



# Princeton Alumni Weekly

Peter W. Singer '97  
on modern warfare

Veterans on campus

Bonfire!



# MISSION IMPOSSIBLE

ONE PROFESSOR'S SEARCH FOR SOMETHING OTHERS SAID COULD NOT EXIST



# HAPPY



## TIGER GLASS BALL ORNAMENT

MEMBERS PRICE \$12.60  
REGULAR PRICE \$15



## SKINNY RUGBY STRIPE SCARF

MEMBERS PRICE \$27  
REGULAR PRICE \$30



## BLOWN GLASS SNOWMAN ORNAMENT

MEMBERS PRICE \$22.50  
REGULAR PRICE \$25



## VINEYARD VINES TOTE & TIE

MEMBERS PRICE \$157.50  
REGULAR PRICE \$175



36 UNIVERSITY PLACE  
116 NASSAU STREET  
800.624.4236  
WWW.PUSTORE.COM

**PRINCETON**  
  
**UNIVERSITY STORE**

CHECK US  
OUT ON  
FACEBOOK!



# HOLIDAYS

FROM YOUR FRIENDS  
AT THE PRINCETON  
UNIVERSITY STORE



## PRINCETON MEDALLION BOOKENDS

MEMBERS PRICE \$81  
REGULAR PRICE \$90



## BRASS FITZRANDOLPH GATE ORNAMENT

MEMBERS PRICE \$40.50  
REGULAR PRICE \$45



## TINSEL BALL ORNAMENT

MEMBERS PRICE \$14.40  
REGULAR PRICE \$16



## PRINCETON SHIELD GLASS BALL ORNAMENT

MEMBERS PRICE \$12.60  
REGULAR PRICE \$14



## PRINCETON TRAVEL MUGS & WATER BOTTLES

MEMBERS PRICE \$10.80 - \$16.20  
REGULAR PRICE \$12 - \$18



## PRINCETON ETCHED MEDALLION ROCKS GLASS

MEMBERS PRICE \$10.80  
REGULAR PRICE \$12



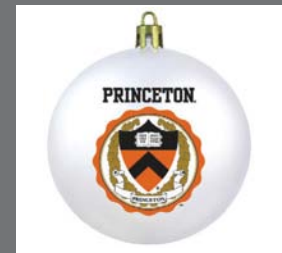
## SILVER TIGER COAT PIN

MEMBERS PRICE \$45  
REGULAR PRICE \$50



## PRINCETON MEDALLION BALL ORNAMENT

MEMBERS PRICE \$9  
REGULAR PRICE \$10



SINCE 1905 THE PRINCETON UNIVERSITY STORE HAS BEEN SERVING THE STUDENTS AND THE TOWN OF PRINCETON. STOP BY TODAY FOR AWESOME HOLIDAY GIFT IDEAS!

SAVE AT  
OUR ONLINE  
STORE!





# Princeton Alumni Weekly

An editorially independent magazine by alumni for alumni since 1900

DECEMBER 12, 2012 VOLUME 113 NUMBER 5

President's Page 3

Inbox 5

From the Editor 7

Campus Notebook 14

Few veterans on campus • Superstorm Sandy roars through Princeton • São Paulo partnership • Online theses • IDEAS: Amaney Jamal on the Arab street • FYI: When do women speak up? • Sensors measure bridge health • ON THE CAMPUS: Bicker changes • Public-speaking club • Briefs

A Moment With 21

Professor Brandice Canes-Wrone '93: We had an election. Now what?

Sports 22

Two special victories, one huge bonfire • Football returns to Ivy prominence • Basketball preview • EXTRA POINT: The student-coach bond • Sports shorts

Alumni Scene 38

In the classroom, Nick Ehrmann '10 thinks small • TIGER PROFILE Hospital leader Laura Forese '83 • STARTING OUT: Taylor Carroll '10 • Newsmakers • READING ROOM: Steven Strogatz '80, on *The Joy of X* • New releases

Perspective 42

Muslims and the West: Bridging the divide  
*Taufiq Rahim '04*

Class Notes 43

Memorials 63

Princeton Exchange 69

Final Scene 72

ON THE COVER: Professor Paul Steinhardt's three-dimensional model of a 20-sided quasicrystal. Photo by Paul Steinhardt.



Bonfire, page 22.

BEVERLY SCHAEFER

A world in a grain of sand 26

In his search for a natural quasicrystal, Professor Paul Steinhardt wouldn't take no for an answer.

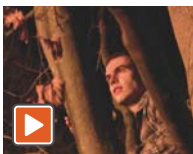
By Mark F. Bernstein '83

Warfare, under the radar 32

Brookings scholar Peter W. Singer '97 explains how a nation can be at war — and barely notice it.

By Christopher Shea '91

## What's new @ PAW ONLINE



### VICTORY'S GLOW

Watch video of the Big Three bonfire, which returned to Cannon Green Nov. 17.



### MARVELS OF MATH

View clips of Cornell professor and *The Joy of X* author Steven Strogatz '80.



### BACK TO SCHOOL

Football standout Chuck Dibilio '16's comeback story will begin in the classroom.



### LECTURE CIRCUIT

Read about campus events, including David Brooks' lecture on "Politics and the Organization Kid."



### Gregg Lange '70's Rally 'Round the Cannon

A fond farewell to Princeton's Class of 1925.



### PAW on iTunes

Listen to Rally 'Round the Cannon as a podcast on iTunes.

PHOTOS FROM TOP: BETT TOMLINSON/PAW; HOUTON MIFLIN HARCOURT; NAM Y. HUI/AP IMAGES; APRIL BARTOLOMEO

# The Arts Take Flight

*One of the most far-reaching — and personally rewarding — developments of my tenure has been the expansion of the creative and performing arts at Princeton. Thanks to the generosity of our alumni, led by Peter B. Lewis '55, the talents of our faculty and students, and the support of our entire University community, the arts have moved from the periphery to the center of academic life. I have asked the newly appointed chair of the Lewis Center for the Arts, Michael Cadden, to reflect on the arts at Princeton today. — S.M.T.*

It's hard to believe that 2012-2013 marks the fifth anniversary of the naming of the Peter B. Lewis '55 Center for the Arts. No current undergraduate has ever known Princeton without the center. If something exists for five years here, it's usually assumed to have been around for over two centuries. However, as most PAW readers know, that is certainly not the case with the Lewis Center. I'm in my 30th year of teaching at Princeton, where I first came as an assistant professor in the Department of English. Now I'm in my first year as chair of an entity unimaginable 30 years ago.

The Lewis Center functions like a department; it serves as the umbrella organization for the Programs in Dance, Theater, Creative Writing, Visual Arts, and the Princeton Atelier. Its mission is to put the arts at the heart of the Princeton experience by offering a wide range of curricular, co-curricular, and extracurricular opportunities designed to attract both students who self-identify as artists and those who want to explore what that might mean. In any given semester, over 10 percent of the student body is taking one or more of our courses.

Paul Muldoon, our visionary inaugural chair, had the arduous task of carving out a space for the new center both within the University and in the world as a whole. It's hard getting anything started, and Paul did a great job of establishing us on a firm foundation. It helped that the "arts charge" was being led by the president of the University! In the center's first year, Paul riffed with characteristic wit on the University's informal motto — "In the Nation's Service and in the Service of All Nations" — to set the Lewis Center agenda: "Princeton in the Service of the Imagination." But how best to serve the imagination?

One way, of course, is to develop a world-class faculty of teaching artists and scholars of the arts — people whose achievements make them the equals of faculty members across the curriculum. A case in point: Three years ago, we hired choreographer Susan Marshall to be the first-ever director of the Program in Dance. Susan's work has graced many of the major dance venues around the world, so it was hardly a surprise she'd won a MacArthur "Genius" Award. When we were courting Susan, she expressed amazement that someone who had never been to college was being offered a professorship at Princeton. I remember a hint of pride in Paul's voice when he replied, "Your work speaks for itself." Those of us in the room knew where that hint of pride came from: Most universities treat their artistic faculty as second-class citizens. Not Princeton. Not now.

People matter most, but space too counts. Our creative

writing faculty and students now thrive in intimate seminars and one-on-one advising sessions held in newly renovated classrooms and offices in New South. But students in many of the other arts need more room to flourish. Thanks to our new director of the Program in Visual Arts, Joe Scanlan, the offices at 185 Nassau Street that once housed creative writers are now studios and classrooms for certificate students in the visual arts. The 2003 opening of the Roger S. Berlind '52 Theater gave the Programs in Theater and Dance a much-needed purpose-designed performance space; now we've added two rehearsal/classrooms — one dedicated to dance, the other to theater — to the ground floor of New South. You can only imagine how we look forward to 2017, when the new arts neighborhood designed by Steven Holl — Berlind Alexanderplatz as I like to call it — will be the visual embodiment of the University's new commitment to the arts.



PAUL CSOGI

Michael Cadden, chair of the Lewis Center for the Arts, meets with students in his course, "Special Topics in Performance History and Theory-Performing Australia."

Another sign of that commitment will be the arrival next fall of our first Princeton Fellows in the Creative and Performing Arts, a program kick-started with an endowment from the Andrew W. Mellon Foundation and a gift from an anonymous alumnus. To get things rolling, every year, early-career artists whose achievements have been recognized as demonstrating extraordinary promise in any area of artistic practice will be invited to spend two years at Princeton. They may be asked to teach one course each semester, but fellows may also take on an artistic assignment in lieu of a class, such as directing a play, conducting a student music ensemble, or creating a dance with our students. As full and lively members of our community, dedicated to frequent and engaged interactions with students, these artists will provide a new dimension to the arts scene at Princeton.

I'm committed to establishing Princeton's pre-eminence in the field of undergraduate arts education. In collaboration with a new president and our faculty, staff, and students, I look forward to continuing the work in progress that is the Lewis Center for the Arts!



## Creative Public Relations That Gets Results

Strauss Global Public Relations LLC provides results-driven public relations that makes a difference. We offer our clients superior value, and they also appreciate our creativity, persistence and strategic thinking.

The firm was founded in 1995 by Princeton alumnus George Strauss with two clients, and its multilingual staff has expanded to serve several dozen companies and nonprofit organizations since then.

We guarantee that the situation of each organization we work with receives our focused, individual attention and its program meets the expressed needs of the company or association.

Our services include:

- Media positioning, strategy and targeting
- Multilingual media relations in the U.S., Canada, Western Europe, Asia
- Business, financial, consumer, trade media interviews and placements
- Bylined articles and speeches
- Presentation training and interview coaching
- Press releases and media advisories
- Company profiles and white papers
- Quarterly and annual reports
- Website and Internet communications
- Survey research counsel and implementation

You can see more about Strauss Global Public Relations and what we have achieved for our clients by visiting [www.straussglobalpr.com](http://www.straussglobalpr.com).

To discuss your situation in depth with George Strauss, call him at 212-766-1113 or send an email to [straussgpr@aol.com](mailto:straussgpr@aol.com).



## Princeton Alumni Weekly

*An editorially independent magazine  
by alumni for alumni since 1900*

DECEMBER 12, 2012 Volume 113, Number 5

### EDITOR

Marilyn H. Marks '86

### MANAGING EDITOR

W. Raymond Ollwerther '71

### ASSOCIATE EDITORS

Jennifer Altmann

Katherine Federici Greenwood

### DIGITAL EDITOR

Brett Tomlinson

### SENIOR WRITER

Mark F. Bernstein '83

### CLASS NOTES EDITOR

Fran Hulette

### ART DIRECTOR

Marianne Gaffney Nelson

### PUBLISHER

Nancy S. MacMillan p'97

### ADVERTISING DIRECTOR

Colleen Finnegan

### STUDENT INTERNS

Laura C. Eckhardt '14; Nicole M. Kreutter '15;

Erin McDonough '14; Rosaria Munda '14;

Allison S. Weiss '13

### PROOFREADER Joseph Bakes

WEBMASTER River Graphics

### PAW BOARD

Annalyn M. Swan '73, *Chair*

Richard Just '01, *Vice Chair*

\*James Barron '77

Anne A. Cheng '85

\*Robert K. Durkee '69

John McCarthy '88

\*Margaret Moore Miller '80

\*Nancy J. Newman '78

David Remnick '81

William W. Sweet '75

Charles Swift '88

*\*ex officio*

Bianca Bosker '08, *Young-alumni representative*

### LOCAL ADVERTISING/PRINCETON EXCHANGE

Colleen Finnegan

Telephone 609-258-4886, [cfinnega@princeton.edu](mailto:cfinnega@princeton.edu)

### NATIONAL ADVERTISING REPRESENTATIVE

Lawrence J. Brittan

Telephone 631-754-4264, Fax 631-912-9313

*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](mailto:paw@princeton.edu); website [paw.princeton.edu](http://paw.princeton.edu).

Printed by Fry Communications Inc. in Mechanicsburg, Pa. Annual subscriptions \$22 (\$26 outside the U.S.), single copies \$2. All orders must be paid in advance. Copyright © 2012 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

“I think that it is absurd to not permit Princeton to do what it did before and to do what the other Ivy schools are doing. Please allow transfers quickly.”

— *J.E. Murdock III '69*

“By all means, let Princeton revisit its transfer policy, but sports parity should be given the low, or even negative, weight it deserves.” — *Stewart A. Levin '75*

## Debating the transfer ban

Whatever the other arguments for or against admitting transfer students (Extra Point, Oct. 24), football “parity” ranks at the bottom of my list. Indeed, our former president Bill Bowen \*58, co-author of *The Game of Life: College Sports and Educational Values*, might well respond to that argument with mighty oaths were he not a true gentleman. That study’s empirical evidence, which included Princeton, identified: (a) that the true bottom line of athletics programs is red ink, (b) there’s almost no chance any more of walk-on players participating in major-sport intercollegiate competition, (c) the majority of alumni do not consider boosting support of athletics a priority, but trustee positions are over-weighted in favor of former athletes, (d) athletes on the whole have significantly lower academic performance than the general student population, (e) athletic-weighted admissions improve diversity measures by a paltry 1 percent, (f) admission

committees are hesitant to admit an athlete with a stronger academic record, rather than a person the coach has specifically recruited for his team ... and the list goes on. By all means, let Princeton revisit its transfer policy, but sports parity should be given the low, or even negative, weight it deserves in the universe of values and priorities that a great university must uphold.  
**STEWART A. LEVIN '75**  
*Menlo Park, Calif.*

Wow, did I have a negative reaction to this article. To propose that any university should adopt (or reinstate) a transfer policy simply because it needs talented athletes (football or otherwise) is offensive.

I was a junior-year transfer student in 1977 and was not chosen for my athletic prowess. We were 24 students chosen from a pool of 800. I was older than the other undergraduates and had two small children — the “token” non-traditional student. Women weren’t yet welcome on campus — never mind

## BUZZ BOX

### '77's wheelchair project adds meaning to reunion

Each story, letter, and memorial at [paw.princeton.edu](http://paw.princeton.edu) offers a chance to comment



Alumni posted enthusiastic comments at PAW Online with the Oct. 10 story about members of the Class of 1977 who distributed wheelchairs to more than 500 people in Peru as a 35th-reunion class-service project.

“Mil gracias a '77,” wrote **GREG PLIMPTON '73**, a Peace Corps volunteer in a small Peruvian town that received seven wheelchairs. One of the new users “cried as she thanked me for her gift, as did I,” Plimpton said.

“The trip was an amazing bonding experience for my husband, our daughter, and me,” commented **COLLEEN KELLY '77 s'77**. “It was wonderful to give back in honor of our 35th.”

“What a great way to give back and honor Princeton — and make Reunions even more meaningful!” wrote **TOM LEYDEN '77**. Added **DAVID BEHRING '77**: “I hope that every Princeton class will try to do some form of community service in honor of their major reunions.”

## Catching up @ PAW ONLINE



What do a congressman-to-be, a farmer, and a math Ph.D. have in common?

Each has been honored as PAW's Tiger of the Week this fall (Derek Kilmer '96, Sean Frazier '12, and Maria Chudnovsky\*03, respectively). Read about notable alumni every Wednesday, browse the archives, and send your own nominees at [paw.princeton.edu/blog](http://paw.princeton.edu/blog).



### WE'D LIKE TO HEAR FROM YOU

- EMAIL:** [paw@princeton.edu](mailto:paw@princeton.edu)
- MAIL:** PAW, 194 Nassau Street, Suite 38, Princeton, NJ 08542
- PAW ONLINE:** Comment on a story at [paw.princeton.edu](http://paw.princeton.edu)
- PHONE:** 609-258-4885; **FAX:** 609-258-2247

Letters should not exceed 275 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.

## CONQUER YOUR LAW SCHOOL APPLICATIONS



Work with  
admissions consultants from  
**Harvard, Stanford, Yale**  
and other top law schools

- Final Application Review
- Personal Statement Editing
  - Resume Refinement
  - Application Strategy

Invest in  
your future...  
get an  
**expert review!**

**10% DISCOUNT FOR  
ALL PRINCETON GRADS!**

**a** | ADMIT ADVANTAGE  
*The expertise you need. The advantage you deserve.*

[www.admitadvantage.com/law](http://www.admitadvantage.com/law)

**800-743-9213**

older, married undergraduate women with children.

