

HONOR SYSTEM
CHANGES

MCCARTER THEATRE'S
EMILY MANN

THE ADVENTURES OF
RICHARD HALLIBURTON 1921

PRINCETON ALUMNUS WEEKLY



THE SCIENCE OF SPORTS

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Retablo of José Cruz Soria (detail), 1960. Oil on metal. Arias-Durand Collection

PRINCETON ALUMNI WEEKLY

An editorially independent magazine by alumni for alumni since 1900



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Richard Halliburton 1921 on his rented elephant in Paris in 1935, page 22

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He swam the Panama Canal and crossed the Khyber Pass. But the adventures of Richard Halliburton 1921 ended at sea. *By Mark F. Bernstein '83*

What could make a baseball fly farther, or a bike be more stable? Peko Hosoi '92 brings an engineer's analysis to sports. *By Brett Tomlinson*

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John Batchelor '70

Tigers of the Week

Read recent profiles of actor and producer Marisol Rosa-Shapiro '07, radio host John Batchelor '70, model-train enthusiast Bruce Greenberg '65, and more.

Get Happy

Author and psychology professor Catherine Sanderson '97 talks about shifting to a positive mindset.

Great Minds

Columnist Gregg Lange '70 looks at the history of the Institute for Advanced Study.

Thesis Challenge

Have you ever re-read your senior thesis? PAW invites you to pull it off the shelf to revisit, reflect, and answer a few questions for an upcoming story. To participate, contact us at paw@princeton.edu.

From top: ©TopFoto / The Image Works; Alfred Miller '11

Extending the Influence of the Humanities

For millennia, the arts and humanities have helped people to understand their lives and their world. Their guidance is ever more important today, when technology and other forces transform society with dizzying speed. Fortunately, some of Princeton's leading scholars are not only educating students at the University, but also finding creative ways to extend their lessons far beyond the boundaries of our campus.

For example, Professor of Classics Barbara Graziosi, a leading scholar of Homer, has worked to infuse the classics into schools on both sides of the Atlantic. Graziosi's latest book, *Homer*, lends both intellectual rigor and accessibility to literary, philosophical, and cultural questions in Homer's work. Her department chair, Michael Flower, the David Magie '97 Class of 1897 Professor of Classics, calls it the best short introduction to Homer in any language.



DANIELLE ALIO

Jane Cox (far right), director and senior lecturer in theater, teaches THR 400/VIS 400 Theatrical Design Studio in the Lewis Arts complex.

New Jersey Governor Phil Murphy joined Flower in his praise. After receiving a copy of *Homer* at a recent board meeting, Governor Murphy took the trouble to ring Graziosi at home to express his admiration for her work. He conveyed his hope that students in New Jersey public schools would all be effectively and enjoyably introduced to Homeric epic and the classics more generally.

Throughout her career, Graziosi has demonstrated a deep commitment to this sort of public engagement. In the United Kingdom, she used funding from a National Teaching Fellowship, the highest recognition of excellence in higher education in the UK, to support projects that linked academic research, undergraduate teaching, and work with under-resourced primary and secondary schools. Graziosi's work breathes fresh life into long-studied questions, engaging new generations in the study of the humanities.

Tracy K. Smith, the Roger S. Berlind '52 Professor in the Humanities and director of the Program in Creative Writing, is introducing poetry to communities throughout the United States during her second term as U.S. poet laureate. In this capacity, Smith has hosted readings in small towns across the country as part of a series called "American Conversations: Celebrating Poems in Rural Communities."

This year, Smith is expanding the reach of her community engagement by broadcasting "The Slowdown" on public radio stations in seven cities, including San Francisco, Honolulu,

and Charleston, West Virginia. During this five-minute podcast, she introduces and reads a poem of her choosing, highlighting accessible works by both contemporary and canonical authors.

Smith's own writing has enthralled readers around the world. She has written four books of poetry, including *Life on Mars*, which won the 2012 Pulitzer Prize for Poetry, and a memoir, *Ordinary Light*, a finalist for the 2015 National Book Award in Nonfiction. We are delighted that she has agreed to serve as the next chair of the Lewis Center for the Arts beginning in July.

Jane Cox, director and senior lecturer in the Program in Theater, is making theatrical performances vibrant for audiences around the world. An award-winning lighting designer, Cox uses light as a form of visual storytelling. She has been nominated for two Tony Awards for her work on the plays *Jitney* and *Machinal*. In recent years, Cox has also designed lighting for the Broadway revival of *The Color Purple*, the National Theatre's production of *Hamlet* in London, and productions of Mozart Da Ponte operas for the San Francisco Opera.

Princeton is fortunate that Cox has brought this extraordinary experience and pioneering spirit to her work at the University. For example, during the development of the Lewis Arts complex, she advocated for the use of LED lighting in the new performing spaces. She now leads one of the first all-LED theaters in an educational setting, enabling her to teach our students to engage with the most versatile and cutting-edge technology.

Finally, Princeton University Concerts scored a remarkable coup by attracting Maestro Gustavo Dudamel, the Music & Artistic Director of the Los Angeles Philharmonic, as its first artist-in-residence. Maestro Dudamel is a lifelong champion of access to arts education. He led the development of the Youth Orchestra Los Angeles (YOLA), which has provided music education to thousands of children from underserved communities around Los Angeles, and established the Gustavo Dudamel Foundation to promote access to music as a catalyst for social change.

During his residency at Princeton, Maestro Dudamel is continuing these community engagement efforts. He has interacted with students from the Trenton Central High School Orchestra and the Trenton Music Makers, hosted a Q&A for public school music teachers in Trenton, and discussed "Poverty, the Arts, and Civic Engagement" at the Princeton University Center for Human Values. In April, he will conduct the Princeton University Orchestra and Glee Club in performances at Richardson Auditorium and the War Memorial in Trenton. We are fortunate to be able to welcome him as a member of Princeton's extended family.

With creativity and zeal, these artists and scholars are spearheading exciting efforts to capture the imagination of new audiences and thereby extend the influence of the humanities. These initiatives give people throughout the world the tools to lead thoughtful lives and examine the fundamental questions that define our shared humanity.

Inbox

FROM PAW'S PAGES: 11/26/1954

For Bigtime Football

Dear Sir:

As I sit down to write, the airwaves are full of the fact that Yale, "the Ivy League leader and potential champion," was clobbered Saturday by Army on the gridiron, 48-7, this debacle occurring hard on the heels of Penn's horrendous televised humiliation by Navy last week, and the many other indignities worked on our good neighbors by football upstarts from all sides. Stifling an impulse to say "I told you so!" to Yale for its attitude on spring practice, I would like, instead, to pose this question: "Why do we put up with it?"

On this subject, I hold the following truths to be self-evident:

1. Football, as we have known it, holds a special place in the athletic galaxy, and has importance above and beyond mere sport in that it is the only way many people hear about an institution like Princeton.

2. Ivy League schools, who number among their graduates some of the world's foremost advertising men, are letting themselves in for reams of unfavorable publicity. Why this split personality?

3. Ivy League teams, sans spring practice, lack competence in their chosen field, and will continue to do so.

4. Our coaches and players are placed in a position more exasperating than that of General MacArthur at the Yalu. This is unfair to them as they are an outstanding group of men.

5. Princeton should take determined leadership in bringing the Ivy group back to a policy of putting well-coached, smart and competitive (not all-winning, of course) football teams on the field. They should command respect, if not awe, throughout the nation.

WILLIAM P. MATTHEWS JR. '42
Troy, Ohio

THE ECONOMIC DIVIDE

The report on income diversity among undergraduates ("Class on Campus," Life of the Mind, Jan. 9) struck home. It's not only money that separates students from different classes. I grew up in a solidly working-class family. Early on in our freshman year, my mother and grandfather decided to visit the campus on Parents Weekend. I had a one-room double. My family and I thought nothing of having my guests sleep in the room, with my grandfather in my bed and my mother and I sharing a sleeping bag on the floor. It not only saved them the cost of a hotel room, but gave us all more time together. My upper-middle-class roommate was horrified, as was our RA.

As a sophomore, a classmate asked me to be her guest at the opera — until she realized that I had nothing appropriate to wear, at which point she offered to "buy back" my ticket, rather than be seen with someone who was underdressed. A sophomore-year roommate of mine (I later learned) used to show my closet to her preppy friends so that they could laugh at my wardrobe.

I learned a huge amount at Princeton about many things, academic and otherwise, including the differences between the behaviors of working-class people and those in the upper-middle class.

Elizabeth A. Shollenberger '78
White Plains, N.Y.

Thank you for examining these issues so carefully! The article brought back memories of Princeton in the late 1960s. I have always felt extremely fortunate

to have attended Princeton. Issues of class played a minor role, but the article reminded me of having been a public high school graduate when half of my classmates attended prep schools, and having to work during the summers and school years to pay for my books, clothing, and other incidentals.

During freshman orientation week, I was chatting with a classmate who mentioned that he attended Deerfield Academy. Innocently, I replied that I attended Exeter — summer school. I was surprised to see his face quickly morph from a smile to a look of disappointment when he learned I had only been there for summer school (a list of scholarship students was posted on the bulletin board).

Working in the "Commons" dining halls meant meeting many other less-privileged classmates. One who became a close friend periodically invited me to eat in his room our junior year. He prepared simple meals, and asked me to pay only for my share of the ingredients. (No, we did not join eating clubs.)

One of the huge benefits of working at minimum-wage jobs on campus and during the summer was the motivation that provided to do well academically and have a better job after medical school. I learned to love Orgo!

Richard M. Waugaman '70
Signal Mountain, Tenn.

(Via Facebook) A major issue when I was around the Hidden Minority Council starting up circa 2014 was access to the eating clubs and the economic, cultural, and social capital they represent. What

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.

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is going to happen to all of these low-income students when they graduate? Are these "brothers and sisters" going to actually help one another get jobs and other kinds of capital? Or are the Pell-eligible students just expected to go back where they came from and pull themselves and their communities of origin up by the bootstraps?

Marissa Smith *15
Sunnyvale, Calif.

In the early 1950s, a freshman chose a room with different costs. Some rooms came with maid service. As I was being interviewed for the Larkin scholarship, one Princeton interviewer said to another, "See, I told you the dorm you're in doesn't make much difference in the friends you make." Before 1954

PRINCETON ALUMNI WEEKLY

An editorially independent magazine by
alumni for alumni since 1900

March 20, 2019 Volume 119, Number 9

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Princeton Alumni Weekly (I.S.S.N. 0149-9270) is an editorially independent, nonprofit magazine supported by class subscriptions, paid advertising, and a University subsidy. 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 twice monthly in October, March, and April; monthly in September, November, December, January, February, May, June, and July; plus a supplemental Reunions Guide in May/June.

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 © 2019 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

graduated, the maids and “low-rent” areas were gone.

Vernon Ordiway '54

Ridgway, Pa.

DEFENDING FREE SPEECH

When Philippine police in February arrested journalist Maria Ressa '86, we decided silence was not an option. Ressa is the founder of Rappler, a news site known for its critical coverage of Philippine President Rodrigo Duterte. She's been honored by press-freedom organizations and professional colleagues and was named by *Time* as one of its 2018 Persons of the Year.

A team of erstwhile rivals (one of us worked for the Press Club at Princeton; another for *The Daily Princetonian*), we reached out to members of the Princeton community who, like us, had formative experiences as student journalists. We also contacted those who have taught and otherwise advanced the cause of journalism on campus.

The response was phenomenal. Within 72 hours, more than 100 Princetonians added their names to a statement of support for Ressa. When we placed it as a full-page ad in *The Daily Princetonian*, the managing board joined us with an editorial.

Ressa's roster of supporters encompasses seven decades of Princetonians standing in solidarity with a brave and enterprising editor and her fight for free speech.

Members of Ressa's Class of 1986 are suggesting another way to show support. They have launched a drive for donations to a legal-defense fund established for her by First Look Media and the Committee to Protect Journalists. To make an online donation, go to: <https://pressfreedomdefensefund.org/donate>.

Checks, made out to First Look Media Works Inc., should be sent to:

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We thank our fellow alumni for helping us to send an important message: At a time when democracy and the journalism that supports it are under threat across the globe, complacency,

like silence, is not an option.

Mike McCurry '76

Kathy Kiely '77

Anne Tergesen '86

Julia Hicks de Peyster '86

NAME ROAD FOR SCHEIDE '36

An On the Campus article in the Jan. 9 issue asked for suggestions for naming the short section of road from Nassau Street to Firestone Plaza. As an honorary member of the classes of '36, '76, and '10 and past manager of grounds at the University, I had many meetings and conversations with students and alumni over 20-plus years. One of the most memorable was with William Scheide '36 prior to the opening of Scheide Caldwell House while it was being landscaped. We had made many improvements to that entrance to campus, all of which were pedestrian-friendly yet accessible to buildings in that area for deliveries.

When I read of the naming opportunity, my thoughts went to that meeting with Bill and his comments with respect to the campus plan at that location. He was thrilled that it would be open to the public as far as Firestone Plaza and that he could be dropped off to visit the Scheide Library, the Chapel, East Pyne Hall, Chancellor Green, and now the new building. (Bill was no longer able to drive at that time.)

Scheide Lane seems to fit in so many ways and would be a future reminder to the Princeton community of his family's generosity and how he improved this one special niche of the Princeton campus.

Jim Consolloy

Sun City West, Ariz.

'K' CONCATENATIONS

The Kardashian Klub on Kampus (On the Campus, Feb. 6)? Innocent fun, for sure, but here's a little cautionary history for the members. The penchant for changing C to K in the names of businesses and other institutions arose as an homage to the KKK — the bad one — in the early decades of the 20th century. Kountry Kitchens and Kozy Korner mean no harm nowadays, but some of us, especially those raised in the South, remember when they still had a whiff of Jim Crow. I grew up in Winston-Salem, headquarters of that cardiac kickstarter

Krispy Kreme, founded in 1937 in the Klan's heyday.

None of this is any reason to tsk tsk the Kardashianistas at Princeton. They may, however, want to tamp down the fetish for K concatenations, especially at a time when blackface minstrel party get-ups, an ugly tradition we thought we had shed long ago, are sadly back in the news.

