the 1967 Danish short film *The Perfect Human* by Jørgen Leth, in which a man and a woman perform mundane tasks in an environment that is pure white, narrated, and set to music. “I wanted to look at the emptiness of white space and challenge that emptiness,” says Moss of his award-winning work, which sets the original film’s music and narration to a kaleidoscope of undulating body parts. “Space is filled with our subjectivity. It’s us and our subjectivity everywhere,” he adds. “Untitled (perfect human)” was an official selection of the 2021 Moving Body Festival, which connects artists and their communities through contemporary dance, performance, and film. ♦ By A.B.



PERFORMANCE AS PERSONAL PRACTICE

Shifting his focus inward, Moss began experimenting with the concept of dance “as personal practice” rather than in support of a company or group. Collaborating with composer Stephen Vitiello, he created the solo work “your marks and surface” (set to premiere in 2022 or 2023), which studies “self-perception shaped by



BEHIND THE RESEARCH: DEAN MOSS

Exploration in Motion

As a kid growing up in Tacoma, Washington, in the 1960s, Dean Moss loved building radios and launching rockets in his backyard. He dreamed of one day working at NASA. He was on his way to fulfilling that dream — through an ROTC scholarship to the University of Puget Sound — when he happened upon a dance class he could use to round out his required college credits.

“I think that I loved motion. I loved exploration, I loved Ginger Rogers,” says Moss. He went on to dance with the Louis Falco Dance Company, David Gordon’s Pickup Performance Company, and other prestigious dance troupes before founding his own Brooklyn, New York-based company, Gametophyte Inc., and teaching at a handful of universities, including Princeton.

“My works explore ‘self’ and the act of becoming,” says Dean Moss, lecturer in dance.

He now focuses his interdisciplinary works on the concepts of perception and selfhood. “I think I have a very romantic view of the world,” he says. ♦ By Agatha Bordonaro '04

follow the data

BY
SUSAN RESLEWIC
KEATLEY '99

Could a new approach to drug discovery lead to treatments for diseases like ALS and Parkinson's?

THE SUMMER BEFORE HER JUNIOR YEAR at Princeton, Alice Zhang '10 had an experience that would change the course of her studies, career, and life. As an intern in a National Institutes of Health lab in Washington, D.C., her hometown, Zhang worked on what she describes as a classic molecular biology project: pipetting and doing Western blots — a lab method used to detect proteins — to study brain cancer. “I wasn’t very good at Western blots,” she says, laughing. One day, a lecture by an Austrian physicist turned Zhang’s classic experience on its head. “He showed a picture of a network of hundreds of different genes. It was then I realized diseases are not caused by a single gene in isolation, but by groups of genes in complex biological relationships. I couldn’t stop thinking about it,” says Zhang.

The next day, she approached the physicist, Stefan Wuchty, now an associate professor of computer science at the University of Miami, and asked how she could get involved with that kind of work. “He told me, ‘You need to know [the coding language] Python.’ I said, ‘What’s Python?’ He told me to Google it.” Zhang did, and then began learning to code. She used Python to build a map of how genes interact in brain cancer. Today, Zhang continues to chase the promise of networks of biological information, this time at Verge Genomics, the drug-discovery startup she founded in 2015, just five years after graduating from Princeton.

Speaking on Zoom as COVID cases ticked up at the end of November, dressed in a baggy Verge Genomics fleece top and clutching a large mug of coffee, Zhang seems more like a college student than a biotech CEO. “I’m

not a morning person,” she says, sheepishly, at 11 a.m. But her relaxed and warm demeanor belies a sharp sophistication. She speaks about her work in a melodic voice and precisely chosen words, explaining how a new approach to drug discovery could lead to desperately needed treatments for neurological diseases such as Parkinson’s, Alzheimer’s, and amyotrophic lateral sclerosis, or ALS (Lou Gehrig’s disease), a fatal disease that causes loss of muscle control.

ZHANG, A MOLECULAR BIOLOGY MAJOR at Princeton, kept returning to networks of genes. For her senior thesis, she used computational tools to study gene networks to try to understand cancer-drug resistance. After graduation, during an M.D.-Ph.D. program at the University of California, Los Angeles (UCLA), she coded algorithms that analyzed networks of genes to predict new drugs for nerve regeneration. The algorithms looked at gene networks that distinguished nerves that could recover after injury from nerves that couldn’t, “with the idea that if we knew the networks, we could reprogram the nerves,” says Zhang. This approach veered from the standard approach taken by scientists at the time, who would either test a series of hypotheses about what causes disease or try a variety of drugs on a cell model of disease to see if something worked. Instead, Zhang’s group first tried to understand the root cause of nerve injury and regeneration, looking directly at the biological pieces involved. When used on mice, the drug predicted by the UCLA group helped them recover nerve function four times faster than the leading therapy at the time.

Zhang saw firsthand the power of a computational, data-driven approach to discovering drugs. “I thought, I could publish this in a paper, but is that the best way to get new drugs to patients?” she says. She felt this kind of work would have the greatest impact on patients if she started a company. And she believed she should not wait to do it. She left the M.D.-Ph.D. program without finishing.

Zhang and another M.D.-Ph.D. student, Jason Chen, now a neurosurgery resident in Boston, started Verge Genomics during their fifth year in the program. The two turned to the tech-startup incubator YCombinator, known as YC, to get the company off the ground. YC provides funding and support for three months to fledgling startups, with a chance for companies to present in front of investors. (Other companies that got their start at YC include Airbnb, Dropbox, and Instacart.) Zhang says she learned about YC through two Google searches: The first was, “What is an incubator?” And the second was, “What is the best incubator in the world?”

Zhang and Chen told YC they saw an opportunity to “parallel process” in drug discovery — to look at hundreds of genes instead of one at a time, and see the



**Alice Zhang '10 inside
the Verge Genomics
laboratory in South
San Francisco.**

genes change together. “Our algorithm was similar to Google’s PageRank, at the time,” says Zhang, offering a tech lens through which to view drug discovery. Before PageRank, webpages were ranked by how often individuals clicked on them. Taking a different approach, PageRank looked at how webpages linked to other pages, and how relevant those linkages were. “We wanted to do the same thing for genes and their relevance in disease,” says Zhang. She and Chen named their company Verge, suggesting the concept of networks, with their nodes and edges. “Verge is a synonym for edge,” says Zhang, “but there’s a double meaning.” With a platform based on networks, the company was on the verge of a watershed moment in drug discovery.

THE PROCESS OF DRUG DISCOVERY AND

development is an arduous one, often stretching over a decade. The industry trade association Pharmaceutical Research and Manufacturers of America (PhRMA) estimates the average cost to develop a successful drug to be \$2.6 billion. Scientists start by searching for a molecular structure, typically a protein or set of proteins, that influences disease. Such a structure will become the intended target of a drug that is either built from scratch or selected from a library of existing drugs. (On rare occasions, as with the drug lithium, used to treat bipolar disorder, the actual target and how it works remain unknown to scientists at the time of discovery. At other times, the final target is unintended, as in the case of Viagra, originally formulated to treat blood pressure.) The process of selecting a target and finding a drug that appears to work in lab tests can take up to six years. From there, scientists develop the drug by testing it in additional lab settings, in animals, and finally in people through a series of clinical trials that can take another six to seven years, if not longer. Most drugs fail because at the end of a clinical trial, researchers find out they do not work. In fact, more than 90 percent of drugs fail in clinical trials. “I don’t think people appreciate by and large what really goes into this, and what it means when we say that 90 percent of drug programs fail,” says Ron Cohen ’77, president and CEO of Acorda Therapeutics, a biotech company focused on neurological disorders such as multiple sclerosis.

Drugs don’t work for many reasons. Sometimes the target isn’t right in the first place. Scientists have had to rely on incomplete information to find drug targets and might lack a full picture of a disease. It’s similar to what happens in the parable of the blind men and the elephant: One blind man touches the elephant’s trunk and declares he’s touching a snake. Another blind man touches the elephant’s leg and says no, it’s a tree trunk. “Thanks to technological breakthroughs in the last decade, we can now just

take a picture of the elephant,” says Zhang.

Now, there are vast new sources of information. Scientists can study an organism’s entire biology through DNA sequencing (genomics), data on how genes turn on and off (transcriptomics), and protein catalogs (proteomics), to name a few. These bodies of information and the computational tools needed to process and interpret them can give scientists a more complete picture than ever before of what’s going on biologically in a disease, without resorting to a guess or a hypothesis.

This shift, from hypothesis-driven, reductionist science to discovery-based, data-driven science is one of the legacies of genomics, says former Princeton President Shirley Tilghman, professor of molecular biology and public affairs, emerita. Another hallmark of the genomic era is a deep integration of computational and biological expertise, says Tilghman, including the introduction of computational tools in undergraduate research. “It’s now impossible to get a degree in any serious molecular biology department without being able to use computers in a sophisticated way,” she says.