I lived off campus and missed most events because I was busy raising twin boys. I had to study at home for obvious reasons. I didn't fit in; I was not a "magic bullet"; and yet, the other students (not the "old boys") welcomed me with open arms. I graduated Phi Beta Kappa and went on to get a doctorate — so I believe I added, at least a little, to the University's "luster."

I would urge that if the University is going to reconsider the transfer policy, it do so for reasons other than to find athletic talent. Perhaps a search for athletes can be part of the process, but certainly not the "driver" for the policy. To reduce transfer students to fodder for an athletic mill is reprehensible.

**ELEANOR A. VIVONA-VAUGHAN '79**  
*Monroe Township, N.J.*

I think that it is absurd to not permit Princeton to do what it did before and to do what the other Ivy schools are doing. Please allow transfers quickly. If the student meets Princeton's standards, then (s)he should be accepted if the transferee is a talented artist, a gifted musician, a Latin scholar, or an athlete, or all of the above.

**J.E. MURDOCK III '69**  
*Washington, D.C.*

Both my father ('23) and grandfather (1886) spent a year at West Virginia University before coming to Princeton. My father, at 6 foot 5 inches, was center on the basketball team and played other sports. I do not know if his, or my grandfather's, sports abilities were a factor in their being accepted at Princeton, but I do know that both they and Princeton benefited. The argument about needing to be at Princeton for all four years to get a "cohesive" experience seems like nonsense, and perhaps a bit arrogant. Reconsider.

**STOCKTON GAINES \*69**  
*Pacific Palisades, Calif.*

**Editor's note:** For more alumni views on Princeton's policy on transfers, go to PAW Online and follow the link on the home page.

## Alumni support for Aspire

President Tilghman rightfully hails Princeton's exceeding Aspire's \$1.75 billion goal (Campus Notebook, Sept. 19). It ain't necessarily so, however, that special praise is due because Aspire raised the greatest sum in Princeton's history "despite the worst financial crisis since the Great Depression."

The gap in recent decades between rich and poor here in the United States has reached a historic spread, and I'd guess that a very large proportion of Princeton alumni (most?) fit into the top 20 percent who control more than 50 percent of this nation's wealth. So for them, making donations may never have been so painless.

**BRAD BRADFORD '44**  
*Highland Park, Ill.*

## The Tilghman years

This (usually) Silent Generation alumnus would like to suggest that the Tilghman years (Campus Notebook, Oct. 24) would have been more highly regarded by history if she had devoted some effort to changing Princeton's relatively new public image as "just another one of those liberal-bias Ivy League academies." Although admirable advances were made in the hard sciences, the public reputation derives from such decisions as the less-than-halfhearted address of the ROTC question, the ongoing not-obsession-but-remarkable-fixation with all things multi- in race and sex, and the offering of a Princeton pulpit to such as Van Jones, all of which (and more) have served to intensify the gentry-left aura.

"Princeton in the nation's service" suggests a posture above trendy political correctness and ideology; indeed, the original LaFollette Progressives, of whom President Tilghman would seem to be an intellectual heir, presented themselves as highly skilled technical experts in governance, not advocates for party or ideology. During her 12 years, she could have restored Princeton's above-the-fray popular image, but made no effort to do so.

Robert Frost would have called it



“the road not taken.”  
**MARTIN S. HARRIS JR. '54 \*59**  
*Jonesborough, Tenn.*

Many are the accomplishments during President Tilghman’s tenure. But to me, what made her quite amazing was that, in addition to all her duties, she was there to catch a dance group’s last show on a Sunday afternoon (“They work so hard, they must be supported”); or that she found time to write a long, detailed reference letter for a student in her freshman seminar who was applying to attend a global seminar.

**ERIKA H. GILSON**  
*Lecturer, Near Eastern studies  
 Princeton University*

**From the Archives**



Re the From the Archives photograph in the Oct. 24 issue: Although this was definitely the football train to Cambridge, this photo is of the Princeton Nassoons going to Boston to attend the game and to perform locally at colleges and schools in the area.

The Nassoons are as follows, starting with the first male face on the left barely peeking through the door and continuing along the right side: Dave Dieck '78, Ben Indig '76, Marc Chamlin '77, Scott Reynolds '78, Bob Vuyosevich '76, David Villa '76, Rick Bond '79, and Travis Emery '78. The three women in front middle are the Danly sisters: Anne, Mimi '74, and Linda.

While I doubt that was a fight song being sung here, I can assure you that “Old Nassau” was sung loudly and often that weekend. Thanks to Stephen Bogardus '76 and Michele Sutter '77 for assistance in identifying the Danly sisters.

**MARC CHAMLIN '77**  
*Scarsdale, N.Y.*

**FROM THE EDITOR**

For eight-plus years, the Class Notes section in every issue of PAW has begun with a report from the Class of 1925. The report in this issue is '25's last.

The class's last surviving member, Malcolm Warnock, died Oct. 9, at 107. He is believed to have been the oldest Princeton alum — ever. It is PAW's tradition to note the passing of each class with a short history of its time on campus.

The official class history records many newsworthy events: the end of the hated “hygiene” class; the anti-evolution lecture by William Jennings Bryan, whom the *Prince* found utterly unconvincing; the destruction by fire of the “Casino,” former home of the Triangle Club. (*The New York Times* reported that hundreds of undergraduates “cheered the firemen in such a manner that the latter turned the hose on the students.”)

In 1922, students saw the “Team of Destiny” complete a perfect football season. As juniors, they fought a move by the student government to abolish the annual “flour picture,” in which flour was dumped on the freshmen. The pro-flour contingent got the tradition reinstated, but a new regulation prohibited freshmen from wearing coonskin coats.

 **READ MORE: Gregg Lange '70's “Hail and Fairwell” to the Class of 1925 @ [paw.princeton.edu](http://paw.princeton.edu)**



'25 classmates in their “flour picture.”

Alumni angered by Princeton's grade-deflation policy would have sympathy for '25, the first class to graduate under tough requirements intended to make Princeton more intellectually rigorous. At first, many in the class welcomed President Hibben's promise of an intellectual renaissance, the history reports — until “the full force of which descended upon the totally innocent heads, which in 1921 had born nothing weightier than black caps.”

For many years, 1925's class column has been written by Lewis C. Kleinhans III '53, son of a class member. Kleinhans told of '25's past, of thank-you notes for class scholarships, of Warnock's astonishing attendance record at Reunions — reporting to the class even when its membership had dwindled to one. For that devotion, PAW — and friends of '25 — always will be grateful.

— *Marilyn H. Marks \*86*

2013 SPRING

*dance* FESTIVAL

February 22 - 24

Berlind Theatre, McCarter Theatre Center

Featuring works by

- Raja Kelly
- Merce Cunningham set by Silas Riener '06
- Karole Armitage
- Zvi Gotheiner
- Laura Peterson
- Mark Morris

For more information about the Program in Dance please visit [princeton.edu/arts](http://princeton.edu/arts)

PRINCETON UNIVERSITY **arts** DANCE

## Magnificent Houses in Twentieth Century European Literature

BY HUGO G. WALTER

STUDIES ON THEMES AND MOTIFS IN LITERATURE; 115

HC | 978-1-4331-1847-0 | 336 PGS. | \$90.95

AVAILABLE THROUGH MOST MAJOR  
LIBRARY WHOLESALERS

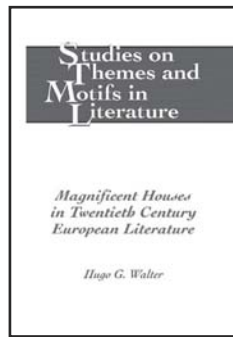


Peter Lang Publishing

29 BROADWAY, 18TH FLOOR | NY, NY 10006

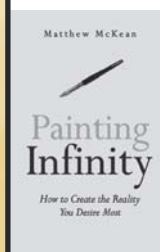
(P) 800-770-LANG | (F) 212-647-7707

CUSTOMERSERVICE@PLANG.COM | WWW.PETERLANG.COM



## Painting Infinity

By Matt McKean '95



A philosophical, elegant guide to creating the reality you desire most. End the struggle, stop sacrificing, and discover a powerful, inner truth that will set you free.

Available on Amazon.com



## BEFORE YOU JOIN A BOARD

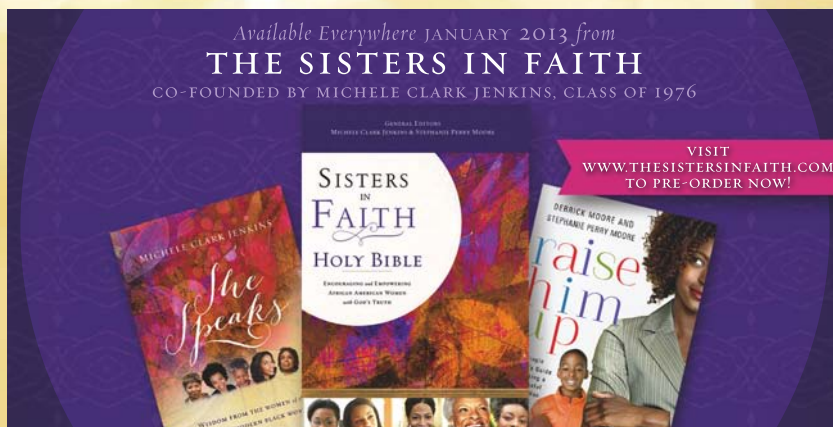
By John Balkcom '69

How to frame your discussion with the Chairman or the CEO when you receive an invitation to join a board of directors, whether for-profit or non-for-profit.

[www.beforeyoujoinaboard.com](http://www.beforeyoujoinaboard.com)

# The No

## Guide to Princeton



Is your book being published this spring? Join us for the June & July Princeton Authors Section.

Contact  
Advertising Director  
Colleen Finnegan,  
[cfinnega@princeton.edu](mailto:cfinnega@princeton.edu),  
609-258-4886

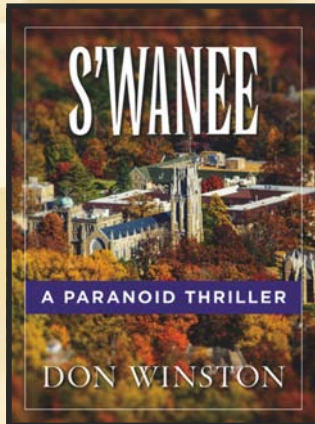
# P R I N C E T O N

# Forgotten Foundation

by Russ Stevenson '58

How the Great Ideas Of The Christian Faith Became The Foundation On Which The West Was Built

Available on Amazon.com



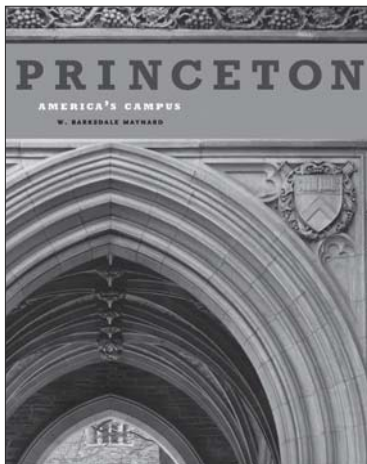
## Old Traditions Die Hard

S'WANEE by Don Winston Fish '90

E-book available at [amazon.com](http://amazon.com).

# Liday

## Authors



### Princeton

America's Campus

W. Barksdale Maynard

"This unprecedented history of the Princeton University campus is fascinating. W. Barksdale Maynard uses the evolution of the campus architecture and landscape as a window onto the evolution of higher education in America, the country's social and political milieu, and the context of contemporaneous architectural interests. All of these topics are interwoven with animated stories of influential characters: university leaders, faculty and administrators, important alumni, and students, as well as many architects, landscape designers, and artists. . . . The stories Maynard tells reveal the rich and interesting evolution of American architecture from the mid-eighteenth to the early twenty-first centuries."

"An eloquent history of the distinguished Princeton campus. Thank you, Barksdale Maynard."

—Robert Venturi

—Michael Graves

288 pages | 150 illustrations/3 maps  
\$44.95 cloth | \$19.95 paper

## penn state press

820 N. University Drive, USB 1, Suite C | University Park, PA 16802 | 1-800-326-9180

AVAILABLE IN BOOKSTORES OR ORDER AT [WWW.PSUPRESS.ORG](http://WWW.PSUPRESS.ORG)

### Restatement of the New Covenant

by W. W. Anderson, '53

A fictional account of a lawyer's rationale for an alternative explanation of Christ's crucifixion. It attempts to justify Christianity to conscientious Christians who are skeptical of traditional beliefs.



Available for \$10.95 at [buybooksontheweb.com](http://buybooksontheweb.com)

### REVIEWS IN MATH:

An excellent choice for instruction at universities and research institutes.



Dr. Henry A. Pogorzelski \*68  
Founder & President, Research Institute for Mathematics

[Information@ResearchInstituteForMathematics.edu](mailto:Information@ResearchInstituteForMathematics.edu)

Price: \$29.99, \$19.99 for students. Available directly from Research Institute for Mathematics, 383 College Ave, Orono, ME 04473

All you need to know about any GI operation you'll ever need to perform.



## Shackelford's Surgery of the Alimentary Tract, 7th Edition

Expert Consult - Online and Print

By Charles J. Yeo, MD

Class of '75

**SAVE 10%!**

\*Learn more about Dr. Yeo at [elsevierauthors.com/charlesyeo](http://elsevierauthors.com/charlesyeo)

**ORDER TODAY!** <http://www.us.elsevierhealth.com/charlesyeo>  
Use DM CODE **09757** at checkout

**ELSEVIER**

P  
10

NOW IN  
PAPERBACK

Stephen F. Cohen  
*Professor of Politics/  
Russian Studies, Emeritus*

### **The Victims Return**

Survivors of the Gulag  
after Stalin  
*(A Memoir-History)*

### **Soviet Fates and Lost Alternatives**

From Stalinism  
to the New Cold War

Available at Amazon.com

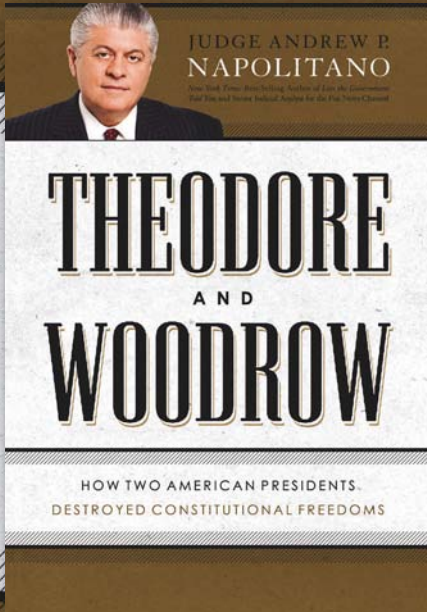
*great titles for*  
**GIFT GIVING**

*or to enjoy yourself!  
all winter long...*

P R I N C E T O N

“The Constitution is only as valid as the fidelity to it of the human beings in whose hands it is reposed. Either the Constitution means what it says, or it doesn’t. If it doesn’t mean what it says, then it is meaningless.”

JUDGE ANDREW P. NAPOLITANO



*New York Times* bestselling author and Fox News Senior Judicial Analyst Andrew P. Napolitano exposes how two of our nation’s most beloved presidents helped speed the Progressive cause on its merry way.

GET A GLIMPSE OF THE BOOK’S TRAILER HERE:

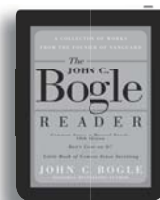
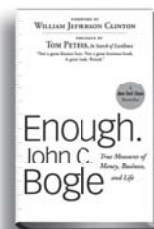
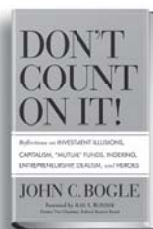
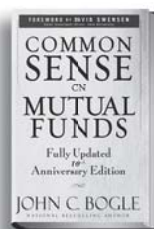
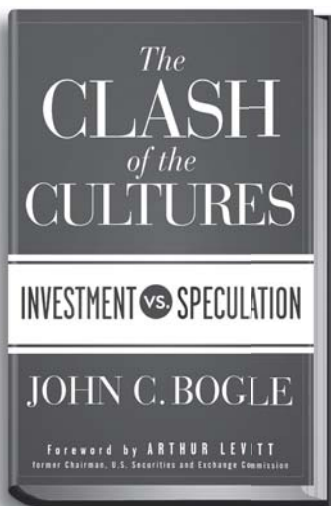
<http://youtu.be/AzBBhwfyiNc>



AVAILABLE NOVEMBER 13, 2012 WHEREVER BOOKS ARE SOLD



From *New York Times* bestselling author  
**JOHN C. BOGLE '51**



“When the history of modern investment management is written, **John Bogle** will stand out as one of its towering figures.”

—BYRON R. WIEN, Vice Chairman,  
Blackstone Advisory Services

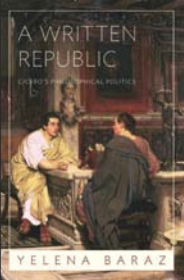
 Available wherever books and e-books are sold.

Wiley is a registered trademark of John Wiley & Sons, Inc.