George Angell '76
Baltimore, Md.

SKELETONS IN THE CLOSET

My classmate Walter Weber '81 (Inbox, Jan. 9) is senior counsel for the American Council of Law and Justice (ACLJ), an extreme-right organization founded by Pat Robertson. Jay Sekulow, one of President Trump's legal advisers, is chief counsel for the ACLJ. Mr. Sekulow has amassed great wealth in connection with the ACLJ and its related charities, as reported in *The Washington Post* and *The Guardian*. One could argue that it, too, is a "scam organization."

While casting stones at the Democrats, Mr. Weber conveniently omits that the Civil Rights Act of 1964 was championed by a Democrat, President Lyndon Johnson.

Mr. Weber is well-known for his opposition to reproductive freedom. The ACLJ has supported anti-LGBT laws and criminalizing homosexuality in African countries.

Arguing that the Democrats of today are the same as the ones 55 years ago is disingenuous. Almost no one would recognize today's Republicans as the party of Lincoln, as evidenced by its efforts toward voter suppression and disenfranchisement of poor and minority voters.

On one point, I completely agree with Mr. Weber: The Democratic Party does have its skeletons in the closet, with one corollary: So do the Republicans.

Kabir Mahadeva '81
Ponte Vedra, Fla.

FROM THE ARCHIVES

I was thrilled to see that the World's Longest Banana Split lives on (From the Archives, Feb. 6). I was one of the organizers of this very big and tasty treat. Note this happened on April 25, 1987, not *continues on page 10*



THE JAMES F. HALEY '50
 MEMORIAL LECTURE

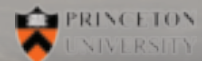
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Inbox

continued from page 5
1989, during Communiversiety. Students from all classes came together for a good cause and to break a world record. We donated all the money to a worthy organization in Princeton, the Family Services Agency.



It took almost a year to plan, with 500 University captains leading the thousands of people who joined in for the fun and bought \$3 tickets to make and eat 3 feet of the banana split. In addition to the ingredients PAW listed (22,000

bananas, 2,000 gallons of all flavors of ice cream), we had 16,000 cherries, 17,000 ounces of whipped cream, 17,000 ounces of chocolate sauce, and miles of tubing and aluminum foil to make up the dish, which, according to the Guinness Committee, had to be continuous.

It was a messy day, but we raised money for a good cause and helped strengthen the community and university bond.

Jon Sichel '89
Scarsdale, N.Y.

Joan and I were at this orgy, along with about half the children of Mercer County. Your photograph does insufficient justice to the town-gown nature of the event. I forget, or was unaware of at the time, any charge being made for actually chowing down. A ditch-full of banana split, while spectacular to the eye and challenging to the mind, rather alarms the palate. My impression was that the organizers had a major problem in getting rid of the stuff. By the time we

left, the field looked something like what might spring to your mind when you try to imagine Culloden or Austerlitz.

But what a great event: even better than the first Earth Day, celebrated in more or less the same spot.

John Fleming *63
Professor emeritus of English

Editor's note: Several more alumni who attended the event wrote to PAW, including Victoria Wu Rosini '90 and '89 classmates



Craig Sherman, David Chaumette, and Jane Lyttle Richter. Carlos Romero '90 and David Chang '89 posted images of the commemorative T-shirt, shown

above. Adam Barr '88 offered some advice for future record-seekers: "Generous amounts of whipped cream and chocolate syrup, easily dispensed, will cover a multitude of sins."

T. Rowe Price

The Man, The Company, and
The Investment Philosophy
Cornelius C. Bond



T. Rowe Price

The Man, The Company, and The Investment Philosophy
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The author graduated from Princeton with a BSEE and went on to work at T Rowe Price for twenty years. Drawing on his personal relationship with Price, as well as on dozens of unpublished corporate and personal documents and writings, he tells the story of how growth investing took the investment world by storm—and how an investor can benefit from this investment strategy today.

AVAILABLE NOW FROM AMAZON

On the Campus



The winter sun glints off Peretsman Scully Hall, left, which houses the psychology department, and the Princeton Neuroscience Institute. Part of Icahn Laboratory, located across Pardee Field, is visible in the reflection at center. Photograph by Ricardo Barros

Reforms Move Forward

New penalties, other changes emerge from reviews of the Honor System

Changes to the University's 125-year-old Honor System — including a new range of penalties, expanded student membership on the Honor Committee, and the pairing of professional investigators with student investigators — are expected to be implemented in the coming academic year.

After a series of committee reviews over the past two years, students, faculty, and administrators on the Academic Integrity Reconciliation Committee submitted their proposals in January. The recommendations were accepted by the dean of the College, the vice president of student life, and the dean of the faculty and approved by President Eisgruber '83.

The committee supported some longstanding aspects of the Honor System — including leaving examinations unproctored and ensuring that only students be members of the Honor Committee — but suggested revising the penalty structure by increasing the range of probationary periods and adding a reprimand for minor first offenses.

"Someone who fails to put their pencil down for 30 seconds after a professor calls time should perhaps suffer a different penalty than a student who copies from another student's paper," said Jill Dolan, the dean of the

"Our hope is that after two years of this process, we're now at a point where students can reinvest their trust in the Honor Code."

— **Dean of the College Jill Dolan**

College. "The committee is trying to make sure that the punishment meets the infraction."

Other recommended changes include:

- ♦ Allowing a one-semester suspension as an alternative to a suspension of one year.

- ♦ Creating and publicizing a "guiding principles" document for students and faculty to "explain how the Honor System exists as a pact between students and faculty and clarify the implications of the pact in terms of modifying the system now and in the future."

- ♦ Increasing the number of students elected to the Honor Committee from four to six.

- ♦ Pairing professional investigators with student investigators to lighten the workload for Honor Committee members.

- ♦ Eliminating character witnesses for hearings.

- ♦ Developing standardized language by instructors for calling time at the end of an exam.

The reconciliation committee recommended against combining the Honor Committee and the Committee on Discipline (which hears cases of academic infractions other than violations during in-class exams), though it suggested bringing each group's penalties more into line with each other.

Dolan said the faculty will not have to act on the proposals, while the Undergraduate Student Government is determining whether any of the changes will require a student vote. She said she expects the recommendations to be implemented by the beginning of the fall 2019 semester.

"Our hope is that after two years of this process, we're now at a point where students can reinvest their trust in the Honor Code," Dolan said.

According to *The Daily Princetonian*, several initiatives are planned for the spring semester to give students the opportunity to ask questions and provide feedback to the USG, the Honor Committee, and the University. Honor Committee chair Camille Moeckel '20 said implementation of the guiding-principles document and the membership changes to the Honor Committee may require a student vote.

The Honor Committee reported last month that from 2014 to 2018, 99 violations were reported to the committee, 37 resulted in a hearing, and 23 students were found responsible for violating the Honor Code. ♦ *By A.W.*

QUESTLOVE TAKES THE STAGE AT MCCARTER



AHMIR "QUESTLOVE" THOMPSON, the drummer and co-frontman for the Grammy-winning hip-hop band **The Roots**, talked about living a creative life with Professor Imani Perry in McCarter Theatre Feb. 15 — and became an honorary member of the Class of '19. He told the audience of about 400 people that "boredom is a cousin of silence" and is the key to "clearing space for a new idea to spring back up." Asked by a student about the responsibility of successful musicians to their communities, Questlove said "a true revolutionary act is to ensure that people have proper education and access to things that I can get, at the end of the day." He added: "I'll be satisfied if I'm able to culturally affect the ... block of West Philadelphia where I grew up, somehow or some way." ♦ *By Brilliant Bao '20*

Q&A: EMILY MANN

Champion of New Work, New Voices on the Stage

During nearly three decades at the helm of McCarter Theatre Center, artistic director and resident playwright Emily Mann has elevated the theater's standing on the world stage. Chief among her accomplishments have been taking risks on new artists who have created highly acclaimed work; enriching the theater's offerings by embracing female artists and artists of color; righting the theater's finances; and McCarter's winning the Tony Award for Outstanding Regional Theatre.

She also spearheaded the construction of the 360-seat Berlind Theatre in 2003 — financed jointly with the University — which enhanced McCarter by serving as a platform for student performances, University events, and McCarter productions suited to a smaller stage. McCarter — an independent nonprofit housed on Princeton's campus — has a long history of collaborating and sharing resources with the University.

In addition to leading McCarter, Mann is a director and playwright who has won eight Obie awards, which recognize off-Broadway theater. Following the announcement that she will step down from her positions at McCarter in 2020, Mann talked with PAW about her legacy, her collaborations with Princeton, and sexism in the theater.

You are the first woman to lead McCarter. There were many people along the way who discouraged you from pursuing a life in theater, especially your adviser at Harvard, where you were an undergraduate. My adviser said to me, "You're quite talented, but you know women can't direct or write plays professionally in the American theater. Why don't you think about going into children's theater?" The top of my head nearly blew off with anger, but I held onto it and said

to myself, "Oh no, I am going to do this, and if I have to be first to do it, I will be first to do it."

In the face of sexism, you just kept going?

If I had let myself get eaten up by anger, I wasn't going to learn anything. At

"So much of my work has been by and about and for women and people of color. ... We've been leading the conversation on that all along."

— Emily Mann

theaters all over the country, I was the first woman to direct. We have come a long way, but the percentage of women directors is still nowhere near parity. It's still not an equal playing field.

You were drawn to McCarter in part because of its close relationship with Princeton. What has been your most important collaboration with the University?

The perfect example is the Princeton and Slavery Project [a 2017 project exploring the University's ties to slavery]. Professor Martha Sandweiss came to me, knowing about the work I've done



On the Campus

HIGHLIGHTS OF MANN'S TENURE AT MCCARTER

1991: Tennessee Williams' *The Glass Menagerie*, the first McCarter production directed by Emily Mann, opens Jan. 15. The cast features Shirley Knight, Judy Kuhn, and a young Dylan McDermott.



1994: McCarter receives the Regional Theatre Tony Award.

1995: *Having Our Say*, written and directed by Mann and developed at McCarter, moves to Broadway and tours nationally.

2001: Mann launches the Sallie B. Goodman Artists' Retreat. It continues to be a centerpiece of the McCarter LAB, a creative incubator for artists.

2003: A joint project of McCarter and the University, the Berlind Theatre opens with Nilo Cruz's Pulitzer Prize-winning *Anna in the Tropics*. Directed by Mann and featuring Jimmy Smits and Daphne Rubin-Vega, it then moves to Broadway.

2013: Christopher Durang's *Vanya and Sonia and Masha and Spike*, commissioned by McCarter, moves to Broadway after its McCarter premiere and wins the Tony Award for Best Play.



on African American history. We decided to commission seven playwrights to be inspired by the archives and write 10-minute plays, which were part of the weekend symposium on Princeton and slavery.

I loved being able to engage with students, with faculty, and to feel that incredible energy that can happen between an arts institution and a university. It is a wonderful cross-pollination.

You have spoken publicly about being diagnosed with multiple sclerosis in 1994. How has that affected your career?

I've been in remission for 15 years, so I'm one of the very fortunate ones.

For six or seven years — before we found which drugs worked in the right combination — I was in and out of a wheelchair. But I never missed a rehearsal. I never missed a day of work.

I was diagnosed right before the Tonys [in 1994]. At that time, when you won best regional theater, the artistic director went out alone to receive it. I was not having a good day and couldn't walk, so Jeff Woodward and Liz Fillo said, "We will go out with you. We will hold you on either side, your board president and managing

director, and support you as you walk." Nobody knew. I didn't even tell my mother. We carried it off. And we started a new tradition! Every year since then, the artistic director comes out with her board president and managing director.

What do you see as your legacy?

So much of my work has been by and about and for women and people of color, though I didn't state it for the longest time, I just did it. We've been leading the conversation on that all along. We have birthed into the world and into the canon some of the more important plays by and about women and people of color.

What makes theater so magical for you?

It's live. A live performance is a conversation between the audience and what's on stage, and between audience members and each other. We've needed that since the beginning of time, when we sat around campfires and told each other stories. I have seen people transformed by seeing theater and creating theater. It is one of the great privileges to do it every day. ♦
Interview conducted and condensed by Jennifer Altmann



Instructor Noah Buchholz demonstrates how to sign “thin” plus “person” as students learn how to describe people.

Helping Hands

American Sign Language courses attract a passionate following

Delivering a weather report and portraying a doctor and a patient during a medical checkup are not your typical classroom activities. But role-playing — along with an occasional game of hide and seek — is helping to bring American Sign Language (ASL) to life for Princeton students.

“The dynamic is really cool, you can’t compare it to any other course here at Princeton,” said Larissa Oliveira ’21. “It was life-changing for me — it made me feel passionate about something that I never thought I would be passionate about.”

Noah Buchholz, a Princeton Theological Seminary Ph.D. student, began teaching the University’s first for-credit ASL course in 2017. Offered jointly

Buchholz said his students offer many reasons for taking ASL, including the desire to communicate with deaf friends or relatives, to become an interpreter, or wanting to work with deaf children.

through the programs in linguistics and translation, at least one of Buchholz’s ASL I and ASL II courses has been taught every semester since then. Last fall, 43 students were enrolled in ASL I, while 16 students are taking ASL II during the spring term.

An ASL speaker, performing artist, and translator who wants to continue teaching ASL and Deaf studies (an uppercase “D” is used in references to the culture and community) after he earns his doctorate, Buchholz — who is Deaf — conducts his ASL I lecture course with an interpreter. During precepts and in his ASL II class, there is no interpreter, and students are allowed to communicate only in ASL. Buchholz said his students offer many reasons for taking ASL, including the desire to communicate with deaf friends or relatives, to become an interpreter, or wanting to work with deaf children.