Zhang is banking on the idea that improvement in the initial stages of drug discovery, via better target identification, will

Verge’s all-in-human approach has multiple benefits. Testing drug candidates in human cells in a dish ensures baseline efficacy before jumping into clinical trials. And once the drugs are tested in human cells, the data flow back into the machine-learning algorithms to further improve their predictive power in target identification.

produce drug molecules more quickly, with greater success down the line in clinical trials. However, even the best targets may not yield drugs that sail through clinical trials, as Cohen knows personally through his experience in developing Acorda’s MS drug, Ampyra. While the drug functioned beautifully in the lab, like a liquid bandage on parts of damaged neurons, it failed to show clinically meaningful improvements in walking speed in patients with MS. Cohen analyzed data from a trial by hand and identified the patients whose walking speed increased consistently in at least three of

four visits during the study period. These “responders” showed a statistically significant improvement over people who received a placebo, but in a previous analysis, that result had been buried because of the variability in how MS affects a patient’s function on any given day or time of day. Later trials replicated Cohen’s post-hoc analysis and led to the drug’s approval. “It’s a constant, bedeviling issue, to come up with correct clinical trial endpoints and know how to measure them, especially in neurological disease,” says Cohen.

Neurological disease, in fact, has been the thorniest frontier in drug discovery. With an aging population, rates of diseases like Alzheimer’s, Parkinson’s, and ALS are on the rise. In these diseases, parts of the nervous system — the brain, spinal cord, nerve roots, and peripheral nerves — die. The results include memory loss (Alzheimer’s), muscle wasting (ALS), and an inability to control movement (Parkinson’s). The cause of these diseases is unknown, but likely lies in a murky soup of genes

and environmental factors that have thus far been impossible to tease out. There are no cures. ALS is especially cruel, afflicting both the young and old, and leaving patients with a life expectancy of just two to five years.

“Neurological diseases are complex. For many, we don’t know the etiology. There’s tissue damage and progressive degeneration. It’s happening in the nervous system, the most complicated system in the body,” says Cohen. Animal models of disease are typically a starting point for drug discovery, but often lose their value in neurological diseases. For example, the core biology behind Alzheimer’s may not be found in mice. “Animals are not humans,” says Cohen, “and the differences can turn out to be important.”

In addition, unlike a disease such as diabetes, defined by blood-sugar levels and thus treated by targeting those levels, neurological diseases present a fuzzy link between a biological feature of the disease, like sticky plaques in the brains of Alzheimer’s patients, and disease manifestation. While Biogen’s Alzheimer’s drug Aduhelm targets these plaques and recently won accelerated FDA approval last June (despite controversy over its effectiveness and safety), it remains to be seen whether removing plaques will improve the lives of Alzheimer’s patients. Prior to Aduhelm, neurological disease drug failures scarred the pharmaceutical landscape, with more than 150 Alzheimer’s drugs failing in clinical development since 1998. Big players have now shifted their investments to other diseases. Twenty-five years ago, just about every major drug company had a neurological drug program; by 2020, only a handful of companies did. The exit of larger drug companies coupled with advances in genomics and computation make today’s environment a “moneyball” moment for neuroscience drug discovery, says Zhang, referring to Michael Lewis ’82’s book of that name, about data’s disruptive effects on baseball.

ON THE NINTH FLOOR OF 2 TOWER PLACE IN South San Francisco, near the pharmaceutical giants Genentech and Amgen, Verge’s 30 employees are taking what they call an “all-in-human” approach to drug discovery, focusing on the elusive goal of drug treatments for neurological disease. Rather than starting with animal models of disease, Verge begins with human data, and lots of it. Zhang led Verge to secure over a dozen partnerships with hospitals, academic centers, and biobanks — repositories of post-mortem human tissue from diseased individuals. From those partnerships, Verge began building up its own proprietary databases from human tissue, mainly brains and spinal cords, as these would be the most illuminating for understanding the full picture of neurological disease. To find biological gems in the mountains of data, the scientists cannot analyze the data by hand — there’s too much of it. Instead, they must use an artificial-intelligence approach — machine learning. Algorithms use “training” datasets containing known linkages between DNA sequences, gene expression patterns, and disease to learn how to find new, powerful biological associations in the datasets of interest. Machine learning requires data of the highest quality so that the algorithms can separate a biological signal from noise. “You can have the most sophisticated algorithms in the world, but you

need high-quality data to feed in and train them on,” says Zhang.

More than 6,800 human tissue samples make up Verge’s human datasets, one of the largest collections of any drug-discovery effort in neurodegenerative disease. Data on gene expression, genotyping (specific DNA sequences), and patient characteristics like age, demographics, and disease progression are fed into machine-learning algorithms that look for associations between networks of genes and disease. Rather than going in with a hypothesis about what’s causing disease, “we let the patient data tell us the target,” says Victor Hanson-Smith, head of computational biology at Verge.

When put to the test on human tissue, Verge’s algorithms identified a network of 200 genes that were consistently suppressed in patients with ALS, compared to people without the disease. The genes were involved in a biological process called the lysosomal pathway that clears the cell of the protein aggregates seen in patients with neurodegenerative disease. “Most people have been focusing on the toxic protein aggregates, but we’re saying, let’s fix the root cause — the lysosomal pathway,” says Zhang. Verge scientists came up with a handful of drug candidates that could hit the lysosomal pathway. One of them slowed ALS progression in mice, and in a petri dish, the drug rescued dying human neuron cells. This drug candidate is expected to head to clinical trials this year, three years faster than the six years typical in traditional drug discovery.

Verge’s all-in-human approach has multiple benefits, Zhang says. Testing drug candidates in human cells in a dish ensures baseline efficacy before jumping into clinical trials. And once the drugs are tested in human cells, the data flow back into the machine-learning algorithms to further improve their predictive power in target identification.

Last July, Verge began a three-year collaboration with Eli Lilly to develop additional ALS targets. And on the heels of Verge’s ALS candidate are drug candidates for Parkinson’s.

ALTHOUGH OPERATION WARP SPEED ACCELERATED COVID-19 vaccine development from decades to mere months, it isn’t clear what impact this will have on other drug programs. “How many marathons can you run simultaneously, and who chooses what to accelerate?” asks Kenneth Moch ’76, senior adviser to the chairman at the Center for Global Health Innovation and the Global Health Crisis Coordination Center, both nonprofits. He also has led several biotech companies.

Now, Zhang says, a second wave of companies is aiming to use a data-driven approach, like that used by Verge, to decipher the biology of disease. She hopes these technologies will improve drug targets and dramatically reduce the time and expense involved in developing new medications. With the cost of full genome sequencing falling from more than \$100 million per genome 20 years ago to just \$1,000 per genome today, garnering vast amounts of data is more affordable than ever. “With the rapidly advancing technologies of cell therapy, gene therapy, and machine learning,” she says, “we are going to see big changes in the next 10 to 20 years.” ♦

Susan Reslewic Keatley ’99 is a freelance science writer and aspiring medical-thriller author.

'12

Class of

The best parts of my Princeton experience were the friendships with people who I still count among my closest friends.

I give because



Isedua Oribhabor '12

Photo: Steven Freeman

Princeton alumni give back to the University and serve humanity in many ways. Through Annual Giving, the path to a brighter future leads *forward together*.



This year's Annual Giving campaign ends on June 30, 2022. To contribute by credit card, please call 800-258-5421 (outside the U.S. and Canada, 609-258-3373), visit www.princeton.edu/ag or scan the QR code.



PRINCETONIANS



TAKING COVER: NPR journalist Frank Langfitt '86 was on the ground in Ukraine when Russian troops invaded the country in February. As he traveled to cross the western border, Langfitt described what he saw: traffic jams for miles, trenches being dug out for soldiers, and the basement of a kindergarten converted to a bomb shelter and set up with little beds for the students, among other scenes. He found Ukrainians in shock. "Most Ukrainians did not think this was going to happen," says Langfitt, pictured here working in a bomb shelter in central Ukraine. As of mid-March, about 3 million refugees had fled Ukraine. Langfitt has also left the country. ♦

READ MORE about Langfitt's experience reporting in Ukraine at paw.princeton.edu

Ian Stewart



Hobart Earle '83, right, conductor of the Odessa Philharmonic Orchestra, speaks to Ukrainian President Volodymyr Zelenskyy in September 2020. Looking on are the governor of the Odessa region, Maksym Kutsyi, and the director of Philharmonic Hall, Halyna Zitser.