**WILEY**

A U T H O R S

# Department of Classics

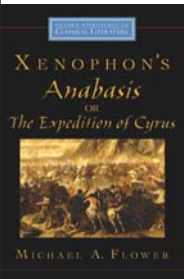


**Yelena Baraz**

**A Written Republic: Cicero's Philosophical Politics**  
Princeton University Press, 2012

When Cicero turned to writing his philosophical encyclopedia during his forced retirement under Caesar, he was acutely aware that this was a controversial undertaking for a Roman statesman, given Romans' frequent hostility to philosophy as foreign and incompatible with one's duty as a citizen. How are we to understand Cicero's decision to pursue philosophy in the context of the political, intellectual, and cultural life of the late Roman republic? Yelena Baraz takes up this question and makes the case that philosophy for Cicero was not a retreat from politics

but a continuation of politics by other means, an alternative way of living a political life and serving the state under newly restricted conditions. *Yelena Baraz is Assistant Professor of Classics and Jonathan Edwards Bicentennial Preceptor at Princeton.*



**Michael Flower**

**Xenophon's Anabasis, or The Expedition of Cyrus**  
Oxford University Press, 2012

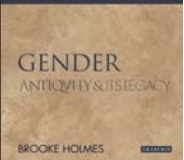
Xenophon's Anabasis, or The Expedition of Cyrus, is one of the most exciting historical narratives to have survived from ancient Greece. It tells the story of Cyrus, a charismatic Persian prince, who in 401 BC enlisted thousands of Greek mercenaries in an attempt to seize the vast Persian empire for himself. Cyrus was killed in a great battle, and Xenophon, an Athenian aristocrat found himself in the unexpected position of leading the Greeks from the vicinity of Babylon in modern Iraq back to the Greek cities in Turkey. This book unveils the literary artistry and narrative strategies that have gone into shaping one of the greatest survival stories of all time. *Michael Flower is Senior Research Scholar and Lecturer in Classics at Princeton.*



**Brooke Holmes**

**Gender: Antiquity and Its Legacy (Ancients & Moderns)**  
Oxford University Press, 2012

Gender has now become a pervasive topic in the humanities and social sciences. Yet despite its familiarity within universities and colleges, some have argued that the radical debates which first characterized gender studies have become ghettoized or marginalized -- so that gender no longer makes the impact on creative thinking and ideas that it once did. Holmes argues that much writing on gender in the classical age fails to place those ancient ideas within their proper historical contexts. By re-examining ancient notions of sexual difference, bodies, culture, and identity, Holmes shows that Plato, Aristotle, the Stoics, Epicureans and others force us to reassess what is at stake in present-day discussions about gender. *Brooke Holmes is Associate Professor of Classics and Elias Boudinot Bicentennial Preceptor at Princeton.*



**Your Loving Son, Philip**

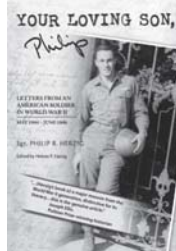
*Letters from an American Soldier in World War II*  
May 1944 - June 1946

By Sgt. Philip R. Herzig

*"A Major Memoir"*

Princeton sophomore Philip Herzig '46 served his country as an infantryman in Germany. For two years he wrote his parents detailed letters of his experiences and expressed loving appreciation for his family life in New York. After his death in 2004, his widow Helene found and edited these letters.

Joseph J. Ellis, Pulitzer Prize-winning historian, praises the book, "...a major memoir from the WWII generation, distinctive for its literacy...Philip is always disarmingly honest, never poses, never embellishes for effect. This is the genuine article."



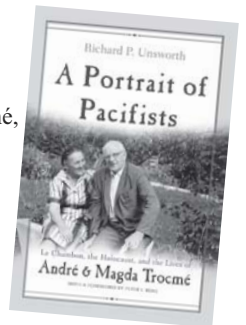
Available through [amazon.com](http://amazon.com), [bn.com](http://bn.com) and on kindle.

there's  
nothing  
quite like  
curling up  
with a  
**GOOD**

**A Portrait of Pacifists**

by Richard P. Unsworth '48

The story of André and Magda Trocmé, two French Resisters who made nonviolence a way of life.

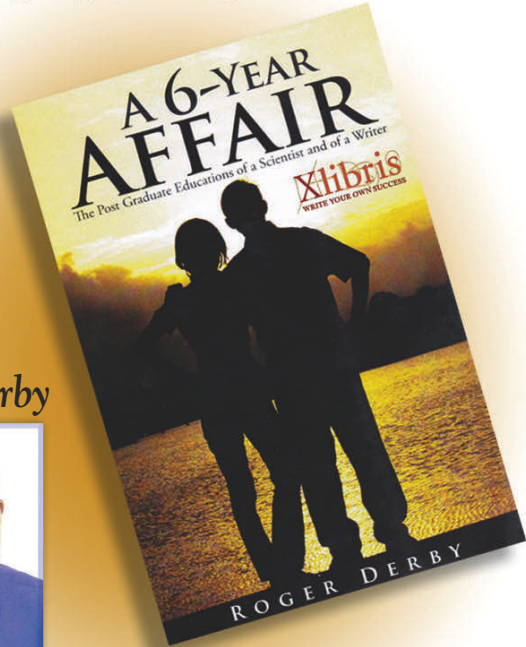


*"Realising a world without genocide: that's the true measure of this book."*

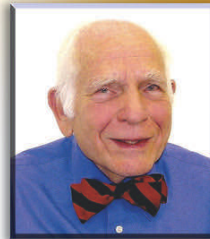
— Winton Higgins,  
Australian Institute of Holocaust and Genocide Studies

Available at  
[www.CommonGoodBooks.com](http://www.CommonGoodBooks.com)  
651-225-8989

An emerging young writer...



Roger Derby



...encourages a middle aged widow to enter graduate school and pursue her dream of studying microbiology. The story chronicles their love affair and their professional development.

After graduating with a BA degree in economics, Roger Derby '54 spent 4 years in the US Army. Upon his discharge, he decided to reinvent himself and pursued an engineering curriculum at the Colorado School of Mines from which he received both his master's and doctor's degrees. During a long career he has been a researcher, a government bureaucrat, a teacher, and a businessman. He has published several dozen technical papers. A controversial short story published in *The Nassau Lit* during senior year resulted in probation. Although *A 6-Year Affair* is a bit tamer, it still has plenty of earthy scenes.

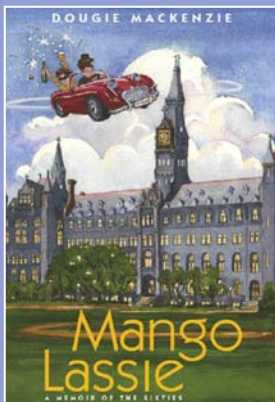
— Available in Hardcover, Softcover & eBook —  
**ORDER TODAY! CALL: 888-795-4274 Ext. 7879**

Order online at [www.xlibris.com](http://www.xlibris.com), [www.amazon.com](http://www.amazon.com), [www.barnesandnoble.com](http://www.barnesandnoble.com), or visit your local bookstore.

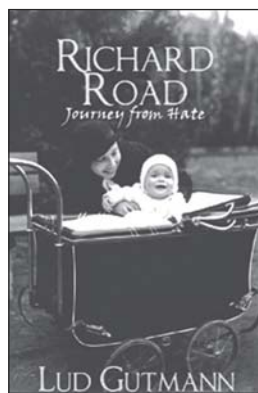
**Mango Lassie:  
A Memoir of the Sixties**  
by **Dougie MacKenzie k'63**

**"Good for any number of  
side-splitting laughs."**

—Bob Quick, *The New Mexican*



Available at Georgetown University Bookstore  
202-687-7482  
[www.Georgetown.bkstr.com](http://www.Georgetown.bkstr.com)  
Politics & Prose Bookstore 800-722-0790  
[www.politics-prose.com](http://www.politics-prose.com)  
[www.dougiemackenzie.com](http://www.dougiemackenzie.com)



**Richard Road**  
*Journeys from Hate*

A memoir by Lud Gutmann '55

The odyssey of a Jewish family—their flight from Nazi Germany to farm life in New Jersey, and becoming Americans.

Depression-era hard work and devotion to the children's future; with a Princeton education the ultimate goal.

Paperback, 249 pages, \$22.95, [Amazon.com](http://Amazon.com),  
[McClainPrinting Company.com](http://McClainPrintingCompany.com), or  
[Barnes & Noble.com](http://Barnes&Noble.com) ([www.ludgutmann.com](http://www.ludgutmann.com))

A U T H O R S

## Princeton trails Ivy peers in enrollment of veterans

In many respects, Joshua Haecker '13 is like most Princeton undergraduates. As he rushes to Frist Campus Center on a recent Tuesday, he's thinking about academics (his upcoming midterms), extracurriculars (he's a vice president of Triangle), and meeting up with his girlfriend.

But the fresh-faced Haecker stands out in one respect. He is a U.S. Army veteran who spent six years based in Germany as an intelligence analyst before arriving on campus. In fact, he is the only known U.S. veteran currently in the undergraduate student body (there may be others who have not identified themselves to the University's administration).

Princeton has the lowest number of undergraduate veterans in the Ivy

League. Figures at other institutions vary widely — at Brown, Dartmouth, and Yale the number is in the single digits, while Cornell has 63 veterans and Columbia has 247. Some alumni and professors say Princeton has not done enough to promote itself to veterans. The administration says the University would like to have more veterans and is working on the issue.

"We want [veterans] to come to Princeton," Dean of Admission Janet

Rapelye said. "We are working hard to encourage more veterans to apply to Princeton. This past year we admitted some veterans, and they chose to go elsewhere." She said her office has been "working with several organizations to get information to those retiring from duty," especially about Princeton's financial-aid program. There also are four veterans in the graduate programs at the Woodrow Wilson School, along with 11 active-duty military members.

Haecker, 28, said he's very happy with his experience at the University, but Princeton "could do a better job making it obvious it's a good place for veterans." A Wilson School major, Haecker plans to work for the federal government after graduation.

Wick Sloane, an English professor in Boston who tracks the attendance of veterans at U.S. colleges and universities, said Ivy League schools are not doing enough.

"The results speak for themselves," said Sloane, who teaches at Bunker Hill Community College, where the 13,000-

P  
14

TOP OF THE NEWS

## Sandy fells trees, cuts power to grad housing

The University lost more than 100 trees during Superstorm Sandy, including the one pictured at right near Alexander Hall, but only minor structural damage was reported. The storm arrived Oct. 29 during fall break, when about 1,200 undergraduates were on campus; most lost electricity for only a few minutes as the University switched to power produced by its cogeneration plant. University buildings that depend on electricity from the public grid lost power for several days, however, including graduate-student housing at the Stanworth and Butler apartments. Students organized relief efforts, including a drive to gather food, clothing, and toiletries for storm victims.

By Allie Weiss '13



ASHWANI SODHI '15/THE DAILY PRINCETONIAN





Joshua Haecker '13, believed to be the only U.S. veteran currently enrolled as a Princeton undergraduate.

plus student body includes 485 veterans. "Ivy League colleges have very sophisticated marketing strategies. If they wanted more veterans, they would have them."

But Sloane conceded that attracting

veterans can be difficult. Prospective students may be intimidated by the prospect of applying to elite schools, reluctant to relocate, and disinclined to join student bodies made up primarily of 18- to 22-year-olds and few veterans.

Another impediment may be Princeton's policy of not accepting transfer students. Michael Dakduk, executive director of Student Veterans of America, which advocates for veterans in higher education, called the policy "a fundamental problem" because many veterans have credits from community colleges or from classes taken in the military. Haecker had almost enough credits from military courses for an associate's degree but

could not apply them toward a Princeton degree.

"If I could point to a university that is not doing all it could to attract veterans, I would point to Princeton," Dakduk said. He has met with the presidents

of universities such as Georgetown and with Harvard's student veterans group, but "I haven't heard one thing come out of Princeton," he said.

Several highly selective schools have special veterans programs. Columbia has a veterans-affairs coordinator and a veterans-orientation program. Vassar teamed up with the new Veterans Posse Program, which works to increase attendance at selective schools. Ten participants will start at Vassar next fall, attending for free.

"It's time for colleges and universities to increase their commitment to veterans," wrote Vassar president Catharine Hill in a published opinion piece. "Selective private colleges in particular must step up." Admission offices, she said, "can take lessons from our efforts to recruit racially and socioeconomically diverse students."

Keren Yarhi-Milo, an assistant professor at the Wilson School, said Haecker's contributions in her class on intelligence and foreign policy were invaluable. "Josh was able to provide insights the students could not have gained just from reading the material," she said, especially regarding the intelligence reports the class studied. "He's written

*continues on page 20*

BERENLY SCHAEFER

P  
15

## New partnerships support global initiative



ton's Council for International Teaching and Research.

A dual-Ph.D. agreement has been signed with Humboldt University in Berlin, and a partnership with the University of Tokyo is nearing completion. Adelman said the partnerships build on areas where faculty already have worked together. Pilot projects with the University of São Paulo will focus on global health and medical anthropology, as well as architecture and urbanism.

**A strategic partnership** between Princeton and the University of São Paulo was created as President Tilghman and São Paulo rector João Grandino Rodas signed the papers Oct. 31 in Brazil. The agreement will increase opportunities for collaboration as part of Princeton's international initiative. "Excellent education increasingly means being global," said history professor Jeremy Adelman, who is the director of Prince-

## Senior thesis moves into the digital era



No additional bound volumes of senior theses will join the 63,000-plus that are stored in Mudd Library's basement. In a leap into the digital age, Mudd will save only PDFs of senior theses beginning with the Class of 2013; they will be searchable from any computer within the University network through Princeton's digital repository, DataSpace. Theses from prior years will continue to be available in paper format; the library said there are no plans to systematically convert those to a digital format.

Doctoral dissertations have been available online since the last academic year, though students can choose to restrict access. The Senior Thesis Collection is Mudd's most frequently used collection. By F.H.

JORDO BIEHL

STEVEN VEACH



Associate professor Amaney A. Jamal says some Arabs fear that embracing democracy could jeopardize U.S. aid.



**WOMEN SPEAK UP** less than men in situations in which decisions are made by majority vote. That's the finding by Princeton politics professor Tali Mendelberg and Brigham Young University researchers, who studied the decision-making process in 94 groups with different male-to-female ratios. They found that women speak 75 percent less than men when they are outnumbered in a setting where a majority vote is used. The disparity disappeared when the group made decisions by consensus. *American Political Science Review* published the findings in September.

## Democracy: Will Arab countries follow?

Since the fall of the Soviet Union, democracy has blossomed worldwide. From 69 nations that were electoral democracies in 1994, the number has jumped to 119 today. And yet even with the Arab Spring, democracy has struggled in Arab nations.

Some commentators blame Arab culture for democracy's lagging performance, saying the Middle East isn't ready for modern progress. But Amaney A. Jamal, an associate professor of politics, rejects this view in her new book, *Of Empires and Citizens: Pro-American Democracy or No Democracy at All?* (Princeton University Press). Over seven years, she and her team interviewed 250 citizens in Jordan, Morocco, and Kuwait and found strong pro-democracy sentiment.

"I am of Arab-American background," Jamal says, "and I immediately noticed there was a disconnect between what we believe here and what they believe there. We need to understand what they are thinking. Are they undemocratic? Or are there reasons they are undemocratic?"

The chief reason is the United States, which has propped up undemocratic regimes to keep oil gushing, causing widespread resentment in Arab streets, writes Jamal.

Thoughtful people have resisted going in a democratic direction, she concludes, because they fear holding elections that might bring anti-American groups to power, provoking an economic backlash from Uncle Sam. The middle class, especially, is

acutely aware that the Arab world gets more U.S. aid than all of Africa. Embracing democracy might mean jeopardizing this support.

In furthering Arab democracy, the best thing Washington can do is to avoid fanning the flames of anti-Americanism, Jamal argues. When unpopular regimes are propped up, or when civilians are killed in drone strikes, anti-Americanism swells, feeding into the hands of undemocratic forces. In particular, any military action against Iranian nuclear facilities must avoid civilian deaths, she says. That would enrage Arabs in many countries.

When democracy eventually does come, it is likely to differ from democracy in the West, Jamal cautions. "We might anticipate a conservative social trend in these new democratizing societies, including rules for women. It will be based on trial and error and might get worse before it gets better." American democracy itself was generations old, she notes, before women could vote.

Her book was largely finished before the Arab Spring, but events in Egypt in particular have confirmed her conclusions, she says. Better-off Egyptians seem nervous about destabilization. If the new government adopts anti-American policies, Jamal expects the military will void the democratic experiment so that U.S. aid won't be jeopardized and stability can be restored — minus freedom. ■

By W. Barksdale Maynard '88

Based on a course he taught to freshmen, engineering professor emeritus James Wei's "Great Inventions that Changed the World" (Wiley) shows how **TECHNOLOGICAL BREAKTHROUGHS** have ushered in new eras in human history. Stone axes inaugurated tool use; the Internet connects the planet by communications. A torrent of new inventions is required if our children are to enjoy our high standard of living, Wei argues.

In "**TONI MORRISON: Writing the Moral Imagination**" (Wiley-Blackwell), Dean of the College Valerie Smith briefly reviews the output of the famous novelist and Princeton professor emerita. Smith shows how Morrison's writing, both fiction and nonfiction, has been designed to fight racism, sexism, classism, "and other ideologies of repression," a goal shared by works as disparate as "Beloved" and "Playing in the Dark: Whiteness and the Literary Imagination."