“Noah is an amazing teacher,” said Megan Ormsbee ’20, who decided to write her junior paper and senior thesis on Deaf culture after taking ASL I and II. “He’s very good at telling when we’re confused, and will stop and say, ‘Did everyone understand? What questions

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April 11, 2019 8:00 PM
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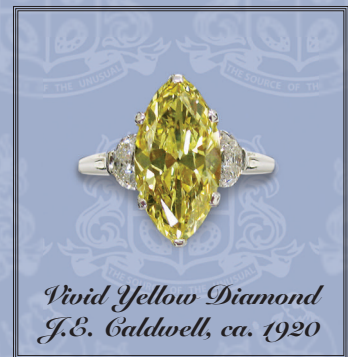
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AA Haven

Feel free to drop by the
AA Haven for fellowship
from 7 - 11 p.m.
Frist Campus Center,
Class of 1952 Room.



On the Campus

do you have?’ Noah always found a way to make each unit memorable.”

Learning about Deaf culture is a large component of the class. Once a semester, students are required to attend a Deaf-community event: ASL poetry slams and Deaf chats (in which people get together to speak in ASL) were popular choices. Students also learned the differences in what is considered active listening between hearing people and deaf people. For example, hearing students are expected to sit quietly in class while someone is speaking, while it’s common in American Deaf culture to express understanding by signing in ASL while a teacher is lecturing.

Students say they’re disappointed that there aren’t more ASL courses offered at Princeton. “Several of my

classmates are getting the linguistics certificate now because they want to focus more on ASL but there’s no ASL certificate or major,” Ormsbee said. “It would be amazing for Princeton to offer it as a language class for language credit, and possibly as a language major.”

The Humanities Council has steadily expanded funding for ASL courses to keep pace with student enthusiasm, said council director Kathleen Crown.

According to the Modern Language Association, ASL is the third-most studied language at U.S. colleges after Spanish and French. Buchholz said he hopes that increasing interest in ASL will lead to more recognition and respect for Deaf culture, language, and history, as well as to improved access to education and work opportunities for deaf people.

◆ By A.W.

IN SHORT

The number of **UNDERGRADUATE-ADMISSION APPLICANTS** dropped by 7.2 percent to 32,808 this year, but University officials say they are not concerned. “Last year we had a very big spike” of almost 14 percent, said Dean of the College Jill Dolan, who is acting dean of admission. “This year is consistent with the historical trend.”

Dolan noted that this was the first admission cycle in which applicants were required to submit a graded high school writing sample, with the writing portion of the SAT or ACT no longer required. While this should not have been an obstacle for most applicants, the change — and the “global political situation” — may have contributed to a 13.5 percent drop in international applications, she said.

The target size for the Class of 2023 is 1,296. The University will seek to enroll 10 to 12 transfer students — the same target number as a year ago, when the transfer program was reinstated.



IN MEMORIAM: Biology professor emeritus **JOHN BONNER** died Feb. 7 in Portland, Ore. He was 98. Bonner joined the faculty in

1947, serving three times as chair of the biology department. After becoming emeritus in 1990, he continued his research for more than two decades at Princeton and in Oregon.

Bonner devoted most of his life to studying cellular slime molds. He published 20 books on their behavior as well as on broader themes in evolutionary biology — the last of which, *Randomness in Evolution*, was published when he was 93. He received an honorary degree from Princeton in 2006.



IN MEMORIAM: BEN PRIMER, former associate university librarian for rare books and special collections, died Feb. 11 in Princeton

after a long illness. He worked in the University Library for 25 years, beginning in 1990 as the curator of public-policy papers and then for a decade as University archivist, expanding access to Mudd Library’s holdings and widening its collections. He served as associate university librarian from 2002 to 2014, playing a role in planning the Firestone Library renovations and invigorating the Friends of the Princeton University Library. ◆



With an average of 26.2 points in 10 Ivy League games, Bella Alarie '20 was on pace to break Princeton's single-season record.

WOMEN'S BASKETBALL

Bella the Baller

Alarie '20, the all-everything center, pushes her team in another championship run

For Bella Alarie '20, Princeton's Feb. 22 game against Cornell was a rare night of frustration. The Big Red had limited the women's basketball team's leading scorer to just eight points (less than a third of her average in Ivy League games), and in the fourth quarter, the Tigers' 21-point lead dwindled to just two in the final minute.

But when Princeton needed a basket to keep Cornell at bay, there was no question who'd get the ball. "It doesn't take a rocket scientist to know that on the last possession, get Bella a low-post touch," head coach Courtney Banghart said.

Alarie caught a pass on the right side of the foul lane with a defender at her back, calmly dribbled twice, and banked in a layup to give her team a 68-64 victory.

It was the kind of move that one might expect from a 6-foot-4-inch center. But Alarie's value to the Tigers lies in the many un-center-like things that she can do, like grabbing a rebound

and starting the fast break on her own, zipping passes to meet her cutting teammates in stride, and sprinting from sideline to sideline in Princeton's trapping zone defense.

Alarie was last year's Ivy Player of the Year, averaging 11.4 points and nine rebounds in 14 league games as Princeton won the Ivy regular-season and tournament championships. This season, with a younger team around her, she has played an even larger role, averaging a league-best 26.2 points and 11.7 rebounds in the first 10 Ivy games. That stretch included a 45-point game at Columbia and a 41-point effort at Dartmouth — the first two 40-point nights for a Princeton woman and the highest-scoring games for any Tiger basketball player since Bill Bradley '65.

◆ *By B.T.*

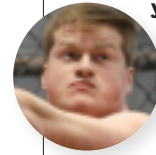
▶ **READ MORE** in our coverage of the Ivy League Basketball Tournaments at paw.princeton.edu

THE BIG THREE

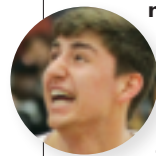
1 CHRIS SAILER, head coach of women's lacrosse, won her 400th game in Princeton's season opener against Temple Feb. 16. Sailer, now in her 33rd season with the Tigers, is the second Division I women's coach to win 400 and the first who has won all 400 at the same school. After the game, players and alumnae wore commemorative T-shirts as they congratulated Sailer on the field. "It was amazing," she told *The Trentonian*, "and I feel a lot of love right now."



2 ADAM KELLY '19 won the weight throw for the second straight year, helping Princeton men's track and field earn its fifth consecutive team title at the Ivy Heptagonal Championships Feb. 23-24. With a final throw of 22.12 meters, Kelly edged Brown's Owen Russell, who threw a personal-best 21.93 meters in the final round.



3 RYAN SCHWIEGER '21 scored a career-high 23 points in men's basketball's Feb. 22 win over Cornell and then led the Tigers again the following night, scoring 20 points and making all four of his 3-point attempts in a win against Columbia. Schwieger started both games in place of Devin Cannady '19, the Tigers' top scorer, who was attending to a personal matter, according to head coach Mitch Henderson '98. ◆





Oliver Schmickel '19, men's water polo; Mimi Asom '19, women's soccer; and Ben Issroff '20, men's soccer

Photo by Tom Grimes

YOU ARE CHAMPIONS, TOO!

Princeton athletes in football, men's and women's soccer, men's cross country, and men's water polo chalked up league championships in fall 2018 sports — and **new members of the I746 Society** champion Princeton's mission through the trusts, bequest intentions, and other long-range gifts they create.

Thank you!

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 William M. Barnhardt '50
 James P. Crutcher '52
 John F. Leinfelder '53
 Wingate Lloyd '53
 Robert S. Adelstein '55
 H. Sheldon Bott Jr. '55
 James C. Chaplin IV '55
 Thomas S. Jordan Jr. '55
 Oral O. Miller '55
 Susan Bauder Smith S56
 Douglas A. Scott '56
 K. Rey Smith II '56
 Barbara Poag Dantzler S57
 William H. Dantzler '57
 Donna Weintraub Sternberg S57
 Hans J. Sternberg '57
 Lee David Davison '58
 Iris May Haggerty S58
 Joan Larson Ryan S59
 Michael K. Cribbs '60

Shirley G.F. Cribbs S60
 Frederick W. Hilles '60
 Jane E. Osgood S60
 Paul W. Earle '61
 Ann Bender S62
 John B. Bender '62
 Allen D. Black '63
 G. Jonathan Greenwald '64
 Gabriele Strietzel Greenwald S64
 Richard A. Kalyn '64
 Douglas E. Kliever '64
 William F. Marmon Jr. '64
 Larry Soll '64
 Linda M. Becker S65
 Philip S. Becker Jr. '65
 Philip E. Coviello Jr. '65
 Peter S. Plumb '65
 Leighton Chen '66
 John E. Davenport '66
 William A. Lutz '66
 M. Suzanne Faron S68
 Stephen L. Tolles '68

Margaret Dewitt Wechsler S68
 Lawrence B. Morris III '69
 Tina Morris S69
 William J. Ramsay '69
 Mrs. William J. Ramsay S69
 O. Lee Tawes III '69
 Faye Davies S70
 Hugh M. Davies '70 *76
 James T. Nixon II '70
 Linda Hanson Olson S70
 Stephen M. Olson '70
 Richard C. Simons '70
 Randall J. Turk '72
 Gail E. Finney '73
 Sara Sill '73
 Richard W. Thaler Jr. '73
 Nancy Gaeta Ginsberg S74
 Paul R. Vanatta '74
 Charles D. Fox '75
 Jean McClung Halloran '75
 Ellen D. Harvey '76
 Oliver T. Kane S76

Tad Glenn Sperry S76
 Bruce W. Fleming '77
 Robert H. Niehaus '77
 Christopher V. Ramsey '77
 Mark L. Shearer '78
 John C. McIntire '79
 Mary Kathleen McIntire '79
 John W. Rogers Jr. '80
 William S. Mutschler '81
 Sara M. Judge '82
 Gerald A. Rizzieri '85
 J. Brian MacFarlane '86
 David L. Sherry Jr. '86
 Leah van der Voort MacFarlane '88
 Angela T. Tucci '88
 Carlos S. Romero '90
 Jonathan W. Kawaja '94
 Emma C. Morton-Bours '94
 Christopher J. Daily '95
 Mrs. Christopher J. Daily S95
 Julie Kaufmann Karen '98
 Anonymous (4)

Graduate School

Joel H. Brenner *69
 John M. Cauley Jr. *70
 Valerie Susan Cauley S*70
 Jennifer Brady *80
 Robert E. Harlow *94
 Anonymous (1)

Parents

Annapurna Ramanarayanan
 Trikur Ramanarayanan

Friends

Allen R. Sandico
 Sandra L. Schmidt

Class designations are based on primary affiliations; S/spouse; W/widow



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New members for calendar year 2018; Princeton University also gratefully acknowledges 1746 Society members who passed away in 2018. For a list of their names, see giving.princeton.edu/1746-society

Life of the Mind

CREATIVE WRITING: PHIL KLAY

The Soldier-Scholar

A ‘quintessential storyteller’
of America’s war in Iraq

In 2005, after studying poetry at Dartmouth, Phil Klay volunteered for the Marines. He signed up, he says, because “I wanted to serve my country in a time of war.” He spent 13 months in Iraq’s Anbar province as a public-affairs officer. Once he returned home, he captured the absurdities and cruelties of war in *Redeployment* (Penguin Random House), a short-story collection that won the National Book Award for fiction in 2014. The judges called it a “brutal, piercing, sometimes darkly funny collection” and called Klay a contender as “the quintessential storyteller of America’s Iraq conflict.”

Klay, who has taught creative writing at Princeton since 2016, evokes the drumbeat of boredom and bureaucratic nonsense soldiers contend with, as well as the blasts of senseless violence they face and the fierce bonds of camaraderie that provide some solace. He also describes how returning home can bring a sense of displacement.

“Coming back, there was a real disconnect between the military world and the American civilian world,” he says. “The gap between public mythology and lived experience” affects veterans’ perceptions of themselves. Coming to terms with having been to war — and what it meant — unfolded gradually for Klay. He wanted readers of *Redeployment* “to enter into and grapple with the experiences I was trying to grapple with.” Using fiction to write about the war enabled him to depict a range of perspectives, from the mortuary-affairs officer who collects remains of American and Iraqi soldiers to the soldier who must shoot a dog.

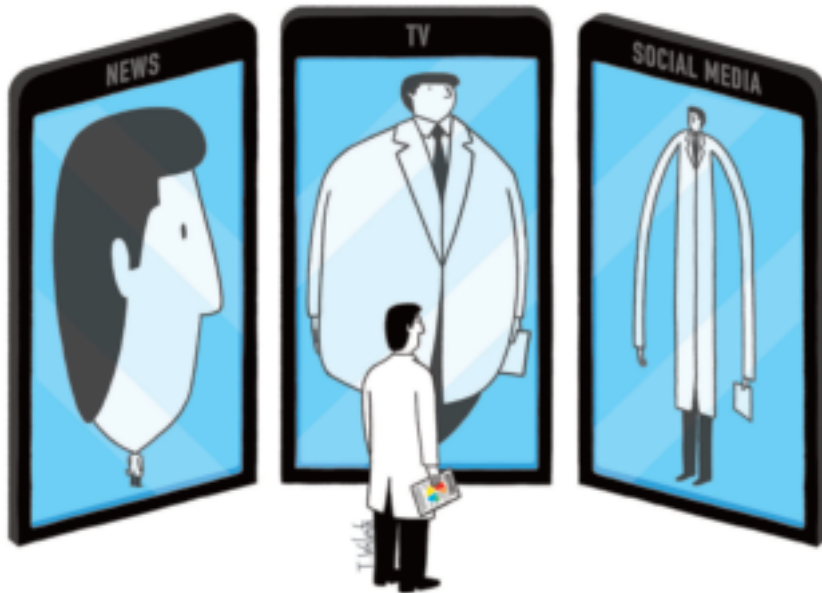
More recently, Klay has turned to nonfiction. His essays have explored the morale of American troops, the obligations of the citizen-soldier, and

society’s failure to demand serious oversight of our wars. Klay seeks to encourage “richer conversations about how we manage wars and think about veterans,” he says. “It’s a different way of engaging the same kind of questions that drive me to write fiction.”

He is working on a novel about the United States’ involvement in Colombia, which has been the largest recipient of American aid in the Western Hemisphere since the Clinton



Phil Klay, an Iraq War veteran, is a lecturer in creative writing.



SOCIOLOGY AND PUBLIC AFFAIRS

How Facts Are Distorted

New paper explains how scientific facts become skewed in the age of information

There are a few facts about immigration that Douglas Massey *78, professor of sociology and public affairs, wishes every American knew. First: For 11 years, more undocumented residents have been leaving the United States than entering it.