HOBART EARLE '83

WAR IN HIS ADOPTED LAND

A conductor offered music to lift Ukrainians' spirits

On the evening of Feb. 12, Hobart Earle '83, the longtime director of the Odessa Philharmonic Orchestra, ended its concert with a surprise encore, the overture to Mykola Lysenko's opera *Taras Bulba*. It is considered Ukraine's unofficial national anthem and with rumors of a Russian invasion mounting by the day, Earle decided to add it to the concert just the night before. "I know my audience and my musicians," he says. "I know that they are patriotic and that they needed something to lift their spirits. And it certainly did."

Earle and the orchestra received a raucous, two-minute standing ovation that night. A few days later, he and his wife left Odessa, with guest conductors expected to lead the orchestra's weekly concerts until his planned return in mid-March. Now, when — or whether — he will return to Ukraine, and what he will find there if he does, are unknowable.

As of March 8, it was still possible for Earle to communicate with loved ones back home, but the news has been grim. His assistant made it safely to Moldova on her way to Bulgaria, where Earle was able to find her accommodations, "since Chisinau [the Moldovan capital] is way overcrowded with refugees." Earle's 79-year-old mother-in-law was

"These are simple musicians — my musicians — going to serve in the civil defense. But what else are they supposed to do?"

— Hobart Earle '83, conductor of the Odessa Philharmonic Orchestra

burning firewood for heat after rocket attacks destroyed her town's gas works. His brother-in-law, who lives outside of Kherson, said Russians had cut off Ukrainian television stations and replaced them with Russian government stations (which "broadcast alternative reality," Earle snaps). In the United States visiting their son, Earle and his wife also remain glued to the TV.

The philharmonic, meanwhile, canceled all concerts after the invasion, including some that would have featured Greek music to celebrate the 200th anniversary of the Greek War of Independence. That war, like the battle for Ukraine, also captured the world's imagination, drawing people from around the globe, including English poet Lord Byron, to join the fight for freedom.

In a sense, Earle and many in

Ukraine have seen this coming for some time. In 2014, after Russia annexed Crimea, he and scores of musicians and singers formed a flash mob in the Odessa fish market to play Beethoven's iconic "Ode to Joy," the anthem of the European Union, to startled but appreciative onlookers.

"The idea was to bring the music — and bring this uniting spirit — to the people," he told PAW at the time. Earle hopes he might be able to do something in a similar spirit now, perhaps conducting concerts to aid Ukrainian relief efforts. "I have my tails with me," he says.

Except for those tails and the rest of what he packed into a single suitcase, however, everything Earle owns remains behind in Odessa. He is particularly concerned about his career's worth of musical scores and hand-notated orchestral parts, which are irreplaceable. Earle has lived in Odessa since 1991, the year the Soviet Union fell, and considers Ukraine his home. "I've seen that country's independence from day one," he says. Though he is esteemed in Russia, as well — in 2003, the Russian Cosmonaut Association even named a star for him in the Perseus constellation — Earle bitterly rebuts Russian talking points used to justify the invasion. "This is not about language or ethnicity," he insists. "This is about the independence of Ukraine."

On March 1, Earle reposted a photograph of the street outside the Odessa opera house, his professional home for three decades, protected by sandbags and anti-tank obstacles. "This is 2022, not 1941!!" he exclaimed in a caption.

There are no answers, only questions. "You feel helpless that these people you spent 30 years of your life with are facing the abyss," he says. Several members of the philharmonic have shepherded their families to the border and safety, then turned back themselves to join the resistance.

"These are simple musicians — my musicians — going to serve in the civil defense," Earle says, his voice full of weariness and wonder. "But what else are they supposed to do?" ♦ By M.F.B.



GEARING UP FOR REUNIONS

With Reunions expected to be held on campus for the first time since 2019, planning for the May 19-22 event has been especially challenging. Princeton staff were preparing for a crowd ranging from 22,000 to more than 30,000 people.

“We’ve done quite a bit of scenario planning to make sure that we have — to the degree that we can — created space for all who want to come back and feel this warm embrace from the University,” Alexandra Day ’02, deputy vice president for alumni engagement, said in mid-March.

A task force including Environmental Health and Safety, Grounds and Building Maintenance, and Public Safety was planning for housing, transportation, wristbands, tents, and other “budgetary and logistical pressure points,” said Day, in case the higher estimates panned out.

Two-fifths of the alumni body missed a major reunion during the pandemic, and many alumni have expressed a desire to celebrate belatedly. While the University announced that it would not “triple up” on Reunions this year, the sites for the 25th and 50th reunions have been expanded.

In March, the University updated its visitor policy to allow for optional masking on campus, though that policy could change again before Reunions. All attendees must register ahead of time and attest that they are up to date with COVID-19 vaccinations to obtain a wristband. Registration is not necessary for outdoor events where wristbands are not required. For more information, go to reunions.princeton.edu. ♦ *By Anna Mazarakis ’16*

Denise Applewhite/Princeton University; Catherine Saint Louis ’96

THE JOURNEY HERE

FROM PRINT TO PODCASTS

Catherine Saint Louis ’96 Reimagines Storytelling

As a child, Catherine Saint Louis ’96 didn’t know what she wanted to be when she grew up, but she was bookish, confident, and an extrovert. She woke up one day during her master’s program at Oxford thinking journalism could be the career for her. After nearly two decades in different roles at *The New York Times*, she pivoted to podcasting and is now the executive editor at the podcast production company Neon Hum. Two of its podcasts — *Smoke Screen: The Sellout* and *Spectacle* — made *The Atlantic*’s list of top 50 podcasts of 2021.

By Anna Mazarakis ’16



- ↳ **Early on at Princeton, Saint Louis thought she wanted to become an English professor.** “Honestly, there were a lot of people who wanted the same thing I wanted at exactly the same time, so it just was like a bad bet,” she says. Saint Louis says English professor Elaine Showalter, now emerita, encouraged her “rare skill” of being able to talk to anyone — which turned out to be perfect for a journalist. She says she can go to any party and “come away with five sources.”
- ↳ **Her original journalistic dream was to be a magazine writer.** She obsessively studied *The New York Times* to teach herself journalism. After a failed attempt to get a job as a fact checker at *The New Yorker*, the editor referred her to an opportunity at *The New York Times Magazine* to work as a clerk. She got the job, learned the ropes of editing, then transitioned over to the newspaper side, where she was an editor and then a reporter. “I kind of loved being an editor, but then I became a reporter and that worked well, too.”
- ↳ **Meanwhile, Saint Louis obsessively listened to podcasts, tracking each show’s structure and the elements of a good story.** She decided to move into podcasting and found joy in working with other people to “figure out the best damn way to tell a story so that a lot of people want to listen to it.” She says her work is about more than reporting; it’s about making people feel something.
- ↳ **Saint Louis also started Neon Hum’s editors’ bootcamp, an eight-week course for people from underrepresented groups.** While students learn the hard skills necessary to become a story editor, Saint Louis also teaches that editors should not act like gods who tell their teams what to do. “We are all in the mess together, and the point is the editor just tries to be one step ahead so that you can say, ‘The way out of the forest is that way.’”
- ↳ **Lessons learned:** “It’s about being awake to feedback and criticism and not in the service of tearing yourself down but in the service of getting better. The end goal is not mastery; the end goal is just every day evolving a little bit.” ♦

CLASS NOTES

Online Class Notes are password protected. To access, alumni must use their TigerNet ID and password. [Click here to log in: http://paw.princeton.edu/class-notes](http://paw.princeton.edu/class-notes)

MEMORIALS

PAW posts a list of recent alumni deaths at paw.princeton.edu. Go to Reader Services on PAW's home page and click on the link "Recent Alumni Deaths." The list is updated with each new issue.

THE CLASS OF 1938



Francis H. McAdoo Jr. '38

Francis, the last member of the Class of '38, died Jan. 26, 2022. He died peacefully in his sleep four weeks before his 106th birthday. He was born in New York in 1916 to Francis and Ethel McCormack McAdoo. He was the grandson of William G. McAdoo, the secretary of the treasury under President Woodrow Wilson.

Francis came to Princeton as a graduate of St. Paul's School, majored in art history, and was an enthusiastic member of Ivy Club. He roomed with Arthur Gorman.

In 1939 Francis married Cynthia Stowe Heffron. In 1940 he left Columbia Business School to enlist in the Navy. After training in Chicago and Newport, he became the skipper of a PT boat in New Guinea, and eventually the commander of a PT squadron of 11 boats. He served with distinction and returned home a lieutenant commander decorated with a Silver Star in 1945.

Upon his return, Francis worked for Emerson Drug Co., and he became president in 1954. Later he successfully merged the company with Warner-Lambert in Morris Plains, N.J. In 1962 he went to work for Warner-Lambert, becoming a vice president and special assistant to the president.

Francis and Cynthia were married for 76 years before she died in 2015. He is survived by his three sons, William, John '67, and Preston; six grandchildren; and nine great-grandchildren.