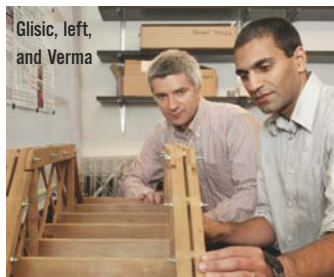
By W. Barksdale Maynard '88 and Nora Taranto '13

# Detecting when to fix a bridge

## THE HEALTH OF BRIDGES

If bridges could talk, some would warn us that they are old, potentially hazardous, and need repair. A new technology being developed at Princeton has the potential to give bridges a voice, possibly preventing disasters like the 2007 collapse of an interstate-highway bridge in Minneapolis that killed 13 people.

“We really don’t have an adequate technology to provide structural information that is accurate enough and specific enough to be actionable,” said Naveen Verma, assistant professor of electrical engineering. That’s why Verma and Branko Glisic, assistant professor of civil and environmental engineering, along with professors James Sturm and Sigurd Wagner, set out to find a way to monitor the health of a bridge.



“The structure manager can now have a color-coded image showing the location of any stress,” said Glisic. “The idea is to make it really easy to act based on the data.”

An appropriate analogy is the human body’s system of nerves, Glisic said: “If you have a cold, you are not going to the doctor, but if you feel strong pain in your stomach, you recognize that you need medical intervention.” The bridge-sensing technology is intended to work similarly, resulting in proper, timely maintenance, and not costly repairs of every minor crack.

“The sensor sheet under development at Princeton is an absolutely amazing technology with incredible potential,” said Jerome P. Lynch, associate professor in the department of civil and environmental engineering at the University of Michigan.

**WHAT’S NEXT** The team has a prototype the size of an 8.5-by-11-inch sheet of paper and is working on using solar energy to make the system self-powered. The technology will be tested on a model 15-foot bridge in the laboratory and then on Streicker Bridge, which crosses Washington Road near the Frick chemistry building.

The approach could also be applied to sense corrosion, wind, and temperature. “In 10 years we will have multifunctional wallpaper that can measure anything about the structure, and it will be self-powered and very intelligent,” said Glisic. The technology also could be applied to other structures — aircraft, buildings, and pipelines. “It has enormous potential,” he said. **By Anna Azvolinsky ’09**

## BROWN = BROTHERS HARRIMAN

### WEALTH MANAGEMENT

At Brown Brothers Harriman we offer a risk management culture and perspective which is uniquely qualified by almost 200 years as a privately owned bank.

Our investment approach and financial footing are based on the core principles of partnership, conservative financial management and client focus that have guided our firm since 1818.

Wealth Management and Estate Planning services are tailored for those with \$5 million or more to invest. For further information please contact:

**G. Scott Clemons '90**

**Managing Director**

212.493.8379

scott.clemons@bbh.com

NEW YORK BOSTON CHARLOTTE  
CHICAGO PHILADELPHIA WILMINGTON  
WWW.BBH.COM



## Multiclub bicker, with some limits, to return to the Street in February

By Gira Nathan '13



**Come February**, students will flock to Prospect Avenue as they have for decades, seeking admission to one of the 11 eating clubs. For the first time since the 1980s, however, there will be an option to bicker more than one club.

Tiger Inn, Cap and Gown, Cottage, and Cannon Dial Elm will participate in a new dual-club bicker system announced Nov. 7 by the Interclub Council (ICC). The other two selective clubs, Ivy and Tower, elected to keep

their bicker processes. Charter, which uses a weighted sign-in system that allows students to increase their likelihood of admission by attending club events, also agreed to the dual-club system. A student could bicker a selective club and attend events at Charter.

The ICC said there will be more informational events for underclassmen, and all the clubs agreed to synchronize selection events, including bicker sessions, pickups, and initiations. All students will be informed of their club placement at the same time.

Before the start of bicker, students will rank up to two participating bicker clubs and as many sign-in clubs as they would like. A computer system will combine this information with the clubs' admission decisions to match students with their highest available choice, according to ICC president Alec Egan '13. (A computer-match system was one of many ideas suggested in May 2010 by the Eating Club Task Force.) As in the past, students will be able to sign into Cloister Inn, Colonial, Terrace, and Quadrangle the week before bicker.

ILLUSTRATION: RON BARRETT; PHOTOS: COURTESY GIRI NATHAN '13, JOHN O'NEILL '13

# Alumni Day

**Save the date:**  
Saturday,  
February 23, 2013



**2013 Woodrow Wilson Award Recipient**  
**The Hon. Mitchell E. Daniels, Jr. '71**  
Governor, State of Indiana  
President-Elect, Purdue University



**2013 Madison Medalist**  
**Arminio Fraga \*85**  
Founding Partner, Gávea Investimentos

**Hear from these award winners at Alumni Day, Saturday, February 23rd.**

For more information, contact the Office of the Alumni Association at 609.258.1900 or [www.alumni.princeton.edu](http://www.alumni.princeton.edu).



Egan said he hoped that Ivy and Tower “can find a way to join the multi-club bicker aspect of the selection reform, but all of the clubs have taken huge steps to creating a more open process.” He said the ICC may increase the two-club limit in the future.

Tower president Jamie Joseph ’13 said club members were concerned about having enough time to interact with bickerees, while Ivy “focused on protecting the integrity of our 10-inter-view bicker process,” club president Jason Ramirez ’13 said.

Members of the Graduate Interclub Council (GICC) and four eating-club presidents worked to implement recommendations of the Eating Club Task

Force, which was created by President Tilghman to examine the relationship of the clubs and the University.

“As alumni, we can look at this process with a great deal of satisfaction,” said GICC president Thomas Fleming ’69. He praised the University’s guidance during the process and sensitivity to the clubs’ independence.

The reforms do more than change “the way that one week works,” said University vice president and secretary Robert K. Durkee ’69, who chaired the task force. “Part of the story is to go back to a time when anyone who went into the system could have some confidence that at the end of the process, they would have a place [in a club].”



## Students join together to practice the fine art of public speaking

By Tara Thean ’13

When Ruey Hu ’13 received evaluations of his molecular-biology research last summer, he was pleased to see that his work was up to par. But something was lacking in his presentation.

“Many students, including myself, are not aware of the idiosyncrasies in our speech,” Hu said, such as using word fillers like “um” and “ah” and forgetting to make eye contact.

He resolved to improve his public speaking, but didn’t want to do it alone. So he started Speak with Style, a group of students committed to improving their “presentation, pitching, and interview skills,” according to the group’s website. Guest speakers such as President Tilghman’s speechwriter, John Weeren, have provided valuable tips.

The group emphasizes that “no prior experience is necessary” — and is one of the few Princeton organizations that truly means it. Participants range from leaders of the American Whig-Clio-sophic Society, the historic debate club, to public-speaking novices. Co-founder Mengyi Xu ’14, whose native language is Mandarin, said she always has been self-conscious about her speech.

“If I have a good idea, I want to be able to express it the same way I have in

my mind,” Xu said. “But sometimes verbal communication can get in the way.”

More experienced speakers said they view Speak with Style as an opportunity to practice their public speaking. Pranav Gokhale ’15, who was active in high school debate, said one of the most valuable exercises was when members delivered speeches by Winston Churchill and Rush Limbaugh with pens in their mouths, a drill to make them focus on pronunciation.

Several students said they would appreciate public speaking as a University course. ENG 230: Public Speaking was last offered in the fall of 2010.

Justin Ziegler ’16 said Speak with Style’s appeal lies in practicing speech in different situations. He cited a study by Stanford psychology professor Thomas Harrell that “verbal fluency” — the ability to communicate well in a wide range of situations — is more strongly correlated with a college graduate’s success than the GPA.

“It’s not just getting up in front of a large group of people,” Ziegler said. “Your ability to speak in all sorts of circumstances, in a cocktail party, with friends, in interviews ... that’s what Speak with Style is dedicated to.”

PRINCETON ALUMNI WEEKLY

Holiday

Gift Guide

great ideas for family and friends

reuse, rethink, revitalize



princeton ephemera & memorabilia

jane

7 Spring Street, Princeton, NJ  
609.683.jane (5263)  
janeconsignment.com

jp crickets

Does your Princeton Tiger have everything? JP Crickets is a unique and new gift idea! Mens and womens University shoes.



Visit: [www.jpcrickets.com](http://www.jpcrickets.com)



CUSTOM BRANDED JOURNALS


Beautiful journal books Made in the USA by women-owned business. Perfect for corporate gifts, wedding favors & special events. Also brochures, boxes & marketing materials.

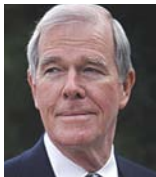
inQueue™

Emily Lewis Penn '77  
info@inqueuedesigns.com

**IN BRIEF**

Indiana Gov. **MITCH DANIELS '71**, the president-elect of Purdue University, will receive the Woodrow Wilson Award on Alumni Day Feb. 23. The James Madison Medal winner is **ARMINIO FRAGA \*85**, a financier and a former president of the central bank of Brazil who is known for his commitment to social causes. The awards are the University's top honors for alumni.

**IN MEMORIAM** Former University trustee **PAUL WYTHES '55**, who chaired a committee whose work resulted in expanding Princeton's undergraduate student body, died Oct. 30 in Palo Alto, Calif. He was 79. Wythes founded one of Silicon Valley's early venture-capital firms, Sutter Hill Ventures, and served as a trustee for 14 years. In 2000, the Wythes Report recommended adding a sixth residential college and increasing the number of undergraduates from 4,600 to 5,100. 



COURTESY OF THE WYTHES FAMILY

**Veterans** *continued from page 15* intelligence reports, so his comments on how those reports are received and perceived were very important."


The federal Yellow Ribbon Program offers tuition assistance for private schools above an \$18,000 annual grant from the Department of Veterans Affairs. Princeton has been the only Ivy League school that did not participate in the program at the undergraduate level; spokesman Martin Mbugua explained in early November that the University's generous financial-aid policy made it unnecessary.

But Mbugua told PAW Nov. 15 that Princeton expects to join in the program this spring "as part of ongoing efforts to encourage and support veterans who apply to Princeton and qualify."

The University had been criticized for failing to participate in the program. Paul Miles \*99, an Army veteran who teaches history at Princeton, said that by not participating, Princeton had given the impression that it was not reaching out to veterans.

Wilson School professor Uwe Reinhardt said Princeton needs to do more. His son, a Princeton alumnus, served in Iraq after receiving his degree.

"If you really want a diversity of perspectives, a veteran — what they've been through, what they've seen — brings so much," he said, ranging from experience in other countries to an embrace of selfless service. "And it would remind the students that there are people their age who are laying out their lives for this country. I'm a little ashamed of my campus, and I would urge Nassau Hall to have an outreach to veterans."

History professor Anthony Grafton sounded a similar theme in remarks at Princeton's Veterans Day Service Nov. 12. "As professors, students, and members of the Princeton University community, we should demand that our university support the military in every way that is consistent with its own larger enterprise, and that it offer opportunities to as many veterans as possible, as it did in the years just after World War II," said Grafton, whose son was a Marine helicopter pilot.  *By J.A.*



**CITY OF GOLD**  
*Tomb and Temple in Ancient Cyprus*

THROUGH  
**JANUARY 20, 2013**

**PRINCETON UNIVERSITY**  
**ART MUSEUM**

**FREE AND OPEN TO THE PUBLIC** [artmuseum.princeton.edu](http://artmuseum.princeton.edu)

Cypriot, late 6th century B.C.: Head from a colossal male statue. Polis Chrysochous, Local Museum of Marion and Arsinoe. Courtesy of the Department of Antiquities, Cyprus.

## Brandice Canes-Wrone '93, on post-election politics

“Immigration will be an interesting issue to watch.”

Brandice Canes-Wrone '93, the Donald E. Stokes Professor of Public and International Affairs at Princeton, has written extensively on the presidency and elections, including “Who Leads Whom? Presidents, Policy, and the Public.” She spoke to PAW three days after the election.

*How are the president and the Congress going to get along this term? Can we expect more dysfunction?*

Both the president and Speaker Boehner are likely to try to make moves to come together. The president is no longer running for re-election. He wants to cement his place in history. To really cement it, he's going to have to take on some of the big challenges we're facing, including the fiscal challenges. So the challenge is for Boehner to lead his members and for Obama to lead his party — because it's not necessarily the case that his incentives will be aligned perfectly with those of [Senate majority leader] Harry Reid and [House minority leader] Nancy Pelosi.

*What issues will be the great test for them beyond the so-called fiscal cliff?*

I think immigration will be an interesting issue to watch. The Republicans have made noises that they are willing to work on immigration. In each party, there are constituents who would really like to see immigration reform, and then a set of constituents who are concerned about large-scale immigration reform, particularly for lower-income workers. There are different reasons for the opposition in each party.

*What is Boehner's motive to work with Obama?*

On immigration, the Republicans want to do better with Latinos. It's an electoral motive. Remember that Reagan had a bill that in today's terms would be called an amnesty bill. People — not only conservatives, but also Democrats and independents — too easily forget that history.

In terms of the fiscal issues, the challenges are so big and the consequences so dire, I think that Boehner recognizes that we have to do something. And not just Boehner. Then it just becomes: What should we do? Both parties have an



incentive not to take us over some sort of cliff.

*How else might Obama's second term be different?*

Second-term presidents tend to shift more to the unilateral or executive side. So policy tools like executive orders tend to become more important. They often focus more on foreign policy because it's something they can do unilaterally — I would not be surprised to see Obama's foreign policy shift ever so slightly toward the Obama of the primaries [of 2008]. One of the surprises to many of his supporters is that, once in office, he has seemed not all that distinct from your typical Republican president in foreign policy. I think some of that was

re-election oriented. I think one thing we'll see is a greater emphasis on disarmament. That was not on the forefront of the agenda in the first term for fear of being seen as soft on national security.

*What will it take to move politics away from the extremes?*

I wish I had an answer. The politicians who, both at the state level and the national level, move beyond polarized politics tend to be the executives, the governors and presidents. It's not fair to say it's all up to Obama, but a president who is willing to take on the polarization that exists in Congress and who makes that a priority can do a lot. Here the smart money is on its not happening in the immediate future.

*Did money make a difference in this election?*

Both sides were evenly matched, so it's an election where the money cancels itself out. One thing that Republicans and Democrats will have to rethink — and this relates more to early voting — comes from how so much of the voting is moving ahead. There's a question about whether the way in which the conventions were scheduled disadvantaged Romney because he couldn't spend the money he had raised for the general election until just a few weeks before some people were going to the polls to vote. Romney had to spend a lot of his primary donations in the spring, so he was at a big spending disadvantage in July and August, and that's when Obama defined him. ■

— Interview conducted and condensed by Merrell Noden '78



## Defying expectations, football team returns to Ivy prominence

**Princeton's football team** came roaring back in spectacular fashion this season, with thrilling wins over Big Three rivals Harvard and Yale and a 5–5 record that marked the team's best finish since 2006. Coming off consecutive 1–9 seasons — and forecasts for another weak season — the Tigers defied expectations with a 4–3 record in the Ivy League, putting them in a third-place tie with Brown and Dartmouth.

“Everybody thought we were going to be last in the league, but this team really rallied,” said co-captain Mike Catapano '13.

Over a four-week midseason stretch, the Tigers blew out the Ivy League, dealing defeats to Columbia, Lafayette, and Brown before shocking Harvard with a memorable homecoming comeback in which the Tigers scored 29 points in the fourth quarter to beat the

defending champion 39–34. But Princeton tumbled from first to third place with losses to Cornell and Penn, surrendering fourth-quarter leads while committing four turnovers in each game.

Those struggles continued for 15 minutes at the Yale Bowl Nov. 10, as the Tigers fell behind the injury-ravaged Bulldogs in front of hundreds of Princeton fans. But just before half-time, cornerback Trocon Davis '14 intercepted a pass at the Princeton goal line and returned it 100 yards for a touchdown, giving Princeton a lead it never relinquished in a 29–7 victory. “That was the biggest play of my entire



# Bonfire!

The Nov. 17 Big Three bonfire festivities began a few hours after Princeton football lost its season finale to Dartmouth, but that result did little to dampen the mood on Cannon Green, where thousands of students and fans gathered. President Tilghman raved about the team's "sweet" wins over Yale and Harvard (and gently chided fans who left the stadium before Princeton's fourth-quarter comeback against the Crimson). Brig Walker '07, a senior on the last bonfire team, passed the ceremonial torch to 2012 co-captain Mike Catapano '13. And head coach Bob Surace '90 shared a bit of history — and hopeful foreshadowing — noting that the year after he lit the bonfire as a player in 1988, the Tigers "took it to the next level and won the Ivy League title" in '89.

By Brett Tomlinson

Photograph by Beverly Schaefer


Watch a video of the Big Three bonfire @ [paw.princeton.edu](http://paw.princeton.edu).



Quarterback Quinn Epperly '15 ran for a touchdown and threw for another to lead Princeton to a 29-7 victory over Yale Nov. 10.

life," Davis said after the game, which earned the campus its first bonfire since 2006.