Second: Most undocumented immigrants cross into the country legally, with a visa, and then overstay — in fact, apprehensions at the border are at a 40-year low.

But over a four-decade career researching immigration, Massey noticed that facts like these have little bearing on the public conversation. “There’s so much disinformation and misinformation in public circles,” he says.



Massey *78

This is why Massey and Stanford political scientist Shanto Iyengar looked into how empirical findings get distorted and suppressed until the public narrative is stripped of scientific fact. They argue that scientists risk irrelevance if they do not change how they engage the public. “The National Academy of Sciences prides itself on being nonpolitical,” Massey says. But when misinformation is politicized, “we’re forced into a political reaction to counter the falsehoods.”

The pair published an article in November in the *Proceedings of the National Academy of Sciences* documenting how the rise of cable TV and the repeal of the fairness doctrine in the 1980s enabled a new generation of ideologically motivated news channels — from Fox News to MSNBC — to replace mandated public-interest news

broadcasts with ideologically motivated content. Ideological content flourished further as social media allowed misinformation to be shared with huge audiences. As an example from his own field, Massey points to a National Academies’ report on immigration, which was leaked before publication to Breitbart News, resulting in a story headlined: “\$500 Billion Immigration Tax on Working Americans.”

Other websites and interest groups, like the Center for Immigration Studies and the Heritage Foundation, ran articles with similarly alarmist headlines, but in reality, the report had unsensational and nuanced conclusions. Immigration, it said, has the biggest negative impact on wages for previous immigrants, who hold many of the same jobs. And while state and local governments do face costs to educate the children of these immigrants, children who remain in the country will contribute more in taxes than either of their parents or the average native-born worker.

Such failures to spread the word about their results are common for “naïve” researchers, says Massey. “They think if they put together a clear press release and make a few clear interviews with NPR and *The New York Times* that that’s all it takes,” he says.

In reaction to these trends, last year the National Academies of Science, Engineering, and Medicine jointly announced a project to identify and counter online misinformation. Massey hopes its outcome will give scientists institutional support to fight falsehoods in ways individual scientists cannot. “Scientists all have day jobs, whereas, say, the Center for Immigration Studies has a fully paid staff whose only job is to get negative information out about immigrants and immigration,” he says. “Frankly, we’re overmatched.” ♦ *By Bennett McIntosh ’16*

continued from page 19
administration. The novel’s action starts in Iraq and Afghanistan and moves to Colombia as Klay explores “how America projects power around the world,” he says. He has a personal connection to the subject through his

wife, who is Colombian American.

While Klay hopes his writing spurs Americans to pay more attention to the wars in which we are engaged, he also has expressed ambivalence about his efforts to capture such an overwhelming experience in words. As he wrote in

The New York Times in 2010, “I feel I do disservice to the enormity of my subject by making it a subject of conversation. And yet I know that keeping a hushed silence is a failure, too, because by not telling these stories we fail to process them.” ♦ *By Jennifer Altmann*

Illustration: Tomasz Walenta; photo: courtesy Douglas Massey *78



CIVIL AND ENVIRONMENTAL
ENGINEERING: ELIE BOU-ZEID

Going With the Flow to Make Cities More Sustainable

Growing up in Lebanon, Elie Bou-Zeid was fascinated by planes, race cars, and other things that go fast. When he started studying mechanical engineering as an undergrad, however, he realized that he could have a greater impact on the world by understanding the slower processes shaping our environment through the flow of wind and water.

“I became very sensitive to the environmental problems we had in Lebanon, and realized that fluid mechanics are more interesting and complex — and can have more real-world consequences — when applied to studying the environment than to designing cars,” he says.

Much of Bou-Zeid’s research focuses on cities, a huge part of the Earth’s ecosystem. “If we want to reduce our environmental footprint, cities are where we need to take action,” he says. “They are the most important battleground to mitigate, and adapt to, climate change.” ♦
By Michael Blanding

Elie Bou-Zeid studies the environmental impact of cities, where 55 percent of the world’s people live.

Illustrations: Agáta Nowicka (top); Mikkel Casal (at right)

Bou-Zeid’s Work: A Sampling

URBAN CANOPIES

Building design can have a dramatic effect on a city’s air quality. Subtle changes in shape can redirect air flow, affecting street-level ventilation of harmful chemicals, such as car exhaust. “If you have round roofs or sloped roofs or flat roofs, the ventilation is vastly different,” Bou-Zeid says. In a recent study of “urban canopies” using models to measure turbulence, he found that round roofs almost doubled ventilation compared to flat roofs. In another study, he found that rough exterior walls behave very differently than smooth ones, necessitating a change in the way that urban planners calculate the exchange of heat between buildings and the surrounding air.



FEELING THE HEAT

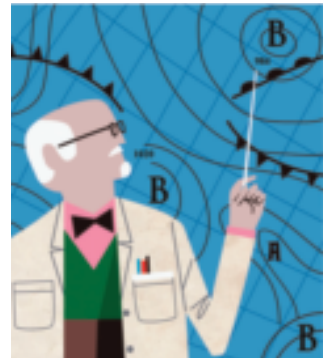
Human activity turns up a city’s temperature — creating urban “heat islands” that can be 5 to 10 degrees hotter than the surrounding region. “This can be a severe threat to citizens,” Bou-Zeid says, noting that climate change will exacerbate the impact of heat waves. He has pioneered research to more accurately calculate — and mitigate — how temperature and rainfall within cities are affected by heat islands. In one study, he has shown how

increasing vegetation-filled green roofs and reflective “cool roofs” can significantly reduce the temperature and flooding.



LOW BLOWS

When meteorologists forecast wind and weather, they mostly look at air flow in the atmosphere far above where people live. Bou-Zeid has helped to develop better models to consider wind and rain in the first half-mile above the Earth’s surface, taking into account the distinctive topography of both natural and manmade features. Such models can help to develop renewable energy by determining the ideal location for wind farms, or creating accurate, ongoing predictions of when solar panels can capture sun through cloud cover. “We are at a time when the social need for very accurate predictions of conditions for the surface are more important than ever,” Bou-Zeid says. ♦
By M.B.



WHAT WOULD HALLIBURTON DO?

The life of a Princeton adventurer

BY MARK F. BERNSTEIN '83



THIS PAGE: Colorized photo of Richard Halliburton 1921 at the Parthenon in 1926.
OPPOSITE PAGE: Halliburton, standing second from right, with the crew of the *Sea Dragon* in 1939.

LOOK FOR HIM HERE.

Begin at the house in Laguna Beach, Calif., at the end of a steep, winding driveway. Across the tops of the palm trees, it offers a breathtaking view of the Pacific Ocean on one side and Alio Canyon on the other.

Richard Halliburton 1921 called it Hangover House, a double entendre suggesting both its location high above the beach and the parties held there. A modernist masterpiece of concrete, steel, and glass, it was the inspiration for the Heller house in Ayn Rand's novel *The Fountainhead*. Halliburton built it in 1938 for \$36,000, a lot of money during the Depression, but affordable for a man who was one of the best-selling travel writers in the world. In recent years, it has been on and off the market; now it appears to be unoccupied. On a recent visit, all the shades were drawn and one large glass panel in the front window was missing.

Getting close enough to investigate is risky. A sign at the foot of the driveway, next to the rusted mailbox, warns, "No Trespassing." This presents the visitor with a choice: Heed the warning or go up? What would Richard Halliburton have done?

That's easy. Halliburton certainly would have gone up. What others called trespassing, or recklessness, or foolishness, he called adventure, and the siren of faraway places sang to him throughout his life. That is why he once hid in the Taj Mahal after closing time to swim in its reflecting pools by moonlight. Why he was arrested on Gibraltar on suspicion of being a German spy. Why he once hired an elephant to retrace Hannibal's route over the Alps and a ship to re-create Odysseus' voyage around the Mediterranean. Why he defied alligators to swim the Panama Canal.

And it is why he drowned at sea 80 years ago, on March 24, 1939, trying to sail a Chinese junk from Hong Kong to San Francisco.



Halliburton chronicled his adventures (highly embellished, some claimed) in eight books, including his most famous one, *The Royal Road to Romance*. Highbrows dismissed him as a dilettante and his audience as garden-club housewives, but he sold millions, lectured to packed houses around the country, and was billed as "the World's Most Popular Non-Fiction Writer."

He practically invented the modern travel-adventure genre.

Had he lived, Hangover House would have been his refuge, a place where he could finally stop wandering and settle down with his partner, Paul Mooney. Now his books are out of print, and his house, it seems, sits empty, almost as neglected as Halliburton's memory.

LOOK FOR HIM HERE.

Number 41 Patton-Wright Hall looks over Elm Drive in three directions. Halliburton lived there for his senior year, one of the last settled periods of his life. He was raised in Memphis, Tenn., the son of a real-estate developer. At Princeton, he majored in English, wrote for the *Princetonian*, and edited its weekly pictorial supplement. With admirable foresight, his classmates voted him "most original," but he was standoffish and a loner by temperament. His only close friends were his roommates — Irvine Hockaday, John Henry Leh, Edward Keyes, and James Sieberling — to whom he later dedicated *The Royal Road to Romance*. "I loved all four of them to death," he told his publisher. "They were the only one-and-inseparable-now-and-forever type of friends I'd ever had or ever hope to have the rest of my life, but the stamp of correct, standardized propriety which they followed and which I abominated prevented my ever winning their complete approval as a roommate."

Halliburton spent the fall semester of his junior year abroad, but not the way a student would do it today. During the summer of 1919, he went to New Orleans on the pretext of visiting some friends and, without his parents' permission, got a job as a mate on a ship bound for England. After crossing the Atlantic, he spent half a year roaming the British and French countryside, crossing the Channel in an open biplane, before returning to Princeton in February 1920.

He tried often to explain why he traveled. As a freshman, he wrote his parents, "Something keeps saying faster, faster — move!" In *Royal Road*, he distilled it into a philosophy — "try everything once" — which he followed throughout his career. "I wanted to realize my youth while I had it," he wrote, "and yield to temptation before increasing years and responsibilities robbed me of the courage."

LOOK FOR HIM HERE.

The Richard Halliburton papers fill 61 boxes in Firestone Library. They contain photographs, publishing contracts, manuscripts, and telegrams announcing innumerable departures and arrivals. The real treasures, though, are nearly 1,000 of his letters home, dashed off on hotel stationery.

Like generations of Princeton students before and since, Halliburton and his roommate Irvine Hockaday decided to see Europe after graduation. So, in the summer of 1921, the pair got jobs on a freighter and worked their way across the Atlantic. Eventually they made their way to Switzerland, where they hired a guide who helped them climb the Matterhorn with only

rudimentary equipment. “Crouching on the supreme ledge of snow we ate our breakfast,” he wrote about reaching the top, “with the wind trying to tear us to pieces for presuming to enter her private domain. Savage as they were, we forgot the aroused elements in our exultation over the humiliation of the Matterhorn.”

After that, Hockaday returned to the United States, but Halliburton ventured on. “My trip is my occupation in life,” he wrote to his parents. “I’ve ‘gone to work.’”

Over the next 18 months, he circled the world, weaving his way through Europe, the Middle East, India, and Southeast Asia, traveling as cheaply as he could and supporting himself by selling accounts of his adventures to newspapers and magazines back home. He always provided good material. Weeks before his after-hours swim at the Taj Mahal, he spent

a night atop one of the Pyramids.

“The droves of annoying tourists had gone to bed ...,” he wrote with satisfaction in his book.

“Five-thousand-year-old Kheops was mine alone.” Later, he crossed the Khyber Pass into Afghanistan, encountered pirates off Macau, and scaled Mount Fuji in January, on his 23rd birthday. “[H]ere,” he recounted, “was a chance to celebrate it by dashing to pieces the age-old tradition that Fuji could never be climbed in winter single-handed.”

These and other exploits formed Halliburton’s first book, *The Royal Road to Romance*. Published in 1925, it was a best-seller for three years and was published in 15 languages. Reviewers in the serious journals seemed unsure what to make of the young author. “Say what one may,” the *Saturday Review of Literature* concluded, “his period of travel was a period of emotional inebriation.”

His readers demanded more adventures, so Halliburton began to crank them out. In 1927, he published his second book, *The Glorious Adventure*, which included accounts of ascending Mount Olympus and attempting to follow the journey of Odysseus. He tried — and failed — to swim the Strait of Messina, where Homer placed the mythical sea monsters Scylla and Charybdis, but succeeded in matching Lord Byron’s swim across the Hellespont, whipping up publicity by having a friend

plant a story in *The New York Times* that he had drowned.

For his next book, *New Worlds to Conquer*, he retraced Cortez’s route through Mexico, bribed French prison officials to let him spend more than a week living among the convicts on Devil’s Island, and pulled off perhaps his most famous stunt, swimming the entire 51-mile length of the Panama Canal in nine days. At the end, he paid a 36-cent toll, the smallest the canal has ever charged. “SWAM CANAL NINE DAYS EASILY PLEASANTLY,” his telegram home read.

Hard as it was, Halliburton kept trying to top himself. For *The Flying Carpet* (1932), he hired a pilot to fly him in an open biplane across the Sahara, Northern Africa, the Middle East, India, and the Philippines. As his plane passed over Nepal, Halliburton stood up in the cockpit and took the first aerial photograph of Mount Everest. In 1935, for *Seven League Boots*,

he rented an elephant, which he named Miss Dalrymple, from a Paris zoo; took it by train to Italy; and rode it for a few miles into the Alps to simulate Hannibal’s invasion route.

At his peak, he was producing a new book — always a best-seller — every year and a half and delivering 50 lectures a month when he was home, often wearing a large turquoise ring he claimed had been given to him by a Tibetan monk training to become the next Buddha. Some doubted that he had actually done all that he claimed or scorned his adventures as sophomore stunts. When Halliburton sent an inscribed copy of *The Glorious Adventure* to F. Scott Fitzgerald 1917, Fitzgerald acidly wrote back, “I hope this will reach you before you disappear into Brooklyn to imagine and write another travel book — because don’t think I really believe you’ve been in all these places and done all these things like you say.”