Francis will be remembered for his longevity, his service during the war, and his contributions thereafter, typical of so many '38ers!

THE CLASS OF 1945



Harold Taylor Jolley Jr. '45

Bud died Jan. 29, 2021. He graduated from St. Louis Country Day School. At Princeton he was a member of Colonial Club. During World War II he was a rifleman in the second Marine Infantry Division in Saipan, Okinawa, and

Hawaii, and was awarded the Purple Heart.

Following his time at Princeton and service in the Marines, Bud married Margaret Virginia Happel. He worked for Darcy Advertising Co., Weyerhaeuser Corp., and then Alton Boxboard Co., where he was sales manager.

He was a member of the Episcopal Church and was the longest-tenured member of the St. Louis Country Club. He was a member of the St. Louis Honor Flight Program, returning to Washington, D.C., in 2017 with fellow veterans to be honored for their courageous service.

Bud was preceded in death by his sister, Elizabeth Jolley Rutledge Cave. He is survived by his wife of 72 years, Peggy; children Meg (David Sameth), David (Barbara), and Susan; and grandchildren Casey, Drew, Mack, Katie, Emma, and Taylor.



George Mickle Wilson '45

George died Feb. 18, 2021. He was born in Karuizawa, Japan, and grew up in Texas, California, and New Jersey, where he attended Westfield High School.

At Princeton he played freshman tennis and was a member of Dial Lodge. During World War II he joined the Navy, then transferred to the Marine Air Corps Operational Training Command, where he was a twin-engine operational flight-training instructor (first lieutenant).

After the war he graduated with a bachelor's degree in English. He earned master's degrees in divinity and in sacred theology from Union Theological Seminary. He pastored at churches in Thailand; Greece; Palo Alto, Calif.; Bend, Ore.; and Louisville, Ky., where he met and married Betty Ann Williams.

He brought six children to the marriage, and she two. He continued to serve the church in Los Angeles and Carmel Valley, Calif., including consultation on institutional lifestyle change for the Presbyterian Church. He also served as a mediator for conflict resolution and volunteered at the Monterey Bay Aquarium.

He is survived by his wife, Betty Ann; children and partners Mike and Lori Wilson, David Wilson and Judy Simons, John and

Nancy Wilson, Martha and Bill Blackmore, Dan Wilson, Theodore C. Wilson '71 and Ellen Tappan, Ben and Heather Williams, and Don and Pam Williams; and many extended family members.

THE CLASS OF 1950



William C. Carson '50

Bill died Oct. 30, 2021, in Lutherville, Md., where he lived in recent years.

A St. Louis (Mo.) Country Day School graduate, Bill

majored in geology and belonged to Dial. Following navigation training in the Air Force, he was commissioned. For the next three years he flew on the Strategic Air Command's B-29s and B-36s.

After earning a Stanford MBA, he worked for several companies over 10 years, leaving the last one, Bell & Howell, where he ran its education division, to become involved with technical education. In 1979 he founded a company to manage private trade schools. In 1996, funding conflicts with the Department of Education forced closure of his last school, Detroit's only auto-mechanic school.

Having moved from Illinois to Santa Fe, N.M., in 1992, he and his wife founded the highly respected Salazar Partnership, which provided books and other needs to elementary schools.

Bill's enduring love for the West dated back to boyhood summers in Los Alamos. He was an avid St. Louis Cardinals fan and delighted in storytelling. His book, *He Moved West with America*, was about his great-great grandfather, who was New Mexico's second territorial governor.

Bill is survived by his wife of 65 years, Georgia; daughters Laura Banes '84 and Chapin; and three grandchildren, all Princetonians.



Leon Goldman '50

Leon died Oct. 21, 2021, in Sun Valley, Idaho.

A son of Russian immigrants, he came to Princeton from the Bronx

(N.Y.) High School of Science. At Princeton he graduated with highest honors in chemistry and was elected to Phi Beta Kappa. He earned a medical degree from Johns Hopkins in 1954, interned at Stanford University Hospital, and continued a three-year residency there, specializing in otolaryngology (ear, nose, and throat) and head and neck surgery.

He spent the next two years at Carswell Air Force Base in Fort Worth, Texas, where he established the ear, nose, and throat department in a new base hospital. He returned to the Bay Area to join the Permanente Medical Group. In 1962 he moved to Los Angeles as chief of otolaryngology, establishing that department at the group's hospital in

Bellflower, Calif. He retained that post until his retirement.

Leon and his family vacationed in Sun Valley for more than 50 years, spending a month each winter and a month each summer enjoying the area's various activities. He moved there permanently after his retirement.

Leon is survived by his wife, Linda; children Nancy, Renee, Susan, and Brian; and four grandchildren. He was preceded in death by his son Scott.

THE CLASS OF 1951



Maurice B. Cohill Jr. '51

Pinky, a retired chief judge of the U.S. District Court of Western Pennsylvania, died on New Year's Day 2022 following a stroke. Pinky was best

known on the campus as "Princeton Charlie" at football rallies and for a standup comedy act he performed on the *Ed Sullivan Show*. He came to Princeton from Mercersburg Academy, majored in history, and joined Tower Club. He roomed with Walt Braham, Jeff Arrick, Vern Wise, Bill Latimer, and Bruce Kennedy. He was business manager of the *Bric-a-Brac* and active in several campus organizations.

Pinky's experiences with the court-martial process while serving as a captain in the Marines turned his interest from a business career to the law. He graduated from Pittsburgh Law School and had a private practice in his hometown of Pittsburgh before appointment to the Juvenile Court of Allegheny County in 1965. This began a lifelong involvement in the campaign for improvement in the juvenile-justice system, and Pinky raised money from family foundations to establish the National Center for Juvenile Justice. His judicial concern for this issue continued following his appointment to the U.S. District Court by President Gerald Ford.

While serving as chief justice from 1975 until 1982, he earned much praise for his opinions on issues such as civil rights, race relations, school desegregation, and civic improvements. He wrote a number of articles for professional journals on these and similar issues and was active in organizations concerned with raising judicial standards.

Pinky was predeceased by his first wife in 1986 and his second wife in 2011. Survivors include a son and three daughters.



William Howard Godson III '51

Bill died Dec. 21, 2021, in Newton Center, Mass., after a career that included 25 years with the CIA (fronting as a foreign service officer) and a lifetime of eclectic learning.

He came to Princeton from the Loomis School, where he played football, basketball, and track. At Princeton he majored in history,

played JV football, was a member of the NROTC, and, with his roommates John Cochran, Sprigg Duvall, and Guy Newland, joined Elm Club. Bill's duties with the CIA included assignments in Islamabad, Iran, and Kampala, Uganda, as well as a regional specialist assigned to the Navy Department.

Following retirement from the CIA in 1977, Bill had administrative positions with the University of Maryland and Boston University and pursued a lifetime of learning that earned him degrees and certificates from Georgetown, American University, the University of Virginia, the Protestant Episcopal Seminary in Alexandria, and the Jesuit Seminary in Cambridge. He also traveled widely, with a special interest in Africa and the Americas and studied such languages as Farsi, Turkish, and Arabic.

Survivors include his third wife, Juliet Waters, a British-born girls-school tennis coach.



Walter Allwein Ruch Jr. '51

Walter died Dec. 16, 2021, after a career as an obstetrician/gynecologist in his native Memphis, Tenn., and a leadership role in the national Planned Parenthood movement.

Walter came to Princeton from The Hill School and majored in psychology in preparation for a career in medicine. He was a member of Charter Club, roomed with Norman Sage and Stuart Sperry, sang in the choir, and was associate editor of *The Daily Princetonian*.

Following medical school at Washington University, Walter remained in St. Louis for postgraduate training and served in the Army for two years before returning to Memphis to join his brother, Robert Ruch '45, at the Ruch Clinic, which was founded by his father.

Following retirement in 1995, he and his wife, Carol, spent much of their time at their vacation home in Basalt, Colo., where he became an accomplished fly fisherman and enjoyed skiing, tennis, cooking, and entertaining.

In addition to his wife of 38 years, Walter is survived by two sons as well as numerous grandchildren and great-grandchildren.

THE CLASS OF 1952



John Lockwood McShane '52 '58

John studied at Baltimore Polytechnic Institute and served in the Army in Germany before joining us to study architecture and join

Cottage. He played lacrosse and belonged to the Thursday Night Warm-up Club as well as the American Institute of Architects student chapter. He roomed with Herb Owen and Phil Uzielli.

After employment in the office of Baltimore architect James R. Edmunds, he returned to Princeton and earned an MFA. He then worked

in the New York office of McKim, Mead & White as well as for Rogers and Butler. He returned to Baltimore in 1959 to work for architects Rogers, Taliaferro and Lamb, then in private practice from 1961 designing schools, residences, and retail buildings in post-modernist style.