Princeton ended its season with a loss to Dartmouth, falling 35-21 Nov. 17. With several key players sidelined or limited by injuries, the Tigers surrendered three touchdowns to the Big Green in six minutes following halftime and lost by their largest margin of the season. But the team's impressive gains gave it much to be proud of.

"That was the goal of our whole team, to bring pride back to this University and this football program," Catapano said.  By Kevin Whitaker '13

## Top forecasts buoy men's, women's hoops



Point guard T.J. Bray '14 will run offense for men's basketball.

The last time the men's and women's basketball teams both were picked to finish first in the Ivy League media poll, in 2010-11, each team lived up to that billing, winning conference titles in a thrilling year of Princeton basketball. Two years later, both sets of Tigers have been declared the favorites again, and with veteran-laden rosters and a recent history of success, each team could hang even more banners in Jadwin Gym this winter.

"We're doing something wrong if those aren't the expectations," said men's head coach Mitch Henderson '98. "In the league, I think we match up well with everybody."

The two teams' similarities reach beyond preseason rankings. Both squads are led by do-everything senior forwards, Ian Hummer '13 and Niveen Rasheed '13, the top returning scorers and rebounders in their leagues. Each team will use several upperclass players in the front court, and both offenses are run by experienced point guards, T.J. Bray '14 and Lauren Polansky '13.

Perhaps most importantly, both teams have done little but win over the past three years. The women have lost only one Ivy League game during the



last three seasons, while the men have won at least 10 of 14 conference games each year since 2009. "Having that legacy is pretty special, and hopefully we can keep that going this senior season," Hummer said.

The men's team is stocked with skilled forwards and centers. In addition to Hummer — an explosive, physical player who passes well and is an asset on defense — the Tigers have centers Brendan Connolly '13 and Mack Darrow '13, roommates with very different skill sets, and talented forward Will Barrett '14, who is back after sitting out most of last season with a foot injury.

But with the graduation of Doug Davis '12 and Jimmy Sherburne '14 with a shoulder injury, Princeton's back court is thin. The Tigers will need Bray, who did not play on the team's summer trip to Spain due to a knee injury.




Standouts on the women's basketball team include point guard Lauren Polansky '13, left, and forward Niveen Rasheed '13, at a practice.

"We're a completely different team when he's on the floor," Henderson said. "He does everything for us."

The women's team, meanwhile, has made three straight NCAA tournament appearances but still lacks a postseason victory. Without another proven scorer alongside Rasheed, head coach Courtney Banghart has created a new offen-

sive system that provides more balance on the court.

Princeton will continue to play an aggressive defense fronted by Polansky, the two-time reigning Ivy League Defensive Player of the Year. The Tigers stifled foes with pressure last season and grabbed 12 more rebounds per game than their opponents, the fourth-best record in the nation.

No player epitomizes that style better than Rasheed, a high-energy player who relentlessly seeks out rebounds and loose balls. With the graduation of All-Ivy players Lauren Edwards '12 and Devona Allgood '12, Rasheed will take even more responsibility on both ends of the floor. Banghart said she's up to the challenge. "People are going to see a better Niveen than they saw last year, which is a scary thought," she said.  *By Kevin Whitaker '13*

BEVERLY SCHAEFER



Having grown and adapted over the years to serve modern needs, this timeless farmhouse remains organic to its setting, a privately situated 4-acre plot surrounded by preserved land and unlike any other in Princeton Township. Rustic stone walls edge terraces overlooking a tree-dotted lawn stretching down to a pond with an imported thatch-roof teahouse from Thailand hidden by the landscape.

**\$1,250,000**



On one of the Princeton area's prettiest roads in Montgomery Township not far from Nassau Street, 100+ acres of level and rolling land is traversed by Bedens Brook, enhancing the bucolic setting and inviting wildlife. Two cottages share the classic cape style, while a caretaker's cottage and separate office are also comfortably finished. Three barns are magnificent with exposed framing and towering silos.

**\$3,400,000**

**Norman 'Pete' Callaway 609.921.1050 Office • 609.558.5900 Cell**



[callawayhenderson.com](http://callawayhenderson.com)

EACH OFFICE IS INDEPENDENTLY OWNED AND OPERATED. SUBJECT TO ERRORS, OMISSIONS, PRIOR SALE OR WITHDRAWAL WITHOUT NOTICE.

## EXTRA POINT

# A bond that endures for coach and player

By Merrell Noden '78



*Merrell Noden '78 is a former staff writer at Sports Illustrated and a frequent PAW contributor.*

**The best college coaches** occupy a special place in the lives of athletes. As the adults with whom student-athletes spend the most time — whether it's during practice or trips to away games — they offer not just on-the-field instruction, but also guidance, friendship, and a shoulder to cry on. They are parents without the psychic baggage.

Many Princeton coaches form lasting bonds with their athletes, but not many have grown as close as Alyson Goodner '00 and swimming coach Susan Teeter, who officiated at Goodner's wedding in May.

Their bond began when Teeter — that's what Goodner calls her — made a recruiting visit to Goodner's home in Philadelphia in 1995. Goodner remembers being struck by how Teeter "immediately felt like family."

A few weeks into her freshman year, Goodner, who swam the 200-yard butterfly, experienced a jolt of panic about academics. Sitting on the couch in Teeter's office, Goodner spilled out her anxieties, and a few tears.

"I really cherish those opportunities to help kids learn about themselves and how to navigate life," says Teeter, who is 53 and has been coaching at Princeton since 1984.

After Goodner graduated, the two kept in touch as Goodner moved to California to work for Gap and then participate in Teach for America. By then, Teeter had grown close to Goodner's parents too, often meeting them for dinner. When Goodner's father was diagnosed with Alzheimer's disease in 2005 — and she was living in England — a group of 30 teammates and friends took turns looking in on her parents, with Teeter serving as the group's unof-

Swimming coach Susan Teeter, center, officiated at the May wedding of Alyson Goodner '00 and Paul Daniels.



ficial captain. There were times when Teeter was the only person Goodner's mother would allow in the door.

Goodner moved back to Princeton this year, and the pair now see each other often. Goodner's mother died in 2008, her father earlier this year, so Teeter has become a surrogate parent.

"Teeter's always been a balance of the strengths of my mother and father," says Goodner. "She's a total straight shooter."

A few years ago, Goodner met Paul Daniels, a world-champion rower who had moved to Princeton to train with the national team. When Goodner's friends heard she was taking him to meet Teeter, they knew the relationship

was serious.

On the day the couple got engaged, they readily agreed on whom they would ask to officiate at the wedding. With "19 bucks and a Visa card," Teeter became a Universal Life minister over the Internet. She counseled the couple on the challenges of marriage, wrote the wedding ceremony, and presided over it. Teeter had Goodner's niece and nephew carry lilies of the valley and birds of paradise during the ceremony, the flowers Goodner's father had brought her mother every Wednesday.

The friendship that began between coach and player 16 years ago had turned into an unbreakable bond. **P**

## SPORTS SHORTS

**FIELD HOCKEY** defeated top-ranked North Carolina 3–2 Nov. 18 to win its first-ever national championship. Kat Sharkey '13, who led the nation in scoring this season, helped orchestrate a second-half onslaught that overwhelmed the Tar Heels. The Tigers lost just one game all season to capture their eighth-straight Ivy League title. (See full coverage in PAW's Jan. 12 issue.)

**WOMEN'S SOCCER** lost to Marquette 3–1 Nov. 15 in the second round of the NCAA tournament after winning its first conference title since 2008. The Tigers' 7–0 season was just the fifth undefeated season in Ivy League history.

**MEN'S CROSS COUNTRY** finished a program-best 11th at the NCAA Championships Nov. 17 after winning the Ivy League Heptagonals in dominating fashion Oct. 27, when five Tigers were in the top 12 at West Windsor Fields.

# A WORLD IN A

## Paul Steinhardt's long, improbable



P  
26

With apologies to William Blake, who once urged us to “see a world in a grain of sand,” the speck that Paul Steinhardt is holding — glued to the point of a glass needle because you’d never find it again if it weren’t — is barely visible to the naked eye. Steinhardt’s enthusiasm notwithstanding, a visitor to his fourth-floor office in Jadwin Hall is only being polite when he acknowledges that he can see it at all.

But Steinhardt is a theoretical physicist, so let your mind bore in to the atomic level. This speck is called a quasicrystal, a rare 20-sided clump of atoms that violates what were long believed to be the most basic rules of crystalline structure. Three decades ago, an Israeli physicist, Daniel Shechtman, stumbled upon man-made quasicrystals in a piece of indus-

trial aluminum and later received the Nobel Prize for his discovery. But Steinhardt already had deduced that such structures might exist, and it was he and his co-author who explained what Shechtman had found.

Having looked within, now pull back. Rewind the probable history of this speck like one of those reverse-action films in which the diver emerges feetfirst from a pool and arcs up onto the board. Follow it back to the piece of khatyrkite, the rare mineral in which it once was embedded; back into the white cardboard box in the collection of the University of Florence; back into the black-market collection of an Amsterdam gem dealer. Go further, to the remote Russian stream bed where a platinum prospector first picked up the khatyrkite 32 years ago, to the glacier that dropped it during

# GRAIN OF SAND

search for a natural quasicrystal *By Mark F. Bernstein '83*



P  
27

the last Ice Age 15,000 years ago, to the meteorite that disintegrated in the atmosphere and rained stardust over Siberia.

Don't stop. Reassemble that meteorite and pull it back into the sky, out of our galaxy, out into the farthest reaches of space, where Steinhardt thinks it may have formed in a collision with another meteorite. Chemical analysis suggests that this little bit of metal ricocheted around the universe for 4.5 billion years. It is older than our solar system yet something never seen before, and it could fit on the head of a pin.

How about that, William Blake?

## Officially, Steinhardt is the Albert

Einstein Professor in Science (and director of the Princeton Center for Theoretical Science), but his three-decade investi-

gation of quasicrystals has required him to be part Carl Sagan, part Indiana Jones, part Lewis and Clark, and part Sherlock Holmes. Throw in a touch of Captain Ahab, as well, for it is not too much to say that in the world of crystallography those rare specks of metal have become — if one can lurch to the opposite end of the metaphorical scale — the Great White Whale.

Face to face, Steinhardt is mild-mannered and engaging,

Above: Members of the July 2011 expedition to Russia stand in front of trucks fitted with tank treads to crawl across the permafrost; from left, Bogdan Makovskii, Glenn MacPherson '81, Will Steinhardt, Chris Andronicos '99, Marina Yudovskaya, Luca Bindi, Victor Komelkov, Olga Komelkova, Paul Steinhardt, Alexander Kostin, Valery Kryachko, Michael Eddy '11, and Vadim Distler.

WILLIAM STEINHARDT

with an uncommon ability to explain opaque scientific concepts in layman's terms. That is helpful, for his interests range among particle physics, dark energy, astrophysics, and cosmology. One of the founders of an inflationary model of the universe, which holds that the early universe underwent a period of exponentially rapid expansion, he since has developed a competing theory, a so-called cyclic model, which posits that the universe oscillates through periods of expansion and contraction. (See "The Cosmic Apocalypse," PAW, Feb. 11, 2009.) A prolific writer and lecturer, Steinhardt has co-authored one book and edited four more, published more than 200 journal articles, and received six patents relating to quasicrystals, with two more pending.

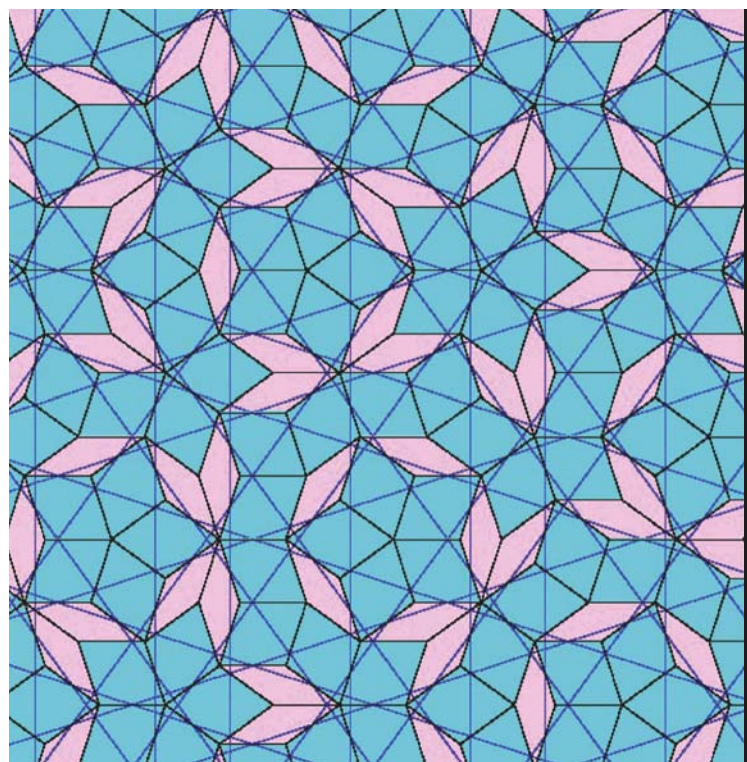
The best way to understand quasicrystals is to look at something two-dimensional. Think of your bathroom floor. Chances are, the tiles are laid in a regular, repeating pattern. If the pattern is made with a single type of tile, only certain shapes — three-, four-, or six-sided — can be used to fill the space completely. Use pentagons, octagons, or any other shape, it was believed, and there will be space left over.

Physicists long thought that the atoms inside a crystal also arranged themselves in repeating patterns. Like those floor tiles, only certain shapes were permissible, and only certain types of symmetries — two-, three-, four-, or sixfold — were possible (in other words, each piece or atom could be rotated a certain number of degrees and still fit in the pattern). Starting in the 1960s, mathematicians tried to see if it were possible to arrange tiles in a pattern that never repeated itself — that was, to use the scientific term, *nonperiodic*. A British mathematician, Roger Penrose, created such a pattern using two shapes, a fat and a thin rhombus.

In the early 1980s, Steinhardt began working with a graduate student, Dov Levine (now a theoretical physicist in Israel), when both were at the University of Pennsylvania, to see if they could find atomic arrangements with supposedly impossible symmetries. Looking at Penrose's two-dimensional mosaic, they discovered that the pattern thought to be nonperiodic was actually quasiperiodic, meaning that the pieces did follow a pattern, although that pattern never perfectly repeated itself.

At the same time, Shechtman, working at what is now the National Institute of Standards and Technology, accidentally discovered an aluminum alloy that, when viewed under an electron microscope, was seen to contain crystals with fivefold symmetry. Not only did no one believe him — crystals *couldn't* have fivefold symmetry — his supervisor reassigned him and suggested that he learn something about crystallography. It took two years before any scientific journal would agree to publish Shechtman's findings.

While Shechtman's article was out for peer review, a mutual friend brought a copy to Steinhardt. As soon as he saw the unique X-ray diffraction pattern for Shechtman's aluminum sample, Steinhardt rushed to his desk and pulled out a copy of a quasiperiodic pattern he and Levine had predicted. They matched exactly. Shechtman had not understood how the



atoms in such an alloy could be arranged to produce the odd symmetry he had seen, but Steinhardt did. In December 1984, five weeks after Shechtman's article appeared, Steinhardt and Levine published their own article in which they dubbed these structures quasicrystals. (Steinhardt and Peter Lu '00, now a postdoctoral research fellow at Harvard, since have discovered that medieval Islamic artisans had designed quasiperiodic wall mosaics 700 years before the concepts behind them were understood in the West. Their findings, published in the journal *Science* in 2007, made the front page of *The New York Times*.)

In the decades since Shechtman's discovery, more than 100 types of quasicrystals have been produced for industrial uses. Because quasicrystals are poor conductors of electricity, they are good insulators; and because they are unusually hard and slippery, they have been put into ball bearings, razor blades, and nonstick coatings. All have been created in the laboratory under tightly controlled conditions.

Steinhardt, however, wondered if quasicrystals also might occur in nature. Off and on for more than a decade, he searched through mineral collections in major museums — until shortly after he arrived in Princeton in 1997, when geosciences professor Kenneth Deffeyes '59 introduced him to Lu. Then a junior, Lu was something of a geological prodigy who had won the national gold medal for mineral collecting four times while in high school. Lu and Steinhardt devised an algorithm to hunt for quasicrystals through their unique X-ray diffraction patterns.

Fortunately, there is an international database of such diffraction patterns for 80,000 different natural and manmade materials. After plowing through them, Steinhardt and Lu identified six minerals that looked promising, tracked down



Top left: Penrose tiles are named after British mathematician Roger Penrose, who arranged fat and thin rhombuses in a pattern that not only filled the available space but did so with symmetries thought to be impossible. Steinhardt recognized that these patterns also could exist in three-dimensional crystals. Above: A 3-D model showing a section of an icosahedral (20-sided) quasicrystal. The shapes within the quasicrystal are arranged so that all available space is filled.

samples, and had each analyzed at the Princeton Institute for the Science and Technology of Materials (PRISM). By 2001, after four years of work, they had found ... nothing. Steinhardt and Lu published a paper announcing their failure and asked for help from anyone who might have access to rare minerals.