Many critics were not much kinder. “Richard Halliburton,” *Vanity Fair* chortled, “has made a glorious racket out of Dauntless Youth ... his books are marvelously readable, transparently

bogus, extremely popular, and have made their author a millionaire.” Still, if the details weren’t always precisely accurate, wasn’t it the spirit behind them that really mattered?

Moving in celebrity circles, he counted Errol Flynn, Douglas Fairbanks Jr., and Charlie Chaplin as friends. Of medium height (5 feet 9 inches) and build (140 pounds), with thick brown hair and blue eyes, Halliburton looked like a movie star. Press agents dubbed him Daring Dick or Romantic Richard.

Though Halliburton was gay, he kept his sexual orientation a closely guarded secret. He met Mooney, a freelance journalist, in 1930 and hired him as his secretary, but biographers agree their relationship was romantic. He soon informed his parents, who did not approve, that henceforward he would not stay at their home during visits but would share an apartment nearby with Mooney.



Halliburton, right, and pilot Moye Stephens pose with their biplane, *The Flying Carpet*, in 1931.

Heterosexuality was not Halliburton's only façade. The pace of his nomadic life, lived out of sleeper cars and hotel rooms, began to wear on him. During one of his first trips he had written that he felt "doomed to seek, seek all my life, never content with what I have, despising it after I have it, seeking a higher place and greater fame every step upward." Often, it seemed, the road he traveled was not in search of romance, but of something else he could never quite name.

LOOK FOR HIM HERE.

The carillon in the Richard Halliburton Memorial Tower tolls the hours on the campus of Rhodes College in Memphis. His father, a longtime friend of the college president, donated the tower in 1962.

As much a creature of the Jazz Age as flagpole sitters and English Channel swimmers, Halliburton was nearly wiped out in the stock-market crash. His book sales also slumped as the Depression deepened and the posture of "Dauntless Youth" slipped out of fashion, making it all the more important to find new adventures to keep his audience.

He also needed money for the house he was having built for himself and Mooney in Laguna Beach. There were inevitable cost overruns, but Halliburton sounded serene. "I agree with [Dad]," he wrote to his mother, "that once I'm on my mountain-top house I'll be able to adjust my life onto a calmer plane and grow in spirit rather than in mileage. If I can't get near the eternal in that house, then it's not in me."

Halliburton conceived a plan to sail a Chinese junk from Hong Kong to San Francisco, arriving for the 1939 Golden Gate International Exposition. In addition to the book he planned to write about the voyage across the Pacific, he ginned up publicity (and raised money) by selling subscriptions to a newsletter so his fans could follow his preparations.

The project was plagued by delays and difficulties, not the least of which was the Japanese invasion of Manchuria. "If any one of my readers wishes to be driven rapidly and violently insane," he wrote in one of his newsletters, "let me make a suggestion: Try building a Chinese junk in a Chinese shipyard during a war with Japan." General Motors backed out of a sponsorship deal, unwilling to have its name associated with something called a "junk."

The diesel- and sail-powered ship was 75 feet long, with an exaggerated poop deck that made it unstable in rough seas. Halliburton was more obsessed with the decoration; he had it painted with fire-breathing dragons on both sides and the ship's name, *Sea Dragon*, on the stern in 3-foot gilded Chinese characters.

Setting off from Hong Kong on Feb. 5, the *Sea Dragon* was forced to turn back after only five days at sea because of bad weather, illness, and leaks in the hull. Halliburton tried to have the leaks patched and the keel extended to increase stability. In his last letter, he wrote to his parents, "So good bye again. ... Think of it as wonderful sport, and not as something hazardous and foolish. I embrace you all."

With a crew of 15, including Halliburton and Mooney, the *Sea Dragon* sailed out of Hong Kong for the second time on March 3. Three weeks at sea, they encountered a typhoon, with tremendous winds and 50-foot waves. On the night of March 23, 1939, about 2,400 miles west of Midway Island, the *Sea Dragon* sent a final radio message, which bore the captain's

name but sounds like Halliburton: "Southerly gales. Rain squalls. Lee rail under water. Hardtack. Bully beef. Wet bunks. Having wonderful time. Wish you were here instead of me."

When other ships in the vicinity could not contact the *Sea Dragon* the following day, they sounded an alarm. Perhaps suspecting that Halliburton's disappearance was another publicity stunt, the Coast Guard station in Honolulu did not send a rescue ship. More than a month later, the Navy finally spent six days combing an area of the Pacific roughly the size of France before calling off the search.

A year after their son's disappearance, Halliburton's parents published his correspondence, excising any mention of Mooney and other men with whom their son might have been romantically involved. At Forest Hill Cemetery, a few miles from Rhodes College and Halliburton's boyhood home, the family plot is easy to find, marked by four Doric columns. Beside the headstones of his parents and younger brother, a cenotaph — the marker placed on an empty grave — reads:

RICHARD HALLIBURTON

1900-1939

LOST AT SEA

WHERE DOES AN ODYSSEY ULTIMATELY TAKE US, IF NOT BACK HOME?

Return, then, to where we started, to Hangover House, negotiating the hairpin turns down Ceanothus Drive and across the Pacific Coast Highway to the beach. Halliburton's white elephant broods back up in the hills, but go down to the shoreline, shed shoes and socks, and wade into the water.

Six years after his disappearance, a 30-foot piece of a Chinese junk washed ashore near San Diego. With that possible exception, no trace of Halliburton's ship or its crew has ever been found. Halliburton disappeared 10 months after Amelia Earhart and in the same general quarter of the Pacific. There were reported Earhart sightings for years after her disappearance, but Halliburton's name soon slipped from the headlines, though he has been the subject of at least five biographies.

Hardly anyone reads Richard Halliburton anymore, and to modern tastes his books seem breathless and treacly, confirming the literati's reviews in his own time. Ernest Hemingway, who knew something about travel writing, once dismissed him as the "deceased *Ladies Home Journal* adventurer." Generations of fans, however, including Walter Cronkite, Lenny Bruce, Vince Lombardi, and R.W. Apple '57, adored him. As a 7-year-old, Susan Sontag, a literati's literati, read *Richard Halliburton's Complete Book of Marvels* and was inspired to become a writer. "Halliburton's books," she recalled, "informed me that the world contained many wonderful things."

Maybe the place to look for him, then, is here, knee-deep in the Pacific surf, peering at the sunlight glinting off the blue waves. After all these years, what are we really looking for? Marvels? Glorious adventure? New worlds to conquer? A royal road to romance?

They might all be out there, just over the horizon. Wouldn't it be thrilling to find out? ♦

Mark F. Bernstein '83 is PAW's senior writer.

A WHOLE NEW BALL GAME

MIT PROFESSOR PEKO HOSOI '92
EXPLORES THE UNDERLYING
COMPLEXITY OF SPORTS

BY BRETT TOMLINSON

A baseball is not that complicated, until you consider what's inside: a rubber-encased cork "pill," coated in adhesive, tightly wrapped by hundreds of yards of yarn, and snugly outfitted with two interlocking panels of leather, stitched together by hand.

Alan Nathan '75, a leading baseball physicist and professor emeritus at the University of Illinois, has visited the Rawlings factory in Costa Rica that supplies Major League Baseball's official ball. "One of the things that sort of amazed me is how uniform the balls actually are," he says. "The various properties of the ball that you can measure really don't change very much from one ball to another."

Last year, Nathan chaired a committee convened by Major League Baseball's commissioner to explore why the rate of home runs had been steadily increasing over a stretch of two and a half seasons, starting after the 2015 All-Star Game. In 2017, 4.8 percent of batted balls cleared the fence — an all-time high that was 35 percent higher than the home-run rate in the first half of the 2015 season. The committee ruled out two popular explanations: changes to the springiness of the ball, and the effects of hitters attempting to launch the ball at a higher angle. They then turned their attention to the ball's flight.

Enter MIT mechanical engineering professor Peko Hosoi '92, a physicist and fluid-dynamics specialist who has found a new niche in recent years as one of the country's most prominent researchers of sports science. (It's pronounced PECK-oh; her given name is Anette, but she's been Peko since childhood, when her grandmother said she looked like the smiling girl on the wrapper of a popular Japanese candy of the same name.)

Hosoi, one of 10 members of the committee, studied the trajectories of balls hit in major-league games, extracting each one's drag coefficient, a measure of the resistance that an object encounters in flight. She identified a small but significant decrease in drag that was enough to explain the change in the rate of home runs.

A home run, Hosoi explains, is a "non-linear event." Either the ball goes over the fence, or it doesn't. A long home run isn't any more of a home run than one that clears the wall by half an inch.

Lillie Paquette/MIT





MIT professor Peko Hosoi '92

“You have to experience what’s And I experienced going That told me that my center of mass

“Because you have this sharp cutoff, and because a lot of the balls are close to home runs, just changing [the distance traveled] by a little sends a lot more balls over the fence,” Hosoi says.

What changed in the leather-covered, tightly wound ball of yarn? The cause is apparently very subtle because the committee could not identify it, even after analyzing game-used balls in detail through a series of lab experiments.

“Our conclusion — that it’s the carry of the ball that has changed — was a rather satisfying conclusion,” Nathan says. “It was, I have to say, unsatisfying not to understand exactly why there was a change in the aerodynamic properties of the ball. But a lot of physics is this way: You figure out something, and then it raises more questions. That’s sort of what keeps you going.”

A bicycle is not that complicated,

until you take it on a chairlift to the top of a mountain, strap on a helmet, put your feet on the pedals, and aim the front tire downhill.

Hosoi started mountain biking as a high-school student in Corvallis, Ore., and when she and her husband first visited Highland Mountain Bike Park in New Hampshire, she gained a new appreciation for how important the right bike could be.

Zippering down the mountainside jump lines was exhilarating, but her cross-country bike wasn’t up to the challenge. “I think I went over the handlebars eight times that day,” Hosoi says with a laugh, “and even doing that, I thought, this is the most fun that a human being could possibly have.”

At the time, Hosoi was making her mark at MIT in fluid dynamics and robotics. But after riding the trails at Highland, all she could think about were mountain bikes.

“MIT’s motto is *mens et manus*,” she says. “*Mens* is mind, and *manus* is hands. ... The hands part is the experience: You have to experience what’s going on. And I experienced going over the handlebars multiple times. That told me that my center of mass was in the wrong place.”

The downhill mountain bikes on the market had a range of divergent components, with variations in everything from the positioning of the shocks to the design of the brakes. Hosoi set to work figuring out the mechanics of the different designs. And since she was teaching an introductory mechanics course, she got her students involved as well. “I think that semester, every exam question was a bicycle question,” she jokes. “And by the end of the semester, I bought a bike.” (Though her choice was informed by analysis, it was ultimately made based on feel — she purchased the same model she’d been renting.)

Bicycles proved to be an intuitive example for the students to explore, which made Hosoi wonder if sports could provide other useful engineering problems, hidden in plain sight. She began asking her colleagues and discovered that “half the

faculty are these closet sports fanatics who are doing these things in their garages on the weekends but not bringing them to the students.”

Determined to find a way to bring her love of sports to the classroom, Hosoi co-founded what’s now called the MIT Sports Lab. She also connected with Christina Chase, a former competitive cyclist and MIT’s first entrepreneur-in-residence, to develop a course, Sports Technology: Engineering and Innovation, in which teams of students work with sports professionals to research real-world questions. In the fall semester, projects included developing an app for the U.S. Olympic Committee to give long jumpers real-time feedback on key metrics such as launch angle and launch velocity; modeling optimal dribbling dynamics for the Spanish soccer club F.C. Barcelona; and testing how different ski-goggle lenses handle “flat-light” conditions, when it’s difficult to see variations in snowy terrain, for the goggle manufacturer Shred.

The course brings together students from engineering, business, architecture, and the sciences. They tend to be comfortable with the technical aspects of their work, Hosoi says, but integrating a series of technical findings into a final product presents more challenges. At their final presentations last December, the teams presented their projects to their “clients” via videoconference, with a combination of video and PowerPoint, distilling three months of research into about 15 minutes.

Relatively few of the students will go on to work in sports, but Chase says the questions students are studying have a wider reach. The “quantified athlete” may lead to the “quantified self,” bringing improvements in fitness and health care, and innovations in sports venues could have applications in urban planning or architecture. “There are a variety of areas where sports is a really fun starting place for a longer-tail, global impact,” Chase says.

A running shoe is not that complicated,

until you take a closer look at the racks of your local running shop and start reading the tags. What exactly is a dual-density midsole? Or a unidirectional carbon-fiber plate? The race to be lighter and bouncier, while maintaining stability, is big business: One Nike model, the Zoom Vaporfly 4%, claims to give marathoners a 4 percent efficiency edge over other top racing shoes. A pair retails for \$250, but according to *The New York Times*, the shoes fetch \$400 and more on eBay.

Adidas, a partner for one research project in Hosoi’s lab, produces a shoe with a 3D-printed sole. “They can design every strut in that mesostructure to do whatever they want it to do,” Hosoi says.

going on.
over the handlebars multiple times.
was in the wrong place.” PEKO HOSOI '92



Hosoi, an avid downhill mountain biker, had her MIT students study the mechanics of different designs of mountain bikes in her introductory mechanics course.

But what do the designers want the sole to do? How do you find the optimal design that, for example, minimizes the energy that a runner uses with each stride? There are remarkable computer models from the field of biomechanics that simulate muscles, tendons, and bones, but those models are complex and slow, Hosoi says.

To create a simpler, faster model of a runner's leg, Hosoi's lab is looking to computer models developed for robotics. They may not be as perfect as the biomechanical options, but if you can get reasonably close, she says, you can search different iterations more efficiently. "Then the optimization problem becomes feasible," she adds, "and you can get to a design that maybe shoe designers have never thought of before."

Robotics is familiar territory for Hosoi, but her path at Princeton began not in engineering but in physics, which introduced her to fluid dynamics. She remembers sitting in a Fine Library carrel, diligently working through the equations in L.D. Landau and E.M. Lifshitz's *Fluid Mechanics* — the type of textbook that will say something like "it can easily be shown ..." and then launch into eight pages of algebraic equations.