Among his private interests were the Ladew Foundation and the Green Spring Valley Hounds, where he rode a thoroughbred, Colonel Muggins.

John died Nov. 13, 2021. He is survived by his second wife, Joan; and his children, Kathleen, Lee, and J. Lockwood. To them the class sends its best wishes with respect for John's military service.

THE CLASS OF 1954



Philip M. Aitken '54

Phil died Oct. 31, 2021.

He prepared at Lawrenceville, where he was active in fencing. At Princeton he majored in geology, writing his senior

thesis on "Invertebrates as Records of Permian-Triassic." He was a member of Elm Club. Among his special interests was firearm collecting.

After service in the Army, Phil was employed by the Sheller-Globe Corp., an auto-parts manufacturer and industrial conglomerate.

He enjoyed hunting and Nebraska football.

Phil was predeceased by his wife, Janet, in 2016; son Paul; and sister Jean Johnson. He is survived by sons Doug and Jeff, daughter Kathleen, brother Jim, and grandchildren Jordan, Stephanie, Roxanna, Josephine, and Max.



Thomas E. Dewey Jr. '54

Tom died Dec. 6, 2021.

He prepared at the Albany Academy, where he was active in baseball, swimming, and publications. At Princeton he majored in history, joined Key and Seal Club, and was active in Whig-Clio, the Bridge Club, and the Debate Panel.

After two years of service as a first lieutenant in the Army, he earned an MBA at Harvard Business School.

Tom then joined the investment banking firm of Kuhn, Loeb & Co. He became a partner and served on the firm's executive committee. In 1975 he founded his own financial-services firm, Thomas E. Dewey Jr. & Co., and subsequently co-founded McFarland, Dewey & Co. He worked well into his late 80s.

He served on numerous boards, on the New York City Housing Development Corp., and as an active trustee and chairman of the board of Lenox Hill Hospital for more than 50 years.

Tom was respected for his deep integrity and kindness, remaining always optimistic about people, life, and even politics. He loved New York, the Metropolitan Opera, WQXR (which was never off), and the Mets.

Tom is survived by his wife of 62 years, Ann

R.L. Dewey; his children, Thomas E.L. Dewey, Elizabeth D. Grattan, and George R. Dewey; and his grandchildren, Frances K. Dewey, Thomas D. Dewey, and Charles J. Dewey. He was predeceased by his brother, John.



Richard D. Perera '54

Dick, a beloved physician and amateur musician known as “Dr. P” in the Berkshires, died Dec. 3, 2021.

He came to us from Hotchkiss, where he was active in football, orchestra, and band. At Princeton he majored in biology, was active in the Pre-Med Society, joined Dial Lodge, and was a leader of The Roundhouse Eight band.

After earning a medical degree at New York Medical College and residencies in New York and Boston he joined Berkshire Medical Group in Pittsfield, Mass., in 1962, where he practiced internal medicine for more than 50 years. He served in the U.S. Army Medical Corps from 1967 to 1969, achieving the rank of lieutenant colonel. He met Evelyn Lewis during one of his Boston residencies, and they married in 1961.

As assistant professor at UMass Medical School, Dick was a widely admired teacher and mentor. He was honored as Community Clinician of the Year by the Massachusetts Medical Society, Berkshire District. Dick reluctantly retired only after a stroke at age 80.

He loved bicycling and music, played trumpet and cello, and was an avid photographer and patron of the arts.

Dick is survived by his three children, Rosie, Rick, and Jane; grandson Isaac Stein; and three generations of nieces and nephews. Along with his wife of 55 years, Evelyn, he was predeceased by his sister, Emily.



David A. Schulz '54

Dave died Oct. 15, 2021.

He came to us from Southwest High School in St. Louis, where he was active in publications, dramatics, and glee club. He majored in geology, joined Terrace Club, The St. Paul’s Society, and the Outing Club, and played IAA football, hockey, basketball, and softball.

During his multifaceted career, Dave served in the Army, worked as a field geologist, was ordained as an Episcopal priest, earned a Ph.D. in sociology, taught sociology at the University of Delaware, was an amateur artist and woodcarver, practiced organic farming, facilitated a domestic-violence intervention group, and sent “radical” opinion pieces to the *Delaware State News*. He characterized himself as a “pago/Judaeo/Christian.”

For two decades he and his wife, Lieba, lived in Bowers Beach, Del., for which Dave wrote an oral history. Appreciating the beauty and fragility of its wetlands, a river estuary, and the Delaware

Bay, they worked to support its protection. In 2004 he wrote, “We are becoming citizens of the Earth ... We are increasingly concerned about our grandchildren’s future in a world more willing to risk war than peace.” In his final years at a retirement facility, he continued to provide the kind of social support to the community that had characterized so much of his earlier life.

Dave is survived by his wife of 27 years, Lieba; five children; and six grandchildren.



W. Scott Tinsman '54

Scott died Nov. 25, 2021.

He graduated from St. Ambrose Academy in Davenport, Iowa. He joined Colonial Club and participated in *Bric-a-Brac*, tennis, boxing, and IAA sports. He majored in chemical engineering and graduated *cum laude*.

After four years as a lieutenant junior grade in the Navy with amphibious forces in the Pacific and on a destroyer in the Atlantic Fleet, he attended Northwestern’s MBA program. In 1958 he co-founded Twin State Engineering and Chemical Co., manufacturing and distributing liquid fertilizer in Iowa, Illinois, and Wisconsin.

In 1959 Scott married Barbara Beckman, and they raised three children: Scott Jr., Peter, and Elizabeth.

Scott gave his time freely to the communities of the Quad Cities (Davenport and Bettendorf, Iowa; Moline and Rock Island, Ill.), serving on numerous boards and in elected office. In later years, he and Barbara enjoyed tennis and golf at their winter home in Rancho Mirage, Calif.

Scott is remembered for his “mellow” competitiveness in all things athletic: squash, golf (particularly his lack of short-putting skills), tennis, skiing, water volleyball, and body surfing. One of his proudest moments was being joined by his grandson W. Scott Tinsman III ’14 in the P-rade at his 60th reunion and his grandson’s graduation.

Scott is survived by Barbara, their three children, and 10 grandchildren. He was preceded in death by his parents, sister Betsy, and brother Hovey ’53.

THE CLASS OF 1955



James Ayer Rubins '55

Jim, a ferocious Scrabble player with a broad range of other interests, died July 28, 2021, at Amsterdam House nursing home in New York City. The COVID-19 lockdown led him into a deep depression, but when his visitors were given a compassionate-care pass in May, his last two months were much better.

Jim was born Oct. 20, 1933, in New York City and graduated from Shortridge High School in Indianapolis. At Princeton he majored in history and joined Tower Club.

Jim had a remarkably varied three-part career

and always enjoyed what he was doing. For 20 years he was with the N.W. Ayer ad agency. Next, he opened his own market-research firm, and then trained in psychoanalysis. As a psychoanalyst, he opened a practice and taught. Jim’s interests ranged from hiking and paddling to the arts, including dance, chamber music, and opera.

In 2000 he met Pamela Bayless, a magazine journalist and book author who was his partner through both good times and his health challenges that began in 2007. At Amsterdam House short-term treatment led to a long-term stay beginning in 2019. When he became depressed during the COVID pandemic, weekly letters from classmate Jim Wiant were a big help.

The two Jims died within six days of each other.

In addition to Pam, Jim is survived by his four daughters, Cynthia Rubins, Suzanne Rubins, and twins Alice Davis and Barbara Admire; four grandchildren; and his brother, Harry.



James Robinson Wiant '55

Jim, cheerful and witty with a strong sense of family and friends, died Aug. 2, 2021, in hospice care at home in St. Louis.

Jim’s powerful connection with friends was evidenced up to the end. Learning that his classmate and lifelong friend Jim Rubins was quite depressed at a nursing home in New York City, Jim wrote him a chatty letter every week for months. Pam Bayless, Jim Rubins’ companion of 20 years, said the letters were “a lifeline.” On July 6, Jim Wiant wrote, “This is my last letter. I’m writing to say it’s close to the end for me.” The two Jims died six days apart.

Jim was born July 22, 1933, in Newark, N.J. At Princeton he joined Tower Club and majored in biology. At Thomas Jefferson University Medical School, he was president of his junior and senior class.

He was especially affected by his experience in 1969 in Vietnam as a volunteer at Quang Tri Provincial Hospital.

Jim and his wife of 63 years, Timmie, loved tennis and travel, especially bicycle trips in Ireland, England, and New Zealand. Jim also loved to travel on his BMW motorcycle until he was 80. He and Timmie played cribbage every night after dinner and took a cribbage board on their travels.

In addition to Timmie, Jim is survived by four children, David, Anne Wiant-Rudd, Peter, and Thomas; and nine grandchildren.