Six years later, in 2007, Luca Bindi, director of the mineral collection in the natural history museum at the University of Florence in Italy, told Steinhardt there might be a promising candidate in a collection of 10,000 mineral samples his museum had acquired back in 1990. He spent more than a year checking likely candidates without success. Finally, in late 2008, Steinhardt suggested that he test a sample of a rare rock called khatyrkite. Bindi prepared a sample and sent it to Princeton for X-ray diffraction. On New Year's Day in 2009, Steinhardt rose at 5 a.m. and went in to the lab to watch PRISM imaging and analysis director Nan Yao test this tiny piece of khatyrkite.

"We popped it into the machine," Steinhardt recalls, "and wow! This was much better than Shechtman's pattern. I never thought I would see anything in nature that was that good. There was no question that what we had there was a quasicrystal."

There were questions, however. This quasicrystal, an aluminum-copper-iron alloy ( $\text{Al}_{63}\text{Cu}_{24}\text{Fe}_{13}$ ), appeared as a granule in a rock about 3 millimeters wide that was studded

with a number of other extremely exotic minerals, like chocolate chips in a cookie. One of those chips was a piece of nearly pure metallic aluminum. Geologists were convinced that metallic aluminum does not exist naturally on earth; the metal reacts so strongly with oxygen that it is always found as aluminum oxide. The oxygen has to be processed out to produce the aluminum used in foil, siding, and other familiar products.

On New Year's afternoon, Steinhardt sent his colleagues an email wishing them a "Happy Quasicrystal Day." Deffeyes, however, refused to believe that Steinhardt had found what he thought he had found. "I want no part of this one," he said, but he did refer Steinhardt to his colleague Lincoln Hollister, who began his career studying rocks from the Apollo moon expeditions. Hollister, too, told Steinhardt that this quasicrystal must have come from some industrial plant, but he agreed to try to help solve the mystery.

Hollister took Steinhardt to Washington, D.C., to meet a former graduate student, Glenn MacPherson \*81, who was working for the Smithsonian as a meteor geologist. MacPherson delivered the same verdict. "I'm sorry," he said, "but what you have there is impossible."

As Steinhardt kept badgering, Hollister and MacPherson conceded that such a crystal might — theoretically — have formed naturally under intense heat and pressure. But there were only two places where such conditions might exist. One was deep inside the earth, near the boundary between the core and mantle, and the other was deep in outer space. Steinhardt took this as a victory. "So it's not impossible, it's just really unlikely," he recalls thinking. "That means you try harder, you don't give up."

The only way to prove that this sample was natural and not man-made was to examine more of it. Unfortunately, Bindi had been forced to destroy the only piece available in preparing it for the X-ray diffraction.

They would have to find more khatyrkite.

## Where had Bindi's museum gotten its

sample? The only clue the scientists had to go on was the box it arrived in, which said that it had been found in a remote part of eastern Russia and been bought from an Amsterdam gem dealer named Nicholas Koekoek. Steinhardt and Bindi tried to trace Koekoek, but the trail was cold. Scouring the Internet, they found four more museums that claimed to have khatyrkite, but three of the samples turned out to be fakes. The fourth, in a museum in St. Petersburg, Russia, was the world's holotype of khatyrkite — the physical example used when the specimen first was formally described — and thus could not be dissected.

Steinhardt tracked down the Russian scientist who had announced the discovery of khatyrkite in 1985, a man named Leonid who once headed the Soviet Union's platinum institute. He refused to help. A few months later Bindi was in Florence and mentioned his fruitless search for Koekoek the gem dealer to a dinner companion, who was from Amsterdam. The friend remarked that a neighbor had the same surname. The woman turned out to be Koekoek's widow.

Bindi traveled to Amsterdam to meet with the widow, who showed him a diary in which her late husband had recorded his transactions. In it, Koekoek mentioned that he had gotten khatyrkite in Romania from a man identified only as “Tim.” That was hardly enough to go on, but then the woman produced a second, secret diary. This one stated that Tim the Romanian actually was Leonid. The Russian scientist, it seemed, had been selling rare minerals on the side while working at the Soviet platinum institute.

Steinhardt and Bindi then reread the Soviet scientist’s paper, which reported that the sample had been found in the Listvenitovyi stream in the Koryak mountains by a man named Valery Kryachko. Finally the scientists chanced upon a 1990 paper that listed Valery Kryachko as a co-author. Steinhardt located the lead author of this paper in Moscow, and he put Steinhardt and Kryachko in touch.

Kryachko proved to be all that Steinhardt hoped he would be. In 1979, Kryachko told Steinhardt, he was sent to northeastern Russia to look for platinum. After spending several days along an old gold-mining stream (platinum often is found near gold veins), he had nothing to show for his efforts, and picked up several pieces of an interesting-looking mineral to prove that he had been out in the field. He still had his maps and was sure he could find the spot again.

Over the next year and a half, Steinhardt raised money for a field expedition from a private donor (Steinhardt won’t say how much or from whom) and assembled a team of 10 scientists including MacPherson, Cornell geologist Chris Andronicos ’99, and Mike Eddy ’11, now a graduate student at MIT, as well as two drivers and a cook. In July 2011, they set off.

The Koryak region is in far northeastern Russia, just across the Bering Sea from Alaska. It is accessible for only about three weeks a year; the rest of the time it is buried under snow or boggy permafrost. Planes took the group as far as the mining town of Anadyr, about 217 miles from their destination, but even traveling in trucks equipped with tank treads, it took them four days, crawling at about 10 miles an hour, to reach the area. They had to hike the last few miles on foot.

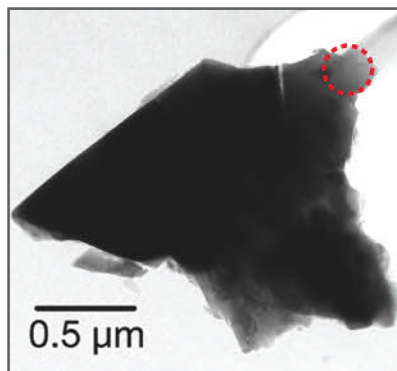
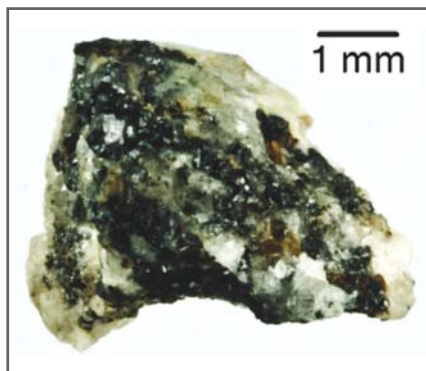
Once the researchers reached the right stream, they spent 10 days fighting clouds of mosquitoes and watching for bears. The stream bed’s blue-green clay was so thick, Eddy says, that it snapped their shovels in half, forcing them to scoop out small clumps by hand. Temperatures in the rushing water were barely above freezing, even in mid-summer; diggers had to warm their hands first over a fire before plunging them into the stream. Their one luxury came at

mealtimes; the salmon were running, and the Russians would squeeze fresh caviar out of them before grilling the meat, washing it all down with an ample supply of vodka.

Detecting a quasicrystal in a ton and a half of clay was like looking for a needle in a very mucky haystack. It fell to Kryachko, an experienced gold-miner, to pan through the mud and sift out promising nuggets, which MacPherson then examined under a field microscope. Other members of the team, meanwhile, surveyed the area and looked (unsuccessfully) for a possible meteor-impact crater.

It was not until a month after their return that laboratory analyses confirmed that they had found more natural quasicrystals — nine in all, each the size of a grain of sand. Steinhardt, Bindi, Yao, and Lu have named the material icosahedrite, because the molecules that comprise it have an icosahedral (20-sided) shape, like the panels of a traditional soccer ball.

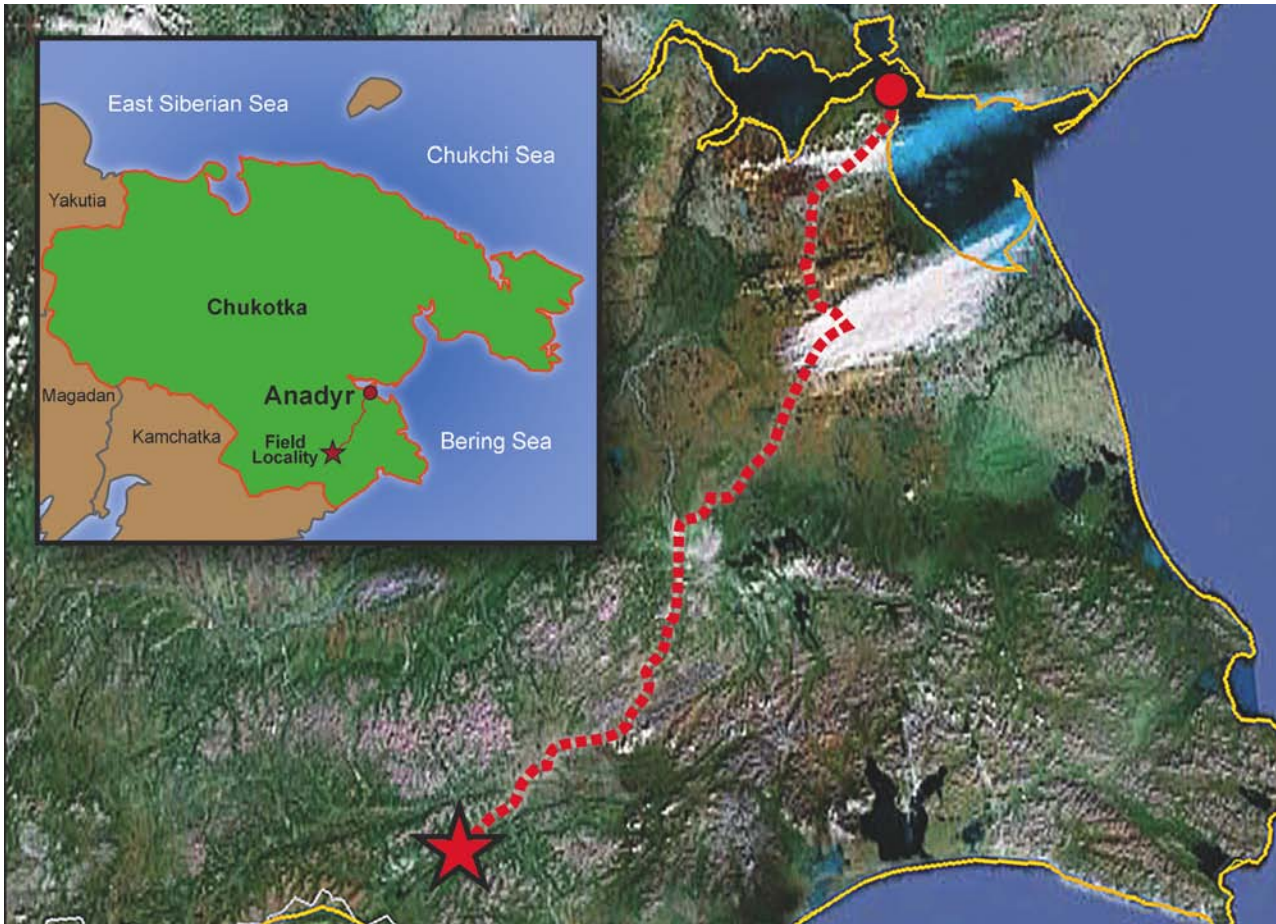
Compared to the rest of the project, the effort to determine where this khatyrkite formed was relatively easy. Materials originating on Earth contain very different ratios of oxygen isotopes than those originating in outer space, Steinhardt explains, and the ratio of



This tiny chunk of meteorite, above and below left, from the geological museum at the University of Florence, contained a rare sample of khatyrkite. When a piece of the khatyrkite was examined by X-ray diffraction at the Princeton Institute for the Science and Technology of Materials in January 2009, it was found to contain the first known example of a naturally-occurring quasicrystal, below right.

IMAGES: LUCA BINDI (COIN); PAUL STEINHARDT AND HAN YAO





oxygen isotopes in khatyrkite is consistent with a rare kind of meteorite called carbonaceous chondrite, which formed at the beginning of the universe. The khatyrkite also contained pieces of another mineral, stishovite, that often is found in meteorites. Although several scientists questioned Steinhardt's first reports that he had found a natural quasicrystal in a meteorite, these isotope studies have put those doubts to rest.

The discovery of a natural quasicrystal is significant, says Deffeyes, who is retired and living in California. "These types of quasicrystals were thought to be a lab curiosity. To find one in nature says that this thing has stood around for billions of years without altering into something else. That means it's stable. I didn't think they had the chance of a snowball in hell, but now I'm a believer rather than a skeptic."

Naturally occurring quasicrystals also may force scientists to rethink geology. Finding a natural quasicrystal, Bindi writes in an email from Italy, "dramatically changes the history of this discipline, expanding the catalog of materials formed by nature. The definition of a mineral (reported in all the textbooks of mineralogy) as material characterized by an ordered and periodic structure would have to be modified, forever."

A.J. Stewart Smith '66, the Class of 1909 Professor of Physics and dean for research, agrees. "This changes people's views of crystallography and what structures are possible," he says. "That's fundamental."

After extensive sleuthing, it was determined that the quasicrystal-bearing khatyrkite in the Florence museum came from the Listvenitovyi stream in the Koryak region of far northeastern Russia. In July 2011, Steinhardt and 12 others traveled to this remote area, which is accessible for only a few weeks a year, on a 10-day expedition to find more quasicrystals.

In science, however, each answer only raises new questions. Steinhardt and Hollister now are trying to determine exactly how this quasicrystal formed and what that might tell us about the formation of the galaxies. Steinhardt also has been talking to scientists who are interested in sending a probe to an orbiting asteroid, where conditions might have produced other quasicrystals.

Robert Downs, a scientist at the University of Arizona, speculated in *Science News* that these crystals might have been born in the shock waves from a supernova that formed the sun and the planets. This discovery, he predicted, "will tell us something fundamental about the process that created the material that formed our solar system."

So another journey begins — and who knows how long this one will take? Steinhardt is enthusiastic. "When I work on a problem, I let the problem lead me to the next thing," he explains. "One thing I've learned on this project is, you just have to go all in. Never let anything go. And that continues to this day." 📌

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

PETER W. SINGER '97  
EXPLAINS HOW  
WE CAN BE  
AT WAR AND  
HARDLY NOTICE

By Christopher Shea '91

# WARFARE under the radar

P  
32

## Peter W. Singer '97's job is to track and forecast trends

in military affairs and war-related technology. To drive home how fast things are moving in that arena, he tells an anecdote involving not a battlefield or a White House situation room but the equipment in his baby nursery:

When he and his wife had their first child, a son, in 2009, they bought a baby monitor that included a camera equipped with night vision that sent an image to a 3-inch television screen. "We had better technology to monitor our baby than the Iraqi Army had to detect coalition forces during the first Gulf War, in the 1990s," he says.

In late summer 2012, as Singer and his wife prepared for the birth of their second child, they bought a new system. This time the camera relays night-vision imagery over a data network to a smartphone that can redirect the camera remotely. "Now," he says, "we have better technology than the U.S. military had just a few years ago." It pales beside sensors being deployed in the field today.

It always has been hard for prognosticators to divine which technological advances will shape warfare, and in what ways. Singer, the director of the 21st Century Defense Initiative at the Brookings Institution think tank in Washington, D.C., points out that then-Col. George Custer

declined use of a Gatling gun, an early machine gun, when he headed to the Black Hills because such guns were conceived of as a kind of artillery that would only slow down a fleet cavalry unit. Had Custer viewed the new weapon more imaginatively, we might recall his name somewhat differently now. And spare a thought for the general who, in 1938, lamented the "foolish and unjustified discarding of horses" from the American repertoire.

But Singer has a pretty good track record of picking up military trends ahead of the curve. Lately, he's been arguing that few people realize just how thoroughly technological and social developments have caused modern warfare to diverge from the World War II-inspired *Band of Brothers* version — men in uniforms facing off against each other — that many of us still hold in our heads, despite years of evidence to the contrary. The outsourcing of military duties to private contractors, the growing use of robotics (especially armed drones), the rise of a professional military and the concomitant divide between soldiers and civilians that followed the end of the draft — all of this has changed the face of war. The changes also may be making wars easier to get into, and the decisions to do so less democratic.

JEFFREY MACMILLAN P14

FIGHT  
THE  
POWER  
'OF COURSE'

CINEMAX ORIGINAL



Peter W. Singer '97 in his office at the Brookings Institution in Washington, D.C.

Consider: Even as the wars in Iraq and Afghanistan wind down, what Singer calls a “third war” — the drone war, or targeted-killing war — has begun, extending outside official battle zones into Pakistan and Yemen. “We’ve had almost 350 air strikes in Pakistan with drones,” he says, speaking in September in his Dupont Circle office, which is adorned with posters of war-themed movies and television shows like *Syriana* and *Traitor*. “Three hundred fifty is not a small covert operation. This is not the equivalent of trying to kill Castro. This is an air-war campaign. We’ve carried out almost 50 strikes in Yemen. Yet we haven’t had a debate about it, we haven’t voted on it. I’m not knocking the operation, but something that we would have previously treated as a war, we aren’t treating in the same way because the technology is unmanned.”