"It wasn't that there was an assignment or that somebody was telling me I had to do this," Hosoi says. "I was going to understand everything in that book. ... When students go from

undergrad to grad, a lot of them go through that switch, where you develop some additional agency, and that was what flipped the switch for me."

The experience, paired with a helpful suggestion from her thesis adviser, Raymond Goldstein, propelled Hosoi to Ph.D. studies at the University of Chicago, followed by her first faculty appointment, at Harvey Mudd College in California, and a year later, a post at MIT.

Her specialty within fluid dynamics was thin-film flows, the behavior of liquids on a surface. But as she began to meet with MIT graduate students, she realized nearly everyone wanted to build robots. "And so I thought, 'If I'm going to survive here, I'm going to have to learn how to build a robot,'" she says.

Leveraging her knowledge of thin films, she worked with a student to develop a robotic snail — "nature's all-terrain vehicle" — using a substance similar to hair gel to replicate the slime that snails use to crawl across a surface. More bio-inspired robotics followed, with projects that emulated the pumping mechanism of plants and the digging skills of a razor clam.

Seeing what her students could achieve in robotics made Hosoi "recalibrate" what she believed was possible. "If I had not come to MIT, my trajectory would have been completely different," she says.

A glove is not that complicated, until you spread your fingers wide, reach out, and try to grasp a spiraling football firmly enough to hold on as your body crashes against the shoulder of a charging defender.

When *The New York Times* wrote about the tacky silicone gloves that have become a staple for NFL wide receivers, reporter David Waldstein posed a question to Hosoi: How much of a difference do those gloves make, versus catching the ball the old-fashioned way, with your bare hands? Sarah Fay, a Ph.D. student who works with the MIT Sports Lab, studied the respective coefficients of friction for hand and glove and found a significant difference: In dry conditions, the gloves are 20 percent stickier than a human hand. In the *Times* story, Hosoi explained that the soft, deformable silicone adheres to variations on the surface of the ball. “Every time you get more deformable, you get a better adhesion,” she told Waldstein.

Sports fans seem to have a growing appetite for the science behind the games they watch, and pro teams now compete for talent in their analytics departments in the same way that they compete for free-agent players. There is no shortage of questions for Hosoi and her colleagues to explore. But Hosoi’s time is a more finite resource, especially since she became an associate dean of engineering in 2017. Working in administration, she says, allows her to see the broader world of innovation at MIT, outside of mechanical engineering, and that has been interesting and rewarding.

At the same time, the MIT Sports Lab has blossomed. Hosoi continues to team up with Chase on the sports course twice a year, which makes for a schedule that is “difficult, but self-inflicted.” As potential partners line up to be part of the next batch of student projects, Hosoi’s network of front-office and corporate contacts

has grown rapidly. Maintaining those relationships takes time.

“Lots of people get to be a dean or a provost,” she says. “But there are not a lot of people who get to open up this box that we’ve opened up, where it’s like, ‘Oh, I think I want to do hockey this year; let’s call the Islanders and see if we can spend a day with them.’ Or, ‘Today I’m interested in football; let’s call the Steelers and see what they’ve got.’ ... So do I give that up? I don’t know.”

One thing she does know: As the data collected in the sports world grows exponentially, so does the demand for smart people who can make sense of it. When the Oakland A’s adopted a more analytic approach to baseball in the early 2000s (popularized in part by Michael Lewis ’82’s best-seller *Moneyball*), they were relying on undervalued statistics — on-base percentage and slugging percentage — that now seem quaint. Today, through baseball’s Statcast system, every movement on the field is measured, from the spin-rate of a pitcher’s slider to the exit velocity of the ball when it leaves the bat. The data set in the MLB home-run study included more than 300,000 batted balls. Other pro leagues have similar in-stadium trackers to record movement during games, and wearable tech has simplified data collection during training, from youth sports to the pros.

“*Moneyball* was amazing,” Hosoi says, “but the size of the data sets we have now are orders of magnitude more than that. And so the question is, when you have these gigantic data sets, how do you pull out the insights that are actually going to be useful to the coaches and the athletes?”

Translating the numbers into something actionable requires a higher level of understanding — mathematics, computer science, machine learning. “To date it’s an underutilized resource,” Hosoi says, “because people have not extracted the real meat of the information that’s in that data.” ♦

Brett Tomlinson is PAW’s sports and digital editor.

DATA-BASED COACHING

When the Princeton rowing teams traveled to Tampa, Fla., in January, they brought along a high-tech training aid. The system, manufactured by Peach Innovations, is rigged on an eight-person shell and measures the watts of power generated by each oar 100 times per second while also tracking the velocity and acceleration of the hull.



The data collected from each oarlock is then plotted in a series of overlapping bell curves — one for each stroke — to show how much power a rower is generating and how he’s generating that power. “It’s a great objective visual,” says Greg Hughes ’96, head coach of the heavyweight men. Coaches can review the data with their athletes, suggest refinements, and then revisit a rower’s data a few weeks later to see if their changes have made a measurable difference.

Hughes says there are subtle differences in each rower’s technique, and there’s no perfect stroke. “This is like your signature,” he tells his rowers when they review the data. “My goal isn’t to change the way that you sign your name. All I’m trying to do is clean up your penmanship a little bit.”

Those “signatures” also allow coaches to observe details they might not otherwise notice. For example, if a rower has a steep power curve that peaks early, a coach might try moving her to the stroke seat, where that style of rowing could have the greatest effect.

SPORTS SCIENCE AT THE PRINCETON BOATHOUSE

The Princeton teams were early adopters of the Peach system and remain on the cutting edge of rowing biomechanics, but their data-driven approach is just one of many ways to assess a rower’s development. “We don’t use this as a primary tool for choosing an athlete or selecting a boat,” Hughes says. “We use it as a tool to understand how they’re progressing and as a way to assist them in making changes.” ♦ *By B.T.*

PRINCETONIANS



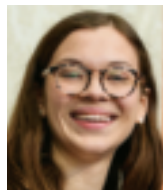
ON THE RAILS: Bruce Greenberg '65's childhood fascination with Lionel trains was reignited when he was a graduate student, but he was frustrated by the rarity of old catalogs that chart the taxonomy of each distinct set. With the help of a small print shop, Greenberg began reproducing original Lionel catalogs for \$2 each, which sold well among collectors. In 1975, Greenberg left his job as a university administrator to become a full-time publisher of toy-train books. He went on to establish toy-train expos, and still produces in-depth guides. ♦

READ MORE about Greenberg and see his trains in action, at paw.princeton.edu/tiger-of-the-week.

Jeffrey MacMillan p'14

Top Honors

PYNE HONOR PRIZES, the top award for undergraduates, went to **ANNABEL BARRY '19**, English with certificates in European cultural studies, humanistic studies, and theater. A 2017 journey along the



border between Ireland and Northern Ireland inspired Barry's junior independent paper on postcolonial critiques of cartography in contemporary Irish literature.



SYDNEY JORDAN '19, philosophy with a certificate in Near Eastern studies. Jordan's senior thesis

investigates the complications of balancing diverse views on corporate social responsibility with freedom of speech. She has played on the varsity women's basketball team for four years and plans to attend law school.

THE PORTER OGDEN JACOBUS FELLOWSHIPS, which fund a graduate student's final year, were awarded to four students: **MÁTÉ BEZDEK**, inorganic chemistry. His work focuses on the development of environmentally friendly fuels using ammonia. **SARAH CARSON**, history. She studies the history of state meteorology in India and hopes to shed light on imperial governance and scientific predictions. **DANIEL FLORYAN**, mechanical and aerospace engineering. His dissertation uses computational tools to explain how fish swim most effectively, knowledge that could influence the design of swimming robots. **MATTHEW RITGER**, English. He studies the role of literature in the formation of correctional practices in the age of authors such as Shakespeare, Milton, and Thomas More.

Alumni Awards

THE CLASS OF 1993 received the **Class of 1926 Trophy** for raising a record \$11,661,993 for its 25th reunion. The **Harold H. Helm Award for sustained service to Annual Giving** went to **BARBARA MCELROY '81** of Birmingham, Ala. ♦

“Princeton handed each of us a shining, bright orange torch ... to light the path to a better world.”

— Woodrow Wilson Award recipient Mellody Hobson '91



ALUMNI DAY

A ‘BRIGHT ORANGE TORCH’

Alumni Day speakers emphasize moving past division through empathy and education

At Alumni Day last month, Carol Quillen '91, president of Davidson College in North Carolina, presented a path forward to remedy the nation's polarization: Listen for the story behind each opinion. In her lecture as the James Madison Medal recipient, Quillen, a historian, began with a lesson from her studies at Princeton on Renaissance humanists. Writings by Machiavelli and his peers revealed something profound to her: Scholars in the 15th century readily regarded classical ancient thinkers as at once heretical and worthy of imitation. The ability to hold otherness alongside appreciation, she said, has been lost in recent history.

“It is rare to find a cultural phenomenon where people are able to look at a different culture and say, ‘They are irreducibly different, I will never be like them, and yet I wish to imitate them in certain ways,’” Quillen said. “See the difference between the notion of ‘difference as inferior’ and ‘difference as potentially exemplary’? That’s what captured me about the humanists.”

This is why, she said, today’s division

and polarization can be overcome by not just informed storytelling but informed listening. As an example, she referred to recent incidents in which students disrupted or shouted down controversial speakers visiting college campuses.

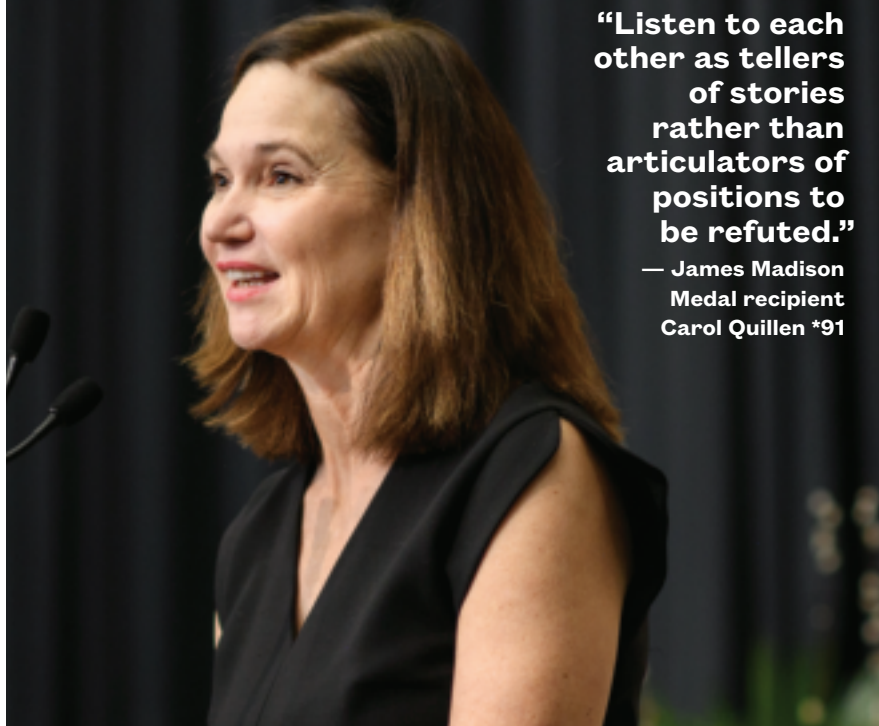
“One of the stories we tell about these students — without actually talking to them — is that they’re too fragile. ... They’re snowflakes.” But, she explained, the students tell another story: that their generation grew up amid two relatively recent phenomena, school shootings and the internet. “From their perspective, somebody ... posts hate speech on the internet and the next day somebody’s dead.” She concluded with a prescriptive: “Listen to each other as tellers of stories rather than articulators of positions to be refuted.”

Woodrow Wilson Award winner Mellody Hobson '91 began her lecture by wondering what the honor’s namesake might think of her, “a woman of color, accepting this award.” To find out, she wrote to A. Scott Berg '71, a biographer of the 28th president. “While Wilson believed in providing opportunity to

Photos: Sameer A. Khan

“Listen to each other as tellers of stories rather than articulators of positions to be refuted.”

— James Madison Medal recipient Carol Quillen '91



students and met them in the Butler apartments, where graduate students lived, to “explain his point of view and listen to ours” — a gesture Quillen said still influences her life and the way she understands her own obligation to students at Davidson.

Hobson, the youngest of six children raised by a single mother, also recalled Princetonians who changed her life, including Ariel Investments CEO John Rogers Jr. '80, who first interviewed Hobson when she was a high school student and later hired and mentored her; and former Sen. Bill Bradley '65, who taught Hobson that service was “not to be considered a burden, but an obligation.”

In the audience was her husband, filmmaker George Lucas, who on his first visit to Reunions had told her: “It’s not a school, it’s a cult.” Hobson let that sink in: “The man who invented *Star Wars* called *us* a cult.”

In addition to the alumni and student award winners, attendees at the luncheon honored Robert Durkee '69, University vice president and secretary, with a locomotive. President Eisgruber '83 noted that Durkee, who started working at Princeton in 1972, has had an office in Nassau Hall “longer than anyone else in Princeton history.” ♦ By C.C. and M.M.

all, Scott admitted that he was in no rush,” she said. “Wilson believed that every social movement had its time, and worried that rapid change would create more problems than it solved. Obviously, I do not share Wilson’s patience.”

Hobson, the president of Ariel Investments and an advocate for financial literacy, discussed the importance of service. “Princeton handed each of us a shining, bright orange torch ... to light the path to a better world,” she said. “And not only does that bright orange torch illuminate the path, it also provides warmth to the holder.” She continued the metaphor, adding that torches can also be used to light other torches. “How many torches have you lit? [That] should be one of the measures of achievement.”

The mild February day drew approximately 1,000 alumni and guests who attended lectures about Brexit, the misleading use of numbers and statistics, and chemistry, in addition to the two talks. Alumni also gathered for the Service of Remembrance and for an intergenerational panel of alumnae who reflected upon 50 years of coeducation.