THE CLASS OF 1957



John L. Chambers '57

John died Nov. 25, 2017, of lung cancer.

He came to Princeton from Withrow High School in Cincinnati, Ohio. He joined Campus Club, majored in history, and was on lightweight crew. His senior-year roommates

were Larry Hicks, Dave Taylor, and Larry Wood. He graduated from Harvard Law in 1960, followed by Navy OCS.

In his Princeton years, John was choosing between medical school and law school. As an avid reader of history and biography a law career worked out to be a better choice. After Harvard, John joined a Nashville, Tenn., firm and remained there until 1971, when he opened his own firm. In 1989 he merged it with a larger firm and continued active practice as of counsel. He was proud of his extensive pro bono work and being a mentor to many young lawyers over the years. John treasured his years at Princeton and felt that experience was the foundation for his accomplishments throughout his career and personal life.

John is survived by two children and five grandchildren from his first marriage. He and Susan were married in 1986 and had 31 wonderful years together. They were regular attendees at '57 mini-reunions. We have lost a highly intelligent, loyal member of the class.



Theodore R. Tauchert '57

Ted's career fit Princeton's urging in our time that we "serve the nation." His service included 33 years as a professor of engineering at the University of Kentucky. Thereafter, he continued writing and research, including work on the *Encyclopedia of Thermal Stresses*.

Ted came to Princeton from the Pomfret School. He majored in civil engineering and belonged to Charter Club. His senior-year roommates were Leo Byrnes, Denny Freeston, Craig McLanahan, Jack Schlegel, and John Wallis.

He was an officer in the U.S. Army Corps of Engineers and then worked three years at Sikorsky Aircraft while earning a doctorate in engineering from Yale University. From 1964 to 1970, Ted taught in Princeton's Department of Aerospace and Mechanical Sciences.

At the University of Kentucky, he was mechanical engineering department chairman and a member of the university senate.

Ted traveled the world with his wife, Ann, and sometimes their children, taking sabbaticals in England and Italy. He was a good tennis player and drove a moped, "Wanda the Honda," to and from tennis matches and work.

Ted died Dec. 10, 2021. He is survived by his wife of 64 years, Ann; five children; and several nieces, nephews, and grandchildren. His family described him as quiet but at times "terribly funny."

THE CLASS OF 1961

John Frederick Bright '61

We lost Jack March 1, 2021, when he died in his native Edgewood, Pa. He came to us from Lawrenceville School. At Princeton he majored in economics, ate at Terrace, ran varsity cross-



country, and was a member of the Hispanic Club, *The Princeton Tiger*, and the AIESEC committee. In senior year he roomed with John Douw and Jerry O'Neill.

Following Princeton Jack earned an MBA at the University of Pittsburgh and then began a career in financial services, working in investments and insurance and along the way owning a local book store. He was active in Edgewood, a community in suburban Pittsburgh, on the Borough Council and the Edgewood Republican Committee, in which capacity he served in many an election campaign. He never retired, being still fully active in all of these endeavors.

Jack is survived by his sons, Frederick and Alfram; his two grandchildren; his twin brother, Bill; and his sister, Janice.

THE CLASS OF 1964



Richard J. Bolander '64

Dick died Oct. 23, 2021, in Wolfebro, N.H.

He grew up in Hawthorne, N.Y., and came to Princeton from Archbishop Stepinac

High School in nearby White Plains, where he participated in football and track (winning a state title in pole vaulting) and was vice president of the student body.

At Princeton he majored in geology, ate at Tiger Inn, and pursued his athletic interests in football (freshman and JV teams) and track (freshman and varsity teams), setting an Ivy League pole-vaulting record. He subsequently earned master's degrees in geology (LSU) and computer science (Pace). He worked for many years in the petroleum exploration field and later as a systems engineer for Norden Systems and Raytheon.

Dick and his wife, Eileen, bought a farm in Bradford, Vt., to which they moved full time after Dick retired. They relocated to Wolfebro in 2019. They shared a passion for traveling, visiting more than 70 foreign countries, including a 53-day round-the-world trip.

Dick's interests were broad, ranging from classical music and foreign languages to photography and computers. He was very active in the various communities in which he lived, serving in civic organizations and coaching sports. Above all, he'll be remembered for his intelligence, sense of humor, generosity, and his courage and dignity in battling recurring bouts of cancer during the past 15 years.

We extend our condolences to Eileen and their family.

Robert B. Snyder '64

Robert died peacefully Nov. 7, 2020, with loving family by his side.

He came to Princeton from Ridley College,

a private boarding school in the Niagara Region of Canada. At Princeton he fulfilled a passion playing ice hockey during his freshman and sophomore years, and joined Cap and Gown. Robert then returned to Canada, graduating from the University of Toronto with a business degree in 1964.

He went to work in the food and pharmaceutical industries, working for companies in Canada including Warner-Lambert and Procter & Gamble. In 1986, while serving as CEO of Best Foods of Canada, he accepted the position of CEO for its American counterpart, S. B. Thomas. In doing so, he and his family moved to New Jersey, and became U.S. citizens. He later became CEO for Spalding/Evenflo, which led to a move to Duluth, Ga.

In retirement Robert committed himself to the Perimeter Church, where he started two ministries that have touched thousands of lives.

Robert was predeceased by his wife of 27 years, Alice. He is survived by his wife, Marilyn; four children through his marriage with Alice; and seven grandchildren. The class offers condolences to them all.

THE CLASS OF 1969



Eugene H. Bayard '69

Gene, a well-liked and accomplished member of our class, died Oct. 30, 2021, in Rehoboth Beach, Del.

Descended from a family of public servants who represented Delaware in the U.S. Senate for five generations, Gene practiced law in Georgetown, Del., for 47 years.

He came to Princeton from St. Paul's as a member of the Class of 1968 but left in his freshman year and returned to Princeton with 1969. He majored in English, and in his senior year at Princeton was secretary of Ivy Club and roomed there with Henry Reath.

Gene played freshman golf and was also a member of the 21 Club and the (nonpolitical) Right Wing Club. He is remembered as a superb raconteur, quick-witted and observant; a master of classical languages who sight-translated *New York Times* articles into Latin; and the likely inventor of Floor Pong.

Following his graduation from Princeton, Gene attended the University of Virginia Law School. During his distinguished professional life, he served on several Delaware corporate boards, including Chesapeake Utilities, Harrington Raceway & Casino, O.A. Newton, and J.G. Townsend Jr. & Co. He was a trustee of Delaware Wild Lands from 1980 until his death.

The Class of 1969 mourns Gene's passing and sends its condolences to his wife, Diane; his daughters, Molly and Avery; his brothers, Richard, John, and William; and his sister, Jane. *Ave atque vale*, Gene. Hail and farewell: We salute you, and goodbye.

THE CLASS OF 1974



Linda Weinstein Madden

'74 Linda died Sept. 7, 2021, in Bethesda, Md.

The daughter of Jerald and Matilda Weinstein, she was born in Newark, N.J., and graduated from Verona High School. At Princeton she graduated from the Woodrow Wilson School, where her true passion was international relations, especially the Middle East. She spent a summer in Israel on a project interviewing the country's leaders. Linda then went to George Washington University Law School, where she met her future husband of 42 years, Michael Madden.

After clerking for a D.C. Court of Appeals judge, Linda worked at the Federal Trade Commission and then took a lengthy sabbatical to raise three children. She later dove into grant writing for the Jewish Social Service Agency and was director of development at Mobile Medical Care. She lived in Bethesda for 30 years and was active in the community as president of the local PTA and running Mobile Medical Care's annual fundraiser. An avid reader, she cherished a cup of Starbucks coffee with her many friends.

Linda is survived by her husband, Michael; children Jason, Joshua, and Emily; daughters-in-law Megan and Chelsea; grandchildren Caitlin, Caroline, Jackson, and Nora; brother Lyle; and sister Cindy.

THE CLASS OF 1983



Judith Pinsker '83

Judy died in a hiking accident Dec. 23, 2018.

At Princeton Judy majored in philosophy, was a member of Colonial Club, and served as a counselor at the Women's Center. She went on to earn two degrees from Harvard, first a medical degree and later a master's in public health.

Judy provided her primary-care patients with exceptional care, expertly and compulsively tending to their needs. She satisfied both her desire to contribute in other ways and her love of Spanish by working with Tufts Timmy Global Health on medical missions in Guatemala and other locations in Central and South America.

Judy spent her life nurturing an ever-growing web of close relationships. She believed the meaning of life has to do with love and human connections. She loved playing the flute and joined multiple orchestras, describing them as "my version of seventh-grade band." She found comfort and contentment tending to her garden, having dinner with friends, reading with her cats, meeting with her book/eating club, swimming, hiking, and kayaking. Ever quotable, she would approach her sometimes-overstimulating family unit and declare, "OK, I'm out of family, not available." She was smart, clever, honest, direct, warm, generous, and humble.