Moreover, the U.S. campaign in Libya will go down as a historical milestone, Singer thinks, because the Obama administration was able to argue that the War Powers Resolution, which dates to 1973 and was intended to reign in an overly adventurous executive branch, did not apply because American servicemen hadn’t been placed in harm’s way — even as U.S. drones blew up Muammar el-Qaddafi’s air defenses and guided strafing runs by NATO planes. (U.S. pilots did fly some missions as well.) Plenty of other presidents have tried to circumvent the War Powers Resolution, yet this was a fresh, technologically driven twist on such maneuvers.

“When I was taking a seminar in political science and philosophy at Princeton, learning why democracy was better than all those other forms of government, a main reason was that the public was linked to its wars,” Singer says. “It was both making the decisions and bearing the costs. But what happens if those links are changing in a way that philosophers could never have imagined?”

Singer is hardly the only one thinking about such shifts: Whether we’re in the midst of a sociological and technological revolution in military affairs along the lines Singer proposes is the subject of heady and sometimes-heated debates among scholars of armed conflict and international law.

Despite a Harvard Ph.D. in government, Singer’s path has not been the traditional academic one: He worked briefly at the Pentagon before joining Brookings, where he soon, at 30, became the youngest person to be named senior fellow. Over the course of three books, he has developed a distinctive voice; in *Wired for War: The Robotics Revolution in the 21st Century* (2009), he rattles off pop-culture references (to *Return of the Jedi*, the sci-fi classic *Ender’s Game*, even MTV’s *Real World*) at an astonishing pace, alongside the requisite quotes by the Prussian military theorist Carl von Clausewitz. He says straightaway, in *Wired for War*, that one reason he chose the topic is that “robots are frackin’ cool.” His breezy prose, reporting chops, and telegenicity have landed him some unorthodox side gigs, including consulting for the video game *Call of Duty: Black Ops 2*, set in 2025. And pop culture is more than tangential to his work, he insists: Sometimes, there can be more insight into the future of war in one sci-fi thriller than in dozens of peer-reviewed academic works.

**A through-line in Singer’s work is an interest in what he calls the seamy side of modern war.** His books also are linked by an interest in military “outsourcing,” broadly defined. Working for a United Nations-financed group in the Balkans during two summers in college, he noticed that “the entire military balance” in the region hung on the work of Military Professional Resources Inc., or MPRI, a private company tasked with no less than training the Bosnian military. Singer’s interest in the then-arcane subject of the outsourcing of such work to for-profit companies continued through graduate school at Harvard and led to the publication of *Corporate Warriors: The Rise of the Privatized Military Industry*, in 2003.

Several years before the private security contractor Blackwater USA would become infamous for killing at least 17 civilians in Nisoor Square in Baghdad, Singer was asking: What rules of war apply to such forces? Can they abandon their posts if they decide their interests don’t coincide with the professional army’s? Even now, no satisfactory answers exist to such questions, demonstrating the risks that the United States takes in embracing privatization.

His next book, *Children at War*, highlighted the scourge of armies and militias in such places as Congo and Sierra Leone conscripting children under 18, but *Wired for War* was his breakout book. A best-seller, and promoted by the comedian and satirist Jon Stewart as “awesome,” it could not have been better timed, arriving just as drones were becoming one face of American foreign policy. *Wired for War* makes clear just how unexpected was the rise of inexpensive, unmanned, armed aircraft, even within the U.S. military. In the mid-to-late 1980s, a company named Leading Systems built a prototype of an unmanned drone, named Amber, that could fly for many hours, over great distances, but the Pentagon showed no interest and the company went out of business. What place did this ungainly, cheap (1/85th the cost of a stealth fighter jet), propeller-driven vehicle have in today’s bleeding-edge military? A company named General Atomics picked up the pieces, renamed it Predator, and the CIA showed interest. “The rest,” Singer wrote, “is robot history.”

By now, some 8,000 drones have been deployed in combat zones, as well as 12,000 earthbound robotic vehicles, including such stalwarts as the iRobot and Talon, which can be sent ahead to scout dangerous terrain or defuse improvised explosive devices.

An early champion of drones was Virginia Sen. John Warner, who argued that they would be useful when public opinion ran against committing its young men to combat. “[I]n my judgment, this country will never again permit the armed forces to be engaged in conflicts which inflict the levels of casualties we have seen historically,” he said at a congressional hearing in 2000. “So what do you do? You move



toward the unmanned type of military vehicle to carry out missions which are high risk ... ?

Some military officers, including Gen. Norton A. Schwartz, the former Air Force chief of staff, have argued that drones are simply another weapons platform, and that they don't change the calculus of when — and if — to strike. But Micah Zenko, a fellow at the Council on Foreign

Zenko's book was about debates, dating back to 1982, over uses of force falling short of war, and often it was that risk to pilots, and related issues, that tipped the balance against using force. Drones remove those challenges, providing an ever-tempting option for policymakers. "Nothing sucks the oxygen out of a debate over what to do about a country more than military force," he says: No policymaker believes

that drone strikes are a long-term solution for the appeal of terrorist groups, yet the availability of drones makes force frictionlessly available — the default option.

Zenko adds, "One thing that is clear about drones is that, wherever they go, they take on more missions than they initially had." Already the line between striking people who pose an immediate threat to the United States and those who threaten mainly their local governments has been crossed, he argues.

**Other observers,** however, think drones represent less of a break from the past than does Singer. "I share many of Peter's concerns about being more systematic about how we use drones, or more clear about how we're using them," says Michael O'Hanlon '82 '91, research director for Brookings' foreign-policy program and a visiting lecturer at Princeton.

But when it comes to being seduced by technology into thinking that war can be relatively costless (for us, anyway), O'Hanlon says, "the 1990s were in many ways a more troublesome decade than the more recent one."

"Think back to Bosnia, or Kosovo — what you have there is a deep aversion to creating casualties, and a desire to create an antiseptic kind of warfare." (Notably, the United States had its bomber pilots fly well above the range of anti-aircraft weaponry, trading accuracy in targeting for safety.) In contrast, O'Hanlon adds, "In Iraq and Afghanistan, we have a lot of people face-to-face with the enemy in a way that looks awfully old-fashioned to me, in a way that would not be unfamiliar to people who study the wars of the 19th or early 20th century." In Fallujah, Iraq, for example, 6,000 soldiers and Marines took the city back from Sunni insurgents, house by house. "If anything, the last 10 years have proven that we still are willing to risk our own troops."

Even if it were proved that drones make it easier to initiate the use of force, that would not end the debate about the



Unmanned MQ-1 Predator drone with Hellfire missiles

**"One thing that is clear about drones is that, wherever they go, they take on more missions than they initially had." — Micah Zenko**

Relations and author of *Between Threats and War: U.S. Discrete Military Operations in the Post-Cold War World* (2010), counters, "Drones are different."

In theory, the Pakistan strikes of recent years could have been carried out using traditional fighters or bombers, but "we wouldn't have bombed using manned aircraft," Zenko says. "We just put pilots at too great a risk — the combat search-and-rescue packages required, the escorts that might be required to protect the craft. You just wouldn't do it." (The drone attacks in Pakistan are officially covert, as are those in Yemen, so no details are available about on-the-ground targeting assistance by U.S. agents or allies, or even if such forces are needed.)

morality of their use, points out Bradley Strawser, an assistant professor of philosophy at the Naval Postgraduate School, in Monterey, Calif.

He is also editor of the forthcoming book *Killing By Remote Control: The Ethics of an Unmanned Military*.

“Imagine a case where there was a clear, just cause to go to war — the cause was the protection of innocents,” he says. “And we think intervention could work, but we decide not to intervene because we might lose too many pilots.” In such a case — think of Rwanda, where the Canadian lieutenant general Roméo Dallaire said he could have stopped the Rwandan genocide with a couple of thousand troops — the availability of drones might well be a moral plus.

For philosophers, “proportionality” is an important measure of the just use of lethal strikes.

Independent estimates of civilian deaths in drone attacks range from 4 percent to 20 percent. That surely is better than the ratio in, say, Vietnam bombing runs that annihilated entire villages. Still, counterinsurgency doctrine — which holds that winning over neutral or wavering civilians is just as important as killing armed adversaries — plays havoc with “attrition math,” as Gen. Stanley A. McChrystal has noted. In an example he relayed to his troops, if there are 10 insurgents in a town and you kill two, you may have eliminated the threat because the other eight give up the cause — or you may have multiplied the number of insurgents tenfold by angering onlookers, depending on the context of the attack. (Former general and former Central Intelligence Agency director David H. Petraeus \*85 \*87 is the most famous architect of modern counterinsurgency strategy; *The Washington Post* reported in October that he had been lobbying the White House for more drones for CIA use.)

The debate remains open as to whether drones’ (relative) accuracy or their (alleged) high-handed use has a greater effect on world opinion. In *Wired for War*, Singer quotes Rami Khouri, a public-policy professor at the American University of Beirut, who suggested that “the average person” sees drones as evidence that Americans “are cowards because they send out machines to fight us ... so we just have to kill a few of their soldiers to defeat them.” A report by law professors and students at New York University and Stanford law schools, published this fall, reported widespread psycho-



**“Anyone who has a family member in harm’s way would rather have a robot exposed to mayhem than their loved one.”** — *Kathy Roth-Douquet* \*91

logical distress where drones fly in Pakistan. And the drones are loathed throughout the Muslim world:

Drone strikes are opposed by 89 percent of Egyptians, for instance, and 81 percent of Turkey’s citizens, according to one survey. The same poll found that 62 percent of Americans support the targeted strikes, while support in other polls has surpassed 80 percent.

Drones may change the reactions of people under attack, but they also change the people doing the attacking, Singer argues. Here the relevant frame of reference is not the strikes in Pakistan and Yemen, a small but consequential program, but the more general use of drones in Iraq and Afghanistan, where they have been a constant presence overhead — tracking insurgents, monitoring battles (to the point where generals can micro-

manage street-level firefights), and supplying firepower. In *Wired for War*, Singer describes how enlisted men — including those who had poor records in high school — can find themselves guiding drones, assuming an air-combat role once reserved for those Air Force aristocrats, fighter pilots. Drone piloting is among the fastest-growing jobs in the Air Force. Of controlling drones, one pilot told Singer, “It’s like a video game. It can get a little bloodthirsty, but it’s ... cool.” Piloting drones is also a job to which one can commute while living in remote Nevada. “You see Americans killed in front of your eyes” — and, of course, insurgents, too — “and then have to go to a PTA meeting,” one unnamed aerial-vehicle pilot told Singer. (Indeed, Singer devised the story for a fictional film titled *Unmanned*, which he is co-producing, about just such a pilot’s divided life.)

The physical remoteness of drone pilots calls into question “the extent to which it is either necessary or possible for many combatants to cultivate or exercise martial virtues,” writes Robert Sparrow, a philosopher at Australia’s Monash University, in his contribution to *Killing by Remote Control*. He means such virtues as physical courage, mercy, and comradery. A contrary argument, however, is that, unlike B-52 pilots, drone pilots can all but look into their victims’ eyes, making the experience in some ways less distant.

Some scholars say the full ramifications of the introduction of unmanned vehicles into warfare won’t be realized until the United States finds itself fighting an industrial

power with similar capabilities — “’bot to ’bot,” in the jargon. But that may be attempting to peer too deeply into the crystal ball. Sooner, we may expect weaker states to try to attack the “soft underbelly” of the U.S. drone system, the areas from which drone pilots operate, says Thomas F. Lynch III ’90 ’95, a distinguished research fellow at the National Defense University — such as attacks on U.S. bases from which drones are piloted or on the homes of drone pilots. A few suicide-bomb attacks on U.S. soil would make the issue of drone attacks less abstract to the American public, Lynch says.

## On the domestic side of the equation,

Robert Gates, secretary of defense from 2006 through 2011, has made a forceful version of Singer’s argument. “Even after 9/11,” he said in a speech at Duke University in 2010, “in the absence of a draft, for a growing number of Americans, service in the military — no matter how laudable — has become something for other people to do.” Enlistment increasingly comes from the South and Mountain West, small towns, and families with a tradition of service, he noted.

According to a 2011 Pew Research Center study, a smaller proportion of the population serves in the military today than at any time since before World War II. Of people ages 50 to 64, 79 percent have someone in their immediate family who has served in uniform. Among those 18 to 29, only 33 percent do. A privatized military helps to make that kind of low citizen participation possible. Blackwater is no more — it has been renamed as the innocuous-sounding Academi — but outsourcing continues to mask the size of the war effort: The final report of the Commission on Wartime Contracting in Iraq and Afghanistan stated that 260,000 contractors worked for U.S. government agencies in those countries in 2010, with most being foreign nationals.

“Our forefathers spent a great deal of time thinking about how a free country, a liberal country that was run by its people, could execute war,” says Kathy Roth-Douquet ’91, co-author of *AWOL: The Unexcused Absence of America’s Upper Classes from the Military and How It Hurts Our Country* (2006). “The possibilities are that you hire mercenaries, or you develop a caste, or you have people do it themselves. The only path consistent with freedom is that you do it yourself.” Today’s arrangement, she thinks, seems all too close to a caste system. “It’s sort of a ‘blood exchange,’” she says. “In exchange for this terrible thing they do, the larger society becomes dependent on them, and can’t control them, because they don’t know them.” About unmanned technology, she is more ambivalent, while granting the gist of Singer’s arguments concerning it: “Anyone who has a family member in harm’s way would rather have a robot exposed to mayhem than their loved one.”

Her husband, Greg Douquet, is chief of staff for U.S. Marine Corps Forces Europe, stationed in Stuttgart, and when she met him, she says, it was driven home how little she or her Woodrow Wilson School peers knew about the military. She’s now CEO of Blue Star Families, which seeks to keep civilian and military leaders aware of the needs of

military families.

Bridging the civilian-military gap “is one of the central themes of my time here at Princeton,” says Lt. Col. Peter Knight, director of Princeton’s Army ROTC program. He mostly means having his future officers interact with students who one day will take on State Department roles or civilian positions in the Pentagon. But on a more personal and cultural level, he says: “I’m the only Army lieutenant colonel around these parts. Some people see me and say, ‘Thank you for your service!’ Others look at me and don’t say anything, or they look at me like I have three heads. They’re not used to seeing us.”

The idea that a disengaged public, lacking skin in the game, would be more willing to send forces off to war makes intuitive sense, but is there empirical evidence for the claim? In 2002, Duke political scientists Christopher Gelpi and Peter Feaver published an article in the *American Political Science Review* that looked at the link between the American propensity to go to war and the proportion of veterans in the executive and legislative branches. As the proportion of veterans rose, the researchers found, the willingness to deploy force dropped somewhat, but once the decision to deploy force was made, veterans were more inclined to use that force with greater intensity.

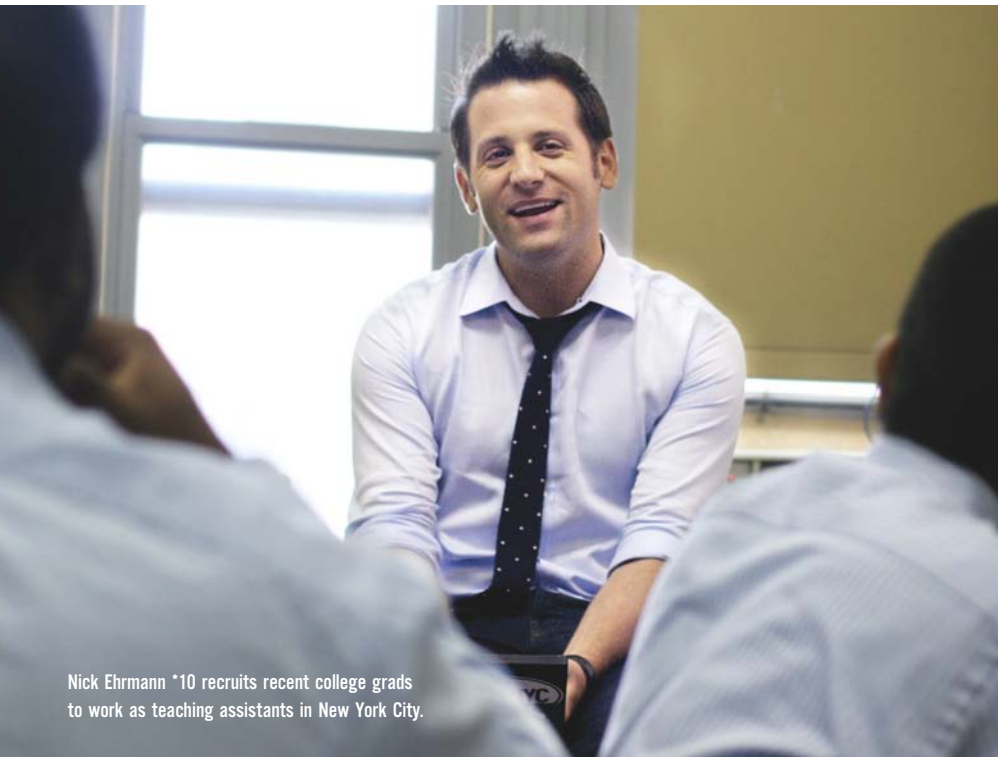
Feaver, who served in the White Houses under both Bill Clinton and George W. Bush, does not think the findings justify the argument that civilian officials have moved away from a natural disinclination to deploy the military. “I saw no evidence of the cavalier approach to using force that critics sometimes describe — ‘Hey, let’s go invade somebody.’ My experience — and the evidence bears this out — is that [officials] may be wrong, or they may be overconfident, but even when they were wrong, they were wary and not cavalier.”