At the alumni lunch in Jadwin Gym, Quillen elaborated on her morning theme of empathy — “to learn how to listen with a desire to understand rather than to simply refute.” She recalled how she was active in the campaign by Princeton

students at the time to have the University divest from companies doing business in apartheid South Africa, saying she and other students were arrested when they blockaded Nassau Hall.

The late Nicholas Katzenbach '43, a former attorney general and a key figure in the U.S. civil-rights movement, was then a Princeton trustee and did not agree that divestment would help end apartheid. But he reached out to the



Colin Yost '19 ignites a fiery column in Rachel Macaulay '19's hands in an afternoon program featuring chemistry demonstrations.

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 1941



Frederick Irving Walsh Jr. '41

Irv died Nov. 8, 2016. He was born in Plainfield, N.J., and attended Loomis, where he was on the student council.

At Princeton he was an officer of Charter Club, president of the Mechanical Engineering Society, and a cheerleader.

Irv was assigned to the Naval Gun Factory in Washington, D.C., under Lt. Cmdr. Arleigh Burke. He served on the U.S.S. *Maryland*, saw action in the invasion of the Philippines and Okinawa, and retired as a lieutenant commander.

Irv was vice president and director of Miehle-Goss-Dexter, a manufacturer of printing machinery; president of the Dexter Division; and president of a subsidiary of Western Gear Corp. He was also director of San Pedro Peninsula Hospital, president of Rolling Hills Board of Realtors, and president of Jack Kramer Tennis Club. Irv was a member of the Rolling Hills Covenant Church. He and his wife, Helen, regularly returned for Reunions, and he served as secretary of the Class of 1941.

At the time of his death Irv was predeceased by his father, F. Irving Walsh h1911, and his brother Gordon H. Walsh '47. He was survived by his wife, Helen (she died Aug. 3, 2017); nephews Gordon (Skip) Walsh '78 and Malcolm Walsh '80; and niece Wendy Walsh k'47.

THE CLASS OF 1949



Daniel P. Filson '49

Dan died July 12, 2018, in Palm Beach, Fla., just four months after celebrating his 90th birthday.

He came to Princeton from James Madison High School in Brooklyn, roomed with Dave Sweney, and majored in economics. He was a member of Elm Club, St. Paul's Society, the Pre-Law Society, and the German Club. After a tour of duty in Korea, Dan went to work for the W.T. Grant Co. in several stores in New York and New Jersey. At the time of our 10th reunion, he reported that he was living in Livingston, N.J., with his wife and they had two children.

By 1974 Dan had been transferred to W.T.

Grant's Chicago office, where he was the regional merchandise manager. Although he was living in Barrington, Ill., at that time, by the mid-1990s he had moved back to New Jersey and was the president and owner of Shelby & Danby, distributors. Other than knowing he had a second residence in West Palm Beach, we have very little information about his life during those years.

Dan is survived by his wife, Betty, and four children Susan, Stephen, Tracy, and Patricia. We offer our sympathy and condolences to Betty and the entire family.

THE CLASS OF 1952



Robert S. Krayner '52

Bob died April 17, 2018, in Vancouver, Wash.

After graduation, he went to the Navy and then to work with Procter & Gamble in Cleveland, Ohio, which was followed by a position at Allied Chemical in Richmond, Va. His career ended in New Jersey — after he worked with International Paper in Tuxedo, N.Y., he worked at Stevens Institute in Hoboken, N.J.

Bob and his wife, Seymour, enjoyed the theater and bowling. They could both be seen as actors on the local stage and knocking the pins at the local alley.

They retired in the early 2000s in Foley, Ala., and soon grew restless and began an RV adventure that took them around the country several times. Their journey ended in Beaverton, Ore., where Seymour passed in 2009.

Bob also was predeceased by his sons David and Charles. He is survived by daughter Susan; sons James and William; grandchildren Sara, Ruth, Rhiannon, Michelle, Amy, Kyle, Meghan, Lewis, Corbin, Thomas, and Benjamin; and eight great-grandchildren.

THE CLASS OF 1954

Edward H. Breisacher '54

Ed died Dec. 3, 2018, after a long battle with multiple myeloma and dementia.

He prepared at Penn Charter School, where he was active in baseball, publications, and glee club. At Princeton he majored in English and wrote his senior thesis on Lord Byron, was a



member of Cannon Club, and participated in Roy Heath's Advisee Project. He developed a lifelong passion for competitive swimming starting in his

freshman year and eventually

captained the team in his senior year.

After military service and periods of teaching and study in Germany, he traveled in the Middle East, edited college textbooks, and earned an MBA. Then he co-founded and directed the Darwin Press, which specialized in scholarly works on the Middle East and science. Darwin also published *Princeton Retrospectives: Twenty-Fifth-Year Reflections on a College Education*, Roy Heath's report of interviews of members of the Advisee Project and others from the Class of 1954.

Ed was a member of the local club of the U.S. Masters Swimming organization, the Princeton Area Masters workout group, and treasurer of Friends of Princeton Swimming and Diving, and he played a major role in developing support for building the DeNunzio Pool. He remained a competitive swimmer until his last years, achieving All-American status in 2007 in the 50-meter freestyle with the best time in his age group, and top-10 ratings 21 times. He also enjoyed singing in Gilbert and Sullivan productions and the church choir, and breeding golden retrievers.

Ed is survived by his son, Eric.

THE CLASS OF 1955



Henry A.G. King '55

Henry was born Oct. 3, 1933, in Princeton and died Oct. 27, 2018, in East Windsor, N.J. He was a longtime resident of Princeton.

At Princeton Henry majored in English, joined Colonial, and belonged to the Yacht Club. He roomed with G. Wagner, T. Gortee, and S. Norman.

After three years in the Air Force, he stopped in Aspen for some skiing and met Yolanda Swee from Hurley, Wis. They married in July 1959.

Henry's 33-year career with Citibank began in New York City, after which he lived in London for five years and then became branch manager in Dublin, where he and Yolanda began riding horses and hunting with the hounds. Three years later Henry became branch manager of the Milan office, which he and Yolanda loved because of its proximity to skiing in the Alps. This began an 11-year stretch with time spent there high-mountain ski-touring with guides, including skiing parts of the Haute Route using randoëe skis, and sleeping in mountain huts.

Henry then returned to New York, where he joined the petroleum department, financing the Alaskan pipeline.

He retired from Citibank in 1992, consulted for Christie's, then retired "for good" in 1995.

Most summer vacations were spent in Greensboro, Vt., with lots of tennis, golf, and friendships. During his five-year presidency of Mountain View Country Club in Vermont, he spearheaded the building of a new clubhouse.

Henry was on the board of the Royal Oak Foundation, the Friends of the Princeton University Art Museum, and the Copley Hospital Foundation in Morrisville, Vt. He was a longtime member of the Pretty Brook Tennis Club, Springdale Golf Club, the Old Guard of Princeton, and the Nassau Club.

He is survived by Yolanda and two sons, Christopher and David '89.



Houston E. Landis III '55

Judge was born Nov. 15, 1932, in Elizabeth, N.J. He died Oct. 26, 2018, at age 85.

He came to us from Pingry. At Princeton, Judge majored in aeronautical engineering, joined Cloister, and was active in the Student Christian Association. He roomed in 1879 Hall with L. Cobb, D. Weeder, G. Denniston, W. White, P. Elliman, F. Kloman, and A. McKinney.

Judge had an Air Force ROTC scholarship at Princeton; he served honorably for three years in the Air Force in Germany and continued to serve in the Air Force Reserve. After 20 years of service to his country, he retired as a lieutenant colonel. He had a successful career as a Pan Am pilot, traveling around the world to many exotic places.

Judge and his wife, Jenifer — owners of Pennington Hardware from 1977 to 1995, a well-known landmark in the town center — were fixtures of the Pennington, N.J., community. In addition to providing advice to homeowners and contractors about their hardware needs, Judge supported numerous programs and activities serving the youth of Hopewell Valley. Pennington Hardware sponsored soccer and baseball teams for many years. One of his many joys was playing Santa Claus during the annual Pennington Holiday Walk.

Judge is survived by his wife of 58 years, Jenifer; son Houston and his wife, Maggie, and their children Christopher, Devon, and Jessica; son Michael; and daughter Teri and her husband, Brian Kennedy.

THE CLASS OF 1957



Henry M. Bruen Jr. '57

Harry went to be with the Lord Oct. 31, 2018. He was a graduate of Blair Academy, Princeton University, and Princeton Theological Seminary.

While at Princeton, he majored in philosophy, joined Cloister, and was active in WPRB and the Baptist Students of Princeton. Harry became a Presbyterian minister and began his ministry in Sitka, Alaska. He then

went on to become a supervisor in clinical pastoral education until his retirement. Harry enjoyed building and flying airplanes, and belonged to the Experimental Aircraft Association. He was a master craftsman and especially enjoyed woodworking. Harry was a loving husband, father, grandfather, uncle, and friend who will be missed by all who knew him.

Harry is survived by his wife of 40 years, Charlotte Mobley Bruen; children Rachel, Harry III, Brett, and Catherine; and three grandchildren.



Joel L. Duberstein '57

Joel died Nov. 6, 2018, after a long battle with cancer. He was born in Brooklyn and raised in Bayonne, N.J. Joel lived in Short Hills before moving recently to

West Orange.

At Princeton he studied biology and ate at Cannon. He earned a medical degree from Columbia Medical School and then served in the Army as a major in Vietnam. He was a distinguished physician, specializing in pulmonary and critical care. He practiced primarily at Overlook Hospital in Summit, N.J., where he was the chief of the ICU.

He was an avid tennis player and enjoyed traveling, discussing politics, and most of all, his family.

Joel is survived by his wife of 53 years, Judith; children Laura '87 and Amy; and four grandchildren.



Charles M. Edwards III '57

Charlie died Nov. 15, 2018, at his home in Marietta, Ga., after a nine-year battle with Alzheimer's disease. He was with his wife of 52 years, Janice, when he took his last breath.

Charlie majored in economics and graduated *cum laude*. His roommate all four years was Richard Smith, a Summit (N.J.) High School friend. He worked at and managed the University Store for two years while at Princeton. He chose Navy ROTC for his first two years, but changed to the Marines ROTC.

He was involved in Princeton's Annual Giving, and the generosity of alumni never ceased to amaze him. He worked with his friends and classmates Dean Groel, John Nevin, and John Wert. Charlie also spent several years working with the Princeton Class of 1957 Caring Committee.

Charlie earned an MBA at New York University while working for Shearson Hammill. He became a partner there at age 31 and retired in 1985 at 50 as a senior vice president.

Charlie remained active as a guest lecturer for the American Management Association.

He invested in the restaurant industry as well as in real estate, property management, real-estate settlement, and the real-estate services industry.

Charlie was a faithful servant and volunteer at Summit United Methodist Church in Summit, N.J. He taught Sunday School and eventually was chairman of the board of trustees. He also served on the Summit planning board, as president and treasurer of the scholarship fund for inner-city youth through the Archdiocese of Newark, and as a trustee of Summit Family Service Association.

Charlie is survived by his wife, Janice; their two daughters, Melanie and Meghan; three grandchildren, Ellie, Ethan, and Zoey; and his brother, Richard F. Edwards.



William R. Feist '57

William died Oct. 7, 2018, in Point Pleasant, N.J., from a stroke. He was 84.

At Princeton he majored in economics, was manager of crew, and ate at Cloister. He roomed with Bill Goldstein, Randy Motland, and Charley Brodhead. William went on to earn a master's degree from both the University of Pennsylvania and Lehigh University, and a Ph.D. from Temple University.

He was a longtime resident of West Long Branch, N.J., where he lived while working as an associate professor of economics and finance at Monmouth University.

In addition to his lifelong interest in finance and the capital markets, he enjoyed and coached sailing and rowing.

He was interred with his parents at Whitemarsh Memorial Park in Ambler, Pa.



John E. Luke '57

John died Feb. 14, 2018.

He grew up in Ridgewood, N.J., and graduated from Tabor Academy in Marion, Mass.

At Princeton John earned a bachelor's degree in engineering. He was a member of Quadrangle Club and the Navy ROTC. He was involved with softball, the Basic Engineering Society, Undergraduate Schools and Scholarship Committee, and the NROTC drill team.

Following graduation, John spent two years as an officer in the Navy, primarily as the chief engineer on a destroyer. He later earned an MBA from New York University.

John and his family moved from northern New Jersey to the Philadelphia area in 1980. At the time of his death, John and his wife of 58 years, Maureen, lived in Berwyn, Pa.

John's career was in the textile fiber business. After more than 40 years in that industry, he retired and followed his longtime interest in education and taught business and

finance courses at a local college.

His favorite pastimes included music (both as listener and pianist), sailing (including several cruising races to Bermuda), and woodworking. As he became limited by Parkinson's disease, John's greatest pleasure was watching the accomplishments of his 10 grandchildren.

John is survived by Maureen; children John Jr., Mary Kathryn, Tara, and Kristen; their spouses; 10 grandchildren; and two brothers, Edmon G. '61 and James P. '65.

THE CLASS OF 1959



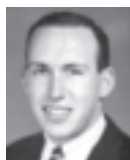
Hugh R. Kirkpatrick Jr. '59 Kirk died Aug. 28, 2018, from complications related to Parkinson's disease. He was a native of New Jersey, and his father was in the Class of 1930.

He prepared at Pingry and Lawrenceville. At Princeton he majored in psychology and was vice chairman of the Undergraduate Schools Committee. He was an officer in Army ROTC and a member of the Right Wing Club. He ate at Cottage Club.

Kirk married Frances Grauer four days after graduation, and the newlyweds spent their honeymoon driving from New Jersey to Fort Sill, Okla., where 2nd Lt. Kirkpatrick served on active duty until the following January. After a brief period with the Bank of New York, Kirk accepted an offer from International Flavors & Fragrances, where he rose from regional sales manager, to North American sales manager, to president of IFF's worldwide fragrance division.

While at IFF he served on the Alumni Schools Committee, worked with Annual Giving, and enjoyed summers with his family on the Jersey shore until his retirement in 1996. After Hugh lived in New Jersey for the first 60 years of his life, in retirement he and Francie relocated to Vero Beach, Fla., and Boone, N.C.