She will be forever loved and missed by her

husband, Ben Smith '83; sons Eric and Jeffrey Pinsker-Smith; extended family; and many friends, who still feel her indelible loving presence.

GRADUATE ALUMNI

Richard S. Stein '48

Dick died June 21, 2021, in Amherst, Mass., at age 95.

Born in Far Rockaway, N.Y., Dick earned a bachelor's degree from Brooklyn Polytechnic Institute and a Ph.D. in chemistry from Princeton.

His career spanned more than 40 years at the University of Massachusetts, Amherst, where he was Goessmann Professor of Chemistry. With more than 400 publications and many books, Dick received three honorary doctorates and served in the first delegation in chemistry to the People's Republic of China.

He was a co-founder of the UMass Computing Center and was one of a handful of individuals to be a member of the National Academy of Sciences, the National Academy of Engineering, and the American Academy of Arts and Sciences. He was inducted into the Plastics Hall of Fame, and the Materials Research Society conferred on him its highest honor, the Von Hippel Award.

By founding the Polymer Science Research Institute and helping establish the Polymer Science and Engineering Program and the Silvio O. Conte National Center for Polymer Research at UMass, Dick helped create the field of polymer science.

Predeceased by his wife, Judith, and daughter Linda, Dick is survived by his children, Anne, Carol, and Lisa; and six grandchildren.

Arthur P. Mattuck '54

Arthur died Oct. 8, 2021, in Brookline, Mass., at 91.

Arthur earned a bachelor's degree from Swarthmore in 1951 and a Ph.D. in math from Princeton in 1954. He started teaching at MIT following an NSF postdoctoral fellowship at Harvard. A member of the MIT faculty from 1958 to 2010, Arthur continued to teach through fall 2019. His field was algebraic geometry.

Arthur held the Class of 1922 Professorship Chair, which funds innovation in teaching. His booklet, "The Torch or the Firehose: A Guide to Section Teaching," became a standard reference at MIT and other universities. He received MIT's School of Science Prize for Excellence in Teaching.

Arthur's textbook, *Introduction to Analysis*, provides a gentle introduction to proofs for students of calculus advancing to real analysis. He served on the Council of the American Mathematical Society and was an AMS fellow in its inaugural class of fellows.

An avid gardener at the Fenway Victory Gardens for 55 years, Arthur devised ways to outsmart the rabbits that loved to devour his produce. He played cello or piano in the math department music recital and taught himself

Italian and Danish.

Arthur is survived by his daughter, Rosemary, and three nephews.

Edmund H. Worthy '76

Ed died March 27, 2021, of metastatic cancer.

Born June 12, 1940, in Washington, D.C., after graduating from Yale in 1963 Ed taught English in Hong Kong at New Asia College for the Yale-China Association. While studying Mandarin there, he met and married one of his teachers, Huel-ling Chow. Bringing his bride to Princeton in 1966, Ed started Ph.D. studies in Chinese history, and she taught Chinese.

After earning a doctorate in 1976, Ed taught part time at George Washington University, published scholarly articles, and founded a journal specializing in Chinese history.

Shifting from academia to adult and continuing education, Ed led the National Council on Aging's Division of Life Enrichment, managing a national continuing-education project for older adults and directing a policy center on education and volunteerism.

He entered the museum world as associate director of the Smithsonian Associates, America's largest museum-education program. He retired as assistant director for education at the National Building Museum.

Ed is survived by his wife, two children, and two grandchildren.

Fiona Cowie '94

Fiona died Dec. 9, 2018, of cancer at the age of 55.

She was born in Sydney, Australia. At Princeton she earned a Ph.D. in philosophy in 1994.

She joined the philosophy faculty of the California Institute of Technology in 1992 and was promoted to professor in 2010. Fiona's research explored the evolution of the human mind and philosophical questions about language. She was a proponent of the theory that language is not an innate product of the human brain but is instead a technological innovation.

Her book *What's Within? Nativism Reconsidered* contends that many aspects of the human mind are acquired through learning rather than inborn. The book earned Fiona the Gustave O. Arlt Award in the Humanities in 1999.

She was awarded an Andrew W. Mellon Foundation New Directions Fellowship for Study of Neuroscience and Genetics.

Fiona's approach differed from that of almost everyone who works on the evolution of language. In an interview she said, "I think that language arose initially through mutation and natural selection." She viewed language "more as an invention, or technological advance, rather than as if it were some extra limb that grew as a result of selection on genetic mutations."

Graduate memorials are prepared by the APGA. An undergraduate memorial appears for John Lockwood McShane '52 '58.

Classifieds

For Rent

Europe

Italy/Todi: Luxurious 8BR, 7.5BA villa, amazing views, infinity pool, olives, lavender, grapes, vegetable garden, housekeeper included, cook available, A/C, Wi-Fi. Discount for Princetonians. Photos/prices/availability: www.luxuryvillatodi.com, p'11.

Paris, Tuileries Gardens: Beautifully-appointed, spacious, 1BR queen, 6th floor, elevator, concierge. karin.demorest@gmail.com, w*49.

Provence: Delightful stone farmhouse facing Roman theater, 5 bedrooms, pool, market town. Frenchfarmhouse.com

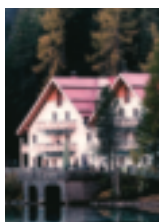
Ile St-Louis: Elegant, spacious, top floor, skylighted apartment, gorgeous views overlooking the Seine, 2 bedrooms sleep 4, 2 baths, elevator, well-appointed, full kitchen, WiFi. 678-232-8444. triff@mindspring.com

Paris, Marais: 2BR 2B spacious, quiet apartment facing inner courtyard. Walk to Louvre, Notre Dame, Picasso Museum. Vibrant neighborhood on pedestrian street, full kitchen, w/d, AC. Gdaly1@gmail.com, '58 704-334-4095

Have a fabulous second home to rent?

Advertise it in PAW where you will reach readers who will treat your home as their own!

Contact Advertising Director PAWads@princeton.edu 609-258-4886



Ireland/Connemara, Co. Galway:

luxurious thatched large cottage, 3 queen beds, amazing sea views, spacious, beautifully decorated, all modern conveniences. afarrellbrowne@gmail.com 215 738 4039

Ireland/ Tipperary: on the shores of Lough Derg. 150 year old Walled Garden Cottage, 2 queen beds, 2 bathrooms, charming interior, all modern conveniences, stunning garden. Located on private estate. Afarrellbrowne@gmail.com 215 738 4039

Paris 7th: Fifth floor, quiet, studio sleeps 2 adults plus 1 child. Balcony. View Eiffel Tower. www.parisgrenelle.com, 207-752-0285

Mexico

San Miguel De Allende, Mexico: Colonial 3 bedroom home in historic downtown with classic courtyard, indoor/outdoor fireplaces, rooftop terrace with breathtaking views. malvinaproductions@gmail.com (202) 257-8390. K'62

United States, Northeast

Stone Harbor, NJ: Beachfront, 4BR, upscale. 570-430-3639, Stoneharborbeachhouses.com, radams150@aol.com

United States, Southeast

Sarasota/Bradenton, Florida: Condo at Lakewood National, 2bed/2bath, membership amenities, golf, tennis, swimming, beaches, sunshine. Contact information: vrbo.com/2290356, cmb3087@gmail.com '15

United States, West

Park City/Deer Valley, Utah: 3 BR ski-out condominium in Upper Deer Valley. Newly remodeled, hot tub, beautiful views, available all seasons. Reasonable rates. 937-825-4137 or jmkolodzik@gmail.com, p'12 p'21.

California Beach Vacation: Fully furnished 2-BR, 2-BTH townhome in picturesque Dana Point (midway LA and San Diego). Enjoy beautiful sunsets/ocean views; prvt ocean bluff park; fully equipped kitchen; and all amenities. For details visit: www.danapointvacationhouse.com or email: danapointvacationhouse@gmail.com.

Timeshare

Timeshare Rentals by Owner:

Affordable, luxurious, 1-6BR weekly timeshare rentals available at renowned resorts in the world's most popular destinations. www.sellmytimesharenow.com/timeshare-rentals/

Books

Looking for a ghostwriter? I'm a well-published author and biographer who also takes on select ghostwriting projects, including a recent memoir for a noted Harvard businessman and philanthropist. I'd love to help you tell your story penelope8@alumni.stanford.edu

The perfect gift for your college student: *How To Intern Successfully — Insights & Actions To Optimize Your Experience*. Available: Amazon. Robert@agilerainmakers.com, '90.

Educational Services

SAT/ACT & ISEE/SSAT Tutor: Robert Kohen, Ph.D., Harvard and Columbia grad, provides individualized tutoring for the SAT/ACT and ISEE/SSAT. 212.658.0834; robertkohen@koheneducationalservices.com; www.koheneducationalservices.com

Personals

Attractive, adventurous, healthy, fun to be with, stylish, Princetonian woman looking for worldly life partner, man over 65, to share a passion for life and a lot of laughter. Laramus66@gmail.com

Professional Services

Free contracting insurance quotes: <https://generalliabilityinsure.com/small-business/handyman-insurance.html>, <https://generalliabilityinsure.com/small-business/plumbing-insurance.html>

Looking for Talent?

Advertise your position here and reach 97,000+ accomplished Princeton alums interested in advancing their careers.

Contact Advertising Director, PAWads@princeton.edu, or 609-258-4886

A Literary Voice Born on Campus

By Elyse Graham '07

The immortal question of a 1997 review in the *New York Press*: “What in the name of Christ is it about Princeton that inspires such sentimental lyricism in its graduates? No other American institution of higher learning has so inspired its progeny to stick pen to paper and effuse about it to the same extent that Princetonians have effused about lilac evenings on the quad and the Pure Young Strong-jawed Sons of Nassau and all the rest of it.”

Naturally, we wouldn't have this problem if Princeton didn't have so many lilac evenings. But Princeton's vast literary territory also owes much to the wicked influence of wonderful writers. Jesse Lynch Williams 1892 may have been the first writer to make Princeton his presiding subject. A co-founder of both the Triangle Club and the *Princeton Alumni Weekly*, Williams influenced generations of authors who wrote in thick shades of rich orange pigment. This month marks exactly 122 years since PAW's debut.

As an undergraduate, Williams joined the Princeton College Dramatic Association, a high-minded company of serious thespians. He soon decided that campus needed fewer histrionics and more hysterics. Together with Booth Tarkington 1893, a future playwright,

A member of the Princeton College Dramatic Association, Williams decided that campus needed fewer histrionics and more hysterics.

Williams reshaped the group — which took the name *Triangle* in 1893 — into the riot of comedians it is today. (“How a Triangle show ever got off was a mystery,” remarked F. Scott Fitzgerald 1917, a member of the Triangle Club, “but it was a riotous mystery anyway, whether or not one did enough service to wear a little gold triangle on his watch-chain.”)

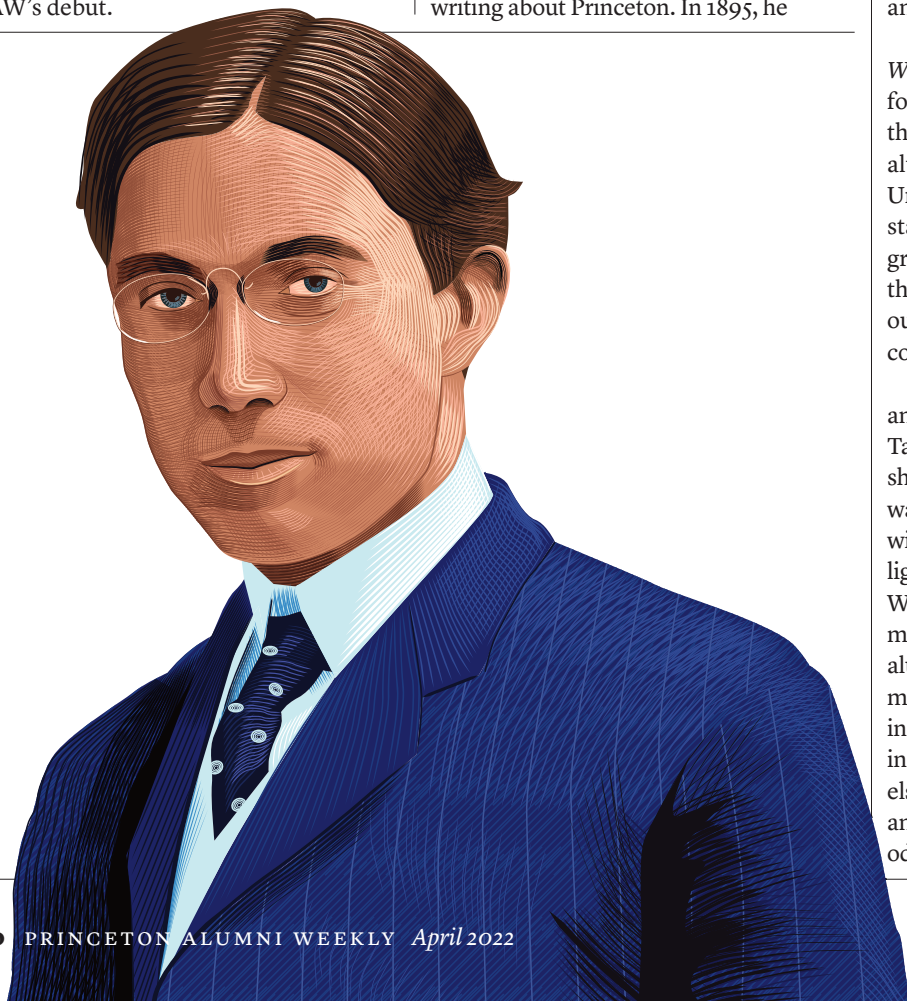
Many writers draw their stories from a single powerful decade of life. For Williams, whose life began in college, his graduation was just the start of his writing about Princeton. In 1895, he

published a book of short stories titled *Princeton Stories*. He followed up, in 1899, with *The Adventures of a Freshman*, a novel of campus life. They catalog in loving detail the college years he knew: A freshman saves his class from disgrace by stealing the bell clapper from Nassau Hall, a campus tradition. (His classmates have the clapper melted into tiny souvenir clappers “to be worn as watch-charms by the whole class.”) The freshman and sophomore classes put up bill posters denouncing each other: “They cast aspersions on you, call you fresh and green and heap ignominy on your prominent men and deride your eccentric characters.”

In Williams' telling, students work up slang into a shared moral order: *greasy poling*, for studying; *loafing*, for slacking off; *dead-gaming*, for gambling. They join Whig or Clio, where they learn secret rituals and roast each other as “Blamed Neo-Platonists” or “Doggoned Transcendentalists.” Only on game days may freshmen wear “the sacred orange and black”; they seize the opportunity, wearing “yards of it, hung all over their hats, their clothes, the coach, the driver, and the horses.”

On April 7, 1900, the *Princeton Alumni Weekly* published its first issue. As its founding editor, Williams explained that he hoped the magazine would give alumni a continued connection to the University and thereby an incentive to stay active in its affairs: “Even though the graduates of Princeton have no voice in the conduct of their college, as yet, they ought at least to know how it is being conducted; and how well.”

Through PAW, through his stories, and through his influence on Fitzgerald, Tarkington, and other writers, Williams shaped the University's literary voice in ways we still hear today. That voice *sings*, with notes as strange and soft as evening light slanting through trees on the quad. Williams' descriptions can evoke the same memories for alumni today as they did for alumni 130 years ago: “At first he could not make up his mind whether it was vocal or instrumental, or whether it was real at all, in fact, or part of a dream like everything else perhaps. The seniors were singing, and from that part of the campus it echoes oddly, as you doubtless know.” ♦



Daniel Hertzberg

A New Opportunity Awaits at Princeton Windrows



Different by Design

As we emerge from these unprecedented times, Princeton Windrows continues to deliver exceptional senior living.

Join fellow alumni in our unique, vibrant, and welcoming community. Enjoy the expertise of our caring and dedicated staff, our beautiful 35-acre campus, and a rich selection of comprehensive services and amenities that make us truly...

Different by Design

A resident-owned and managed 55-plus independent living condominium community

Princeton Windrows Realty, LLC
2000 Windrow Drive, Princeton, NJ 08540 | 609.520.3700 | www.princetonwindrows.com
All homes located in Plainsboro Township.

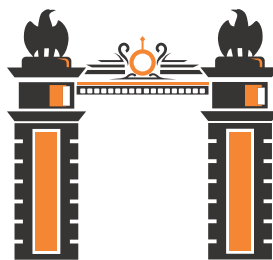
All photo depictions of life at Windrows are prior to the current social distancing and COVID-19 guidelines directed by the State of New Jersey.





- Fitz Gate Ventures is a network driven venture capital firm investing primarily in early stage companies with a nexus to Princeton University, its alumni and faculty.
- Fitz Gate typically writes initial checks of \$500K-\$1MM and reserves for follow-ons. Fitz Gate will lead, co-invest or invest alone.
- Fitz Gate's results to date place it in the top quartile of all early-stage VC funds.
- Thank you to our hundreds of "Friends of Fitz" for helping us achieve so much success.

**Interested in seeking funding or being a Friend of Fitz?
Please email Jim Cohen '86 and Mark Poag '93 at
info@fitzgate.com**



FITZ GATE VENTURES

www.fitzgate.com