Kirk's life was defined by his commitment to family. He is survived by his wife, Francie; his daughter, Laura; and his son, Hugh III. We have sent condolences.



David B. McMullin '59 Dave died peacefully May 5, 2018, at Dunwoody Village in Newtown Square, Pa., with his family around him. He had suffered from frontotemporal dementia for some years.

Dave is remembered for his welcoming smile and ever-gracious and charming demeanor.

A Princeton son of the Class of 1930, Dave came to us from Episcopal Academy, where he was active in football, squash, and tennis. He majored in sociology, was in the Army ROTC, and was a member of Cottage Club.

Following two years in Germany as an artillery officer, Dave earned an MBA at the University of Virginia and then embarked on a life of sales and marketing in increasingly senior and challenging positions: initially with Procter & Gamble, then with classmate Ted Furlong's paper company, and finally in the chocolate and syrup industry where he headed classmate Jay Rhoads' company in the Philadelphia area.

Dave stayed active in outdoor activities with summers in the White Mountains and tennis and squash at Merion Cricket in Haverford, Pa., of which he was president. He held leadership roles in numerous community organizations including the Episcopal Academy alumni board and Camp Tecumseh in Moultonborough, N.H.

Dave is survived by his wife of 56 years, Sandy; daughters Anita and Dana; son David Jr.; and five grandchildren. We have sent condolences to the family.

THE CLASS OF 1963



Edward M. Barrow Jr. '63 Ed died Aug. 5, 2018, in his hometown of Hinsdale, Ill., from Middle East respiratory syndrome (MERS).

He was born in La Grange, Ill. He was an airline pilot, college teacher, and community leader and volunteer. A warm-hearted man of ready humor, Ed spent his recent years passionately in community theater.

At Princeton he majored in math, wrote his thesis on applying game theory to antisubmarine warfare, and was a manager of the football team. He was a member of the Bridge Club, led an NROTC platoon, and ate at Dial Lodge. His roommates were Larry Kelley, DeRochi, Jaramillo, Einstein, and Twigg.

As a Navy pilot for 12 years, he flew P-3s and was stationed on the East, West, and Gulf coasts plus Japan and Sicily. He retired from the reserves as a captain. While serving in the Navy in 1973, he earned a master's degree in systems analysis from the University of Southern California, then taught information systems/telecommunications for 21 years at the Keller Graduate School of Management. Ed also was a board member of multiple Hinsdale organizations.

Ed was a pilot for United Airlines for 25 years, or as he liked to say, a "heavy-equipment operator." He retired as a 767 captain.

The class shares its sadness with Ed's wife of 54 years, Beth; daughter Heather '89; and son Chris.

THE CLASS OF 1964

Robin O. Metz '64

Robin, a poet and athlete, died Nov. 27, 2018, of pancreatic cancer on his Wisconsin farm. He was 76 years old.



If you could stuff the hand of Robert Frost into the catcher's mitt of Joe Garagiola, you might grasp a rough sense of Robin Metz. The football, baseball, and wrestling stored

in his muscle memory arrived at Princeton along with academic prowess and a heart and mind rolling with visionary stories and poems. He could lead a blitz, pin a brawler, and guard home like a wall of Pittsburgh steel. Tiger Inn wanted him because he was a world-class athlete; Ivy wanted him because he was such a gifted writer.

He took the road less traveled, studying with novelist Philip Roth, his first writing mentor, then Kurt Vonnegut at the Iowa Writer's Workshop. A legendary teacher, Robin mentored emerging writers into prominence at Knox College in Illinois for 51 years. His book of searing poetry, *Unbidden Angel*, won the Rainer Maria Rilke International Poetry Prize, one of many international accolades for his many publications. An award-winning tree farmer, he celebrated art, music, theater, and nature. He was fiercely independent, but never a loner — he made friends for life.

He is survived by his wife, Liz; daughters Lisa and Ronnah; and four grandsons. The class extends its condolences to them all.



William T. Schwendler Jr. '64 Bill died May 1, 2018, of cancer in Dunwoody, Ga.

He grew up in Farmingdale, N.Y., and attended Deerfield, where he played soccer and was on the varsity swimming team during his senior year.

Bill started at Princeton with the Class of '62 and commenced a major in chemical engineering, but in his junior year he switched majors to economics and transferred to the Class of '64. Bill joined the Sport Diving Club and was house chairman of Key and Seal Club.

After Princeton Bill earned an MBA from Harvard in 1966 and then began a career of over 25 years at Grumman Corp., the diversified aerospace company co-founded by Bill's father before World War II. Bill became president of its environmental management subsidiary, then was assistant to the chairman of the board and CEO, and ultimately became director of the company's Southeast region, which took him to Atlanta in 1978.

Bill and his wife, Barbara, were married in 1971 and had two children, Rebecca and William T. III (Tad). After retirement, Bill continued his involvement in many community activities, including Atlanta Rotary and Interfaith Outreach Home. He and Barbara engaged in extensive international travels well.

We extend the class's condolences to Barbara, Rebecca, and Tad.

THE CLASS OF 2008**Elizabeth Esther Ortiz '08**

Elizabeth died Oct. 11, 2018 at the Villa Marie Claire Hospice in Saddle River, N.J. She had battled a rare autoimmune disorder, Behcet's disease, for half of her life. Three weeks prior to her passing, Elizabeth celebrated her 32nd birthday with her closest family and friends. She called it her "death party," and planned an *El Día de Los Muertos* theme because she knew that the Mexican celebration honors the bonds with ancestors and acknowledges the eternal life given through powerful, loving relationships.

Originally from Mahwah, N.J., Elizabeth enjoyed playing in her high school marching band and performing in school musicals. At Princeton Elizabeth was a member of Butler College and Charter Club. She planned to major in anthropology, but her time on campus was cut short due to her illness. While at hospice, Elizabeth never faltered in her determination to live, doing what she could to maintain her physical, spiritual, and intellectual strength. Most of all, she devoted herself to others, always showing her appreciation for their care and visits.

Elizabeth is survived by her parents, William and Libby Ortiz, and her godchildren, Mason Brennan and Ella Elizabeth Northrup.

In lieu of flowers, the family has asked for donations to a high school scholarship fund that has been set up in Elizabeth's memory. The donations can be sent to Mahwah High School, with the funds marked for the Elizabeth Ortiz Pride and Spirit Award.

GRADUATE ALUMNI**Martin Shubik *53**

Martin Shubik, the Seymour H. Knox Professor Emeritus of Mathematical Institutional Economics at the Yale School of Management, died Aug. 22, 2018, at the age of 92.

Shubik graduated from the University of Toronto with a bachelor's and a master's degree in 1947 and 1949, respectively. He earned a Ph.D. in economics from Princeton in 1953. After Princeton he was at General Electric for four years and then joined IBM Research Labs before he went to Yale in 1963 as a professor of the economics of organization.

Shubik was director of the Cowles Foundation for Research in Economics from 1973 to 1976, and was one of the founding faculty members of the Yale School of Management. He taught economics, game theory, and investment theory and practice. Named the Knox Professor in 1975, he held that chair through to his retirement in 2007.

Even in retirement he published papers on economics, defense, and other topics, compiling a life's total of 22 books and 340 articles. Much honored for his research in theoretical and practical aspects of economics, he was a highly

valued colleague until his passing.

Shubik was survived by Julie, his wife (who died Oct. 18, 2018); a daughter; and two grandsons.

Leonard N. Banas *62

Rev. Leonard Banas, professor emeritus at the University of Notre Dame, died Aug. 22, 2018, at the age of 91.

He graduated from Notre Dame in 1949 with a degree in philosophy and went to Rome, where he studied theology at the Pontifical Gregorian University and received a licentiate in 1953. He had been ordained in Rome in 1952. After another year of studies at the University of Rome, he taught at two seminaries before coming to Princeton, where he earned a master's degree in classics in 1962.

Father Banas was then assigned to Notre Dame, while also teaching at two seminaries. Continuing with religious assignment at Notre Dame in 1973, he taught at the university from 1973 to 1980 and was chair of the classical languages department. He also served as assistant dean in the College of Arts and Letters.

His assignments at Notre Dame included positions at St. Joseph, Pangborn, and Corby Halls until 2012. He also assisted for more than 25 years at St. Thomas the Apostle Church in Elkhart, Ind.

Father Banas is survived by two sisters.

Bruce O. Nolf *66

Bruce Nolf, who taught geology, math, and physics for 28 years at Central Oregon Community College (COCC), died May 8, 2018, from complications of multiple myeloma. He was 86.

Nolf graduated in 1954 from the University of Iowa, majoring in math. He added geology courses to his math studies and discovered his lifelong passion. He earned a master's degree in geology in 1955 from Cal Tech.

He then started teaching at the University of California, Santa Barbara, and Fresno State. Nolf was invited by Dr. William Taubenek of Oregon State University to map and study the metamorphic rock in the Wallowa Mountains of northeastern Oregon. Over the next 10 years, Nolf mapped the geology of the northern Wallowa Mountains from spring snow to fall snows.

After completing his Wallowa studies, Nolf took his field notes with him to Princeton and earned a Ph.D. in geology in 1966. He joined the faculty at COCC, where he was awarded the first faculty achievement award for teaching excellence. The college provided him with the resources to take his students from the classroom and lab to field studies.

Nolf was predeceased by his wife, Penny Jane. He is survived by two daughters, three granddaughters, and one great-grandson.

Kenn E. Clark *69

Kenn Clark, an aeronautical engineer who had ably assisted Professor Robert Jahn '51 '55 in running the electric propulsion laboratory at Princeton, died April 24, 2018. He was 79.

Clark graduated from the University of Michigan with bachelor's and master's degrees in aeronautical engineering in 1961 and 1962, respectively. He then earned a Ph.D. in mechanical and aerospace engineering from Princeton in 1969. For several years he helped administer the electric propulsion lab of the mechanical and aerospace engineering department.

Under Jahn, Clark assisted students at the lab, and was well liked and admired by them and colleagues alike. Later, he was with RCA Labs in Princeton, which eventually joined Lockheed Martin. Clark was a member of several satellite-launch teams.

His interests included attending sporting events, historic landmarks, space exploration, and his music collection. Since 1989 Clark had been a career-service volunteer for Princeton and an APGA member. He is remembered for his kindness and real interest in others. He contributed to the Graduate School's Annual Giving campaign for 36 years.

Clark is survived by his wife of 57 years, Janet; three children; and four grandchildren.

Victor W. Marshall *73

Victor Marshall, who had been professor of sociology and director of the Institute on Aging at the University of North Carolina (UNC) at Chapel Hill, died Aug. 18, 2018, of prostate cancer, at the age of 74.

Born in Canada, Marshall graduated from the University of Alberta in 1966. He earned a Ph.D. in sociology from Princeton in 1973, after becoming an assistant professor in 1970 at McMaster University.

In 1981 Marshall went to the department of behavioral science at the University of Toronto, where he became the director of the Center on Aging and head of the Canadian Aging Research Network. In 1999 he went to UNC Chapel Hill as professor of sociology and director of the UNC Institute on Aging.

Marshall worked with scholars in the U.S., Canada, Australia, and Europe, and received many awards for his contributions to the field. He received Queen Elizabeth II Jubilee Medals in 2002 and 2012. He was chair of the gerontological advisory committee at Veteran Affairs Canada, for which he received a governmental commendation. He was also honored by the Canadian Association of Gerontology, the Gerontological Society of America, and the Southern Gerontological Society.

He is survived by his wife, Joanne; and one daughter.

Graduate memorials are prepared by the APGA.

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'An Educated Lady' Gets the Job

By Abby Klionsky '14

Anne Shaw spent only four years at the College of New Jersey, but her short employment signified an important shift in the makeup of Princeton's staff.

Hired in 1877 as the assistant to the librarian, Frederic Vinton, Shaw is believed to be the first female employee to fill a non-service role on campus. That also made her one of about only 15 percent of American women who worked for pay in the 1870s. (PAW was unable to find an image of her.)

In Vinton's letter requesting permission to hire an assistant, he noted that the position did not require "the strength of a man." In fact, he specifically sought a woman "of mature age" to fill the assistant's role, since "two such could be paid for the salary which it would be necessary to pay a man."

Indeed, Shaw's salary was a paltry \$800 per year, while the librarian earned \$2,800. Vinton had envisioned that Shaw,

as his assistant, would do everything from alphabetizing his receipts to unpacking boxes of new books — and the "many other petty services" that occupied his time. But Vinton noted that Shaw turned out to be "just as competent" as he was to be the head of the library.

Born in Charlottesville, Va., Shaw had spent more than two decades teaching — despite her "perfect hatred" for the profession — because she believed it to be the "only occupation possible to an educated lady." A cousin of John Shaw Pierson 1840, a major donor to Princeton's collection of books on the Civil War, Shaw was over 40 when she began work at Princeton's library, then in the recently built Chancellor Green. By that time, she'd lived in Europe for two years, traveling and serving as a liaison between her cousin and European libraries.

Vinton noted that two women "could be paid for the salary which it would be necessary to pay a man."

Vinton praised Shaw's multilingual abilities, her depth of literary knowledge, and her good judgment. He believed the "work of mere routine and detail" was not befitting those traits. Instead, Shaw worked on creating the library's first catalog, including an inventory of a newly acquired art collection. Another woman was hired as an assistant within the year, and with a staff of three, the library was able to remain open more hours each day.

Ultimately, Shaw quit in 1881 after four years because of poor heating in the library, which caused her to fall sick. Subsequently, she followed through on a plan she'd been dreaming of for years, launching a third career as the creator of a European tour company aimed at a female audience. Shaw called herself the "pioneer in the South of that profession," and she shepherded groups of women around Europe on tours of four to six months.

By the time Shaw died in 1899, the library counted five women as assistants among its staff of eight. Still, 119 years went by after Shaw joined Princeton before a woman, Karin Trainer, would be named to lead the University's library system. ♦



Daniel Hertzberg

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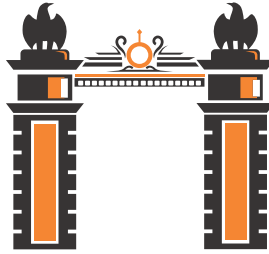
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