Although lawyers for the American Civil Liberties Union have made arguments that sound not unlike some of Singer’s, the Brookings scholar stresses that he’s speaking as an analyst, not an advocate: He is identifying trends that people across the political spectrum need to grapple with. “I’m not saying, ‘Never use the technology,’ or that there’s no circumstance where there are bad guys you can’t get otherwise you might want to target.”

“Sometimes,” he says, as if to drive home that he’s no knee-jerk dove, “there’s no other choice but to put their leaders in the dirt.”

Singer already is looking ahead to the next new thing in warfare. Will it be computer viruses that take down military-computer systems, swarming micro-’bots, or 3-D printers that hold out the promise of creating spare parts on the spot? And what happens as drones grow ever more autonomous? *The Washington Post* recently reported that a U.S. drone at a Djibouti base “started its engine without any human direction.” “I’ve seen that movie,” Singer observes, “and it doesn’t end well for us humans.” ■

*Christopher Shea ’91 is a contributing writer for the Chronicle of Higher Education and a former columnist for The Wall Street Journal Review.*



Nick Ehrmann '10 recruits recent college grads to work as teaching assistants in New York City.

P  
38

NICK EHRMANN '10

## Upping the rigor in class

**Before enrolling in** Princeton's Ph.D. program in sociology and demography in 2003, Nick Ehrmann '10 taught fourth grade through Teach for America in a troubled part of Wash-

ington, D.C. He became so close with his students that over the next year, he raised more than \$1 million to help support them through high school and college. The funds provided tutoring,

“We have to earn the right to do this by proving it really works.”

mentoring, and family outreach, and promised college scholarships.

Six years later, when he was conducting doctoral research on how to close educational achievement gaps, Ehrmann returned to those students, expecting that they would be outshining their peers. But he discovered that despite substantial investment, his students were not performing better than other students from the same school. The biggest difference was that most of his former students expected to graduate from college. But they were “hurtling toward higher education without being prepared,” says Ehrmann.

Ehrmann was struck by research that found that the single best predictor of college completion is the academic rigor of a student's high school. Based on his classroom experiences, he developed the hypothesis that small-group learning is the key to providing a rigorous academic environment. To test that hypothesis, Blue Engine was born.

Founded by Ehrmann in 2009, Blue Engine is a New York City-based education nonprofit that dispatches teams

KETH LAM

## NEWSMAKERS

Of the 10 alumni competing in November's congressional elections, two newcomers and four incumbents won. Texas Republican **TED CRUZ '92**, right, a



former state solicitor general and Tea Party favorite in the race to replace retiring Republican Sen. Kay Bailey Hutchison, defeated Democrat Paul Sadler. The *Austin American-Statesman*

WIKIPEDIA



**STARTING OUT:** TAYLOR CARROLL '10 Manager of public relations and marketing for San Mateo, Calif.-based Doximity, an online network similar to a LinkedIn for doctors, where they can find colleagues for referrals and securely share information. Princeton major: psychology.

**Talking to doctors:** Carroll shows doctors how Doximity works, gets their feedback on its features, and brings that information back to the technical team. She also promotes Doximity and pitches story ideas to the press.

**What she likes:** “Being part of a company that has a tool that actually makes a difference and either helps [doctors] save time or helps them get in touch with the doctor that they need to, or to be more efficient in their jobs,” says Carroll. “I’ve always wanted to work in health care, particularly in a position capable of improving patient-care coordination and delivery.”

**Pushing the product:** Her own doctor uses Doximity. “I made her get on it,” says Carroll, who found the position on a Princeton alumni discussion board. She joined the company in May 2011, two months after its official launch.

COURTESY TAYLOR CARROLL '10



Tiger  
profile

## LAURA FORESE '83

Chief operating officer of a major medical center

of recent college graduates to work as teaching assistants in 13 classrooms across four public high schools. Its mission is to increase the college-completion rate among the roughly 800 low-income students it serves. Only 8.3 percent of low-income students in the United States who start college complete a degree by their mid-20s, according to a KIPP Foundation report. Blue Engine is working to raise that number by dividing classrooms of 30 students into roughly four small groups where more individualized instruction is possible.

Many young graduates are eager to join Blue Engine as teaching assistants (310 applied for 30 positions for the current school year), and several Princeton alumni have gone through the program.

Though only in the third year of a four-year pilot study, Blue Engine is producing data to support Ehrmann's hypothesis that small-group instruction accelerates learning. During the 2010–11 school year, Blue Engine increased the percentage of ninth-graders earning college-ready algebra scores from 15 percent to 43 percent. Ehrmann hopes to see similar results with geometry and reading scores this academic year, and is optimistic about expanding Blue Engine in the future. "We have to earn the right to do this by proving it really works," he says. **By Hilary Levey Friedman '09**

called Cruz "a rising national star in his party." ... **DEREK KILMER '96**, a Democratic state senator and former state representative, won Washington state's 6th Congressional District seat by defeating Republican Bill Driscoll. ... Republican **LEONARD LANCE '82** retained his seat in New Jersey's 7th Congressional District, defeating Democratic challenger Upendra Chivukula. Lance served in the state assembly for most of the 1990s and spent 2001 to 2007 in the state senate. ... Democrat **JARED SCHUTZ POLIS '96** earned his third term as the representa-

*continues on page 41*



Laura Forese '83 says health care is not a partisan issue.

## FROM THE OPERATING TABLE TO OPERATING SYSTEMS

Laura Forese '83 was an orthopedic surgeon, specializing in children with disabilities and congenital problems such as cerebral palsy and clubfoot, before moving into administration. While she misses caring for patients, she likes looking at the big picture — "how institutional change affects patient care, whether it is thinking about nurse-staffing or a new program," says Forese, who oversees approximately 1,000 hospital beds on two campuses.

## CUTTING COSTS BUT MAINTAINING QUALITY

Although health care was a major talking point in the presidential campaign, it is not a partisan issue, says Forese. "The challenge is to get the best quality as cost-effectively as we can." One strategy, she says, is eliminating unnecessary tests. Her hospital uses electronic records that alert doctors if the test they ordered recently had been done. The hospital's shift from paper to electronic medical records also improves communication among hospital doctors and outside providers — another key to hospital efficiency, she says.

**CONNECTING WITH PATIENTS AND KITCHEN WORKERS** Forese wants to continue to focus on the patient experience. One way staff members do that is by calling people the day after they are discharged. "Sometimes we find out that the patients didn't understand the directions for medications or have another problem. Then we can review medical information or even have them return to their doctor or the hospital," she says. Forese is not afraid to explore the nitty-gritty of running the hospital from her employees' perspective, and once worked in the hospital's kitchen to better understand how things operate there. **By Jessica Case '06**

**Résumé:** Chief operating officer of NewYork-Presbyterian Hospital/Weill Cornell Medical Center. Former vice chair of the Department of Orthopedic Surgery at Columbia University. M.D. from Columbia University College of Physicians and Surgeons. Princeton University trustee. Majored in civil engineering and operations research.

Princeton's Famous  
**Triangle Show!**

Our 122nd Year!

WORLD PREMIERE!



**TRIANGLE ON TOUR:**

January 27: New York City

January 29: Cincinnati

January 30: St. Louis

January 31: Nashville

February 2: Washington DC

Tickets & Information:

[www.Triangleshow.com](http://www.Triangleshow.com)

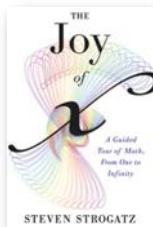
## Calling All Princeton Authors!

Put your book in the hands of **65,000 readers** in our seventh annual Princeton Authors special advertising section. Join fellow alumni, faculty, and University staff authors in promoting your book.

**Cover date:**  
**June 5 & July 10**

**Space deadline:**  
**April 16 & May 14**

For more information  
contact Advertising Director  
Colleen Finnegan  
[cfinnega@princeton.edu](mailto:cfinnega@princeton.edu)  
609-258-4886



**READING ROOM: STEVEN STROGATZ '80**

## The beauty of math



In his new book, *The Joy of X: A Guided Tour of Math from One to Infinity* (Houghton Mifflin Harcourt), Steven Strogatz '80 writes for readers who want a "second chance at math." Based on his popular series of online articles for *The New York Times*, the book seeks to help educated readers find beauty in a subject that they may have been glad to leave behind in high school.

"Even if you never use math, you can still take pleasure in it — with help," says Strogatz, a professor of applied mathematics at Cornell University.

*The Joy of X* offers a survey of the major elements of math, from the simple joys of counting taught on *Sesame Street* to number theory. Strogatz's approach is to connect math to everyday subjects. One chapter looks at the O.J. Simpson trial and how both the prosecution and the defense misused probability theory. In another chapter, Strogatz explores whether love affairs can be explained by differential equations.

**WHAT HE RECENTLY READ:** *The Art of Learning: An Inner Journey to Optimal Performance* by Josh Waitzkin

**What he liked about it:** "It's a very interesting take on how you get to be great at something [from] someone who has achieved world-class status in two different fields, in martial arts and in chess."

Strogatz also takes a look at Google, whose success was built on the principles of linear algebra. Google helped make it easier to search the Web by ranking pages based on the number of other Web pages linked to them. By writing algorithms based upon this insight, Google became the Internet's dominant search engine.

People may be more interested in math today because of companies like Google — or, perhaps, because of the large amounts of money made by Google. Math has helped make many a billionaire, Strogatz says. Technical advances on Wall Street and in the pharmaceutical industry would not have been possible without advanced math.

For Strogatz, math has a remarkable unifying effect. He sees patterns between the spirals on his fingertips and the spirals in the DNA double helix, and between spiral galaxies and the spirals of leaves picked up by the autumn wind. Mathematical patterns are everywhere, he argues, if you know where to look.

"There is a harmony in the universe and in our own selves and all around us that becomes easier to see and appreciate once you understand math," he says.

Strogatz's research focuses on social networks. He is perhaps best known for a paper he co-authored inspired by the idea of "six degrees of separation." He also used mathematical principles to analyze the shifting alliances among European nations prior to World War I.

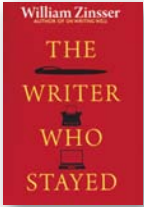
Strogatz acknowledges that math can be daunting, but he argues that it is not beyond the reach of the curious reader. He hopes that his book will help people develop an appreciation for a difficult but rewarding subject.

"If I can help someone see the beauty in math, that to me is really analogous to the beauty in music or in art," Strogatz says. "It gives them one more thing that enriches their lives." **By Maurice Timothy Reidy '97**



**WATCH:** Steven Strogatz '80 talks about math and his book @ [paw.princeton.edu](http://paw.princeton.edu)

**NEW RELEASES BY ALUMNI**



**WILLIAM ZINSSER '44** wrote a series of essays for his blog Zinsser on Friday for the website of *The American Scholar* magazine. *The Writer Who Stayed*


(Paul Dry Books) is a collection of those pieces, covering topics including the craft of writing, culture and the arts, his travels to distant places, and modern life. In one essay he discusses the benefits of downtime; in another, why he doesn't use email. Zinsser is the author of 17 other books, including *On Writing Well*. ...

In her collection of lyric poems, *Possessive* (Louisiana State University Press), **SALLY VAN DOREN '84** examines love and relationships as well as loss, disappointment, illness, and anger. Her first book of poetry, *Sex at Noon Taxes*, won the Walt Whitman Award from the Academy of American Poets. ...



**WILLIAM H. JANEWAY '65** describes his career path in venture capitalism and looks at how financial markets and government investment have led to tech-

nological innovations in *Doing Capitalism in the Innovation Economy* (Cambridge University Press). He explains how financial bubbles and crashes can lead to technological advancements. Janeway is a senior adviser and managing director at Warburg Pincus and was director of its technology-investment team. ... In *The Orchestra: A Very Short Introduction* (Oxford University Press), **D. KERN HOLOMAN '74**


describes the history of the symphony orchestra. He explores topics ranging from the life of a musician and venues for concert music to financial challenges, and describes the orchestra's important role in cultural diplomacy. Holoman is a music professor at the University of California, Davis. 



**Newsmakers** continued from page 39  
tive from Colorado's 2nd Congressional District, defeating Republican state Sen. Kevin Lundberg. A former Web entrepreneur, Polis has been a prominent education advocate. ... **JOHN SARBANES '84**, left, a Democrat, was elect-



ed to a fourth term as the representative from Maryland's 3rd Congressional District. Sarbanes' time on Capitol Hill began in 2007, just as his father, Paul '54, was ending three decades as a U.S. senator. ... Democrat **TERRI SEWELL '86** defeated Republican challenger Don Chamberlain and will continue to represent Alabama's 7th Congressional District. In 2010 Sewell became the first black woman to be elected to Congress from the state of

Alabama. ... After narrowly losing to Democrat Tim Bishop in 2010, **RANDY ALTSCHULER '93**, a Republican, tried again, challenging Bishop in New York's 1st Congressional District. He lost another close race. ... Republican **RICKY GILL '09**, a law school graduate, lost to Rep. Jerry McNerney, a three-term Democratic incumbent who moved to California's newly drawn 9th Congressional District. ... Republican **NAN HAYWORTH '81** lost to Democrat Sean Patrick Maloney in New York's 18th Congressional District. An ophthalmologist who entered politics in 2010, Hayworth served one term representing New York's 19th Congressional District before running in the redrawn 18th. ... **HAYDEN ROGERS '95**, a Democrat from North Carolina, was chief of staff for Rep. Heath Shuler; when Shuler decided not to run for reelection, Rogers made his own bid for the job. But he lost in the general election to Republican Mark Meadows. 



**Princeton Progressives**

is proud to announce that our supporters funded fifteen motivated Princeton undergraduates who spent their fall break campaigning in Florida and Maine.

Join our growing network of Princetonians who care about progressive issues. Together, we are making a difference!

**www.PrincetonProgressives.com**

## A world of Islams

By *Taufiq Rahim '04*

*Taufiq Rahim '04 is the director of Globesight, an advisory firm for strategy in emerging markets. He blogs regularly on TheGeopolitico.com.*

**I remember waking up** in my dorm room on the morning of Sept. 11, 2001, to the shouts of my hall-mate and friend beckoning me to come next door. It was the beginning of our sophomore year, and I was a leader of the Muslim Students Association (MSA) at Princeton. Watching television in 1937 Hall, we were gripped and confounded by the horrific scenes that unfolded in the ensuing hours, which are forever etched in my memory — as I am sure they are for countless others.

It was the start of what has been termed the post-9/11 decade, during which much of the world's narrative was shaped by an “us versus them” mentality. Especially in the first few years, Muslims in the West endured an uncomfortable feeling that the surrounding society considered them suspect.

I fielded calls shortly after the Sept. 11 attacks from local newspapers, the reporters asking if things were OK for Muslims on campus. Though there were incidents, the general situation at Princeton was safe. I sometimes received hate mail. One group of students was assaulted one weekend in Boston and returned with the bruises to show for it. And, I, like so many others, was given the so-called special treatment and faced lengthy interrogations at JFK or Newark whenever flying to and from school.

I came to Princeton as a student like everyone else, but at some point I had to transform into an ambassador of understanding. The funny thing is, at the same time I was explaining Islam to promote understanding, I was questioning the state of Islam in the world around me. It is a duality that has stayed with me in the years since.

This year, on the anniversary of the attacks, a deadly assault on the U.S. consulate in Benghazi, Libya, shocked the world once again. It also shocked the residents of Benghazi. This past January, I spent time with youth activists and entrepreneurs in that city. What I witnessed was a courageous and driven group of young Libyans determined to forge a better future. Alongside tens of thousands of their compatriots, many of these youth marched in mid-September to the central al-Kish Square in memory of the slain U.S. ambassador, Chris Stevens, calling as well on militias to disarm.

Their march was emblematic of the duality I experience.



No doubt, there is still a need to combat what is more a “clash of ignorances” (not a clash of civilizations) across the divide between the Muslim world and the West. This was the impetus that drove two colleagues and me to found the nonprofit initiative Project Encounter, which promotes engagement and dialogue. We bring groups of young people from North America and Europe to the Middle East, to allow them to form their own narrative about the region. I feel that only through improved understanding and greater familiarity can we find constructive ways forward.

Nevertheless, through my work and travels in countries from Afghanistan to Syria, Palestine to Pakistan, and places in between, I find there is a need for just as much soul-searching within Muslim communities themselves.

When a cheaply made YouTube film can lead to violent demonstrations in more than a dozen countries, you cannot help but ask questions. When a young Christian girl can be jailed swiftly on the demands of an unhinged cleric alleging “blasphemy” in Pakistan, you cannot help but raise an objection. When a college is raided and 25 students are killed in Nigeria by a group whose name (Boko Haram) means “Western education is sinful,” you cannot help but be dismayed.

For many countries in the Muslim world, the next few years will not be easy. The political and economic challenges facing them are immense — and that’s an understatement. A few are in active states of internal conflict, if not internecine warfare. Others are under the grip of debilitating authoritarian regimes. So many are still afflicted by economic deprivation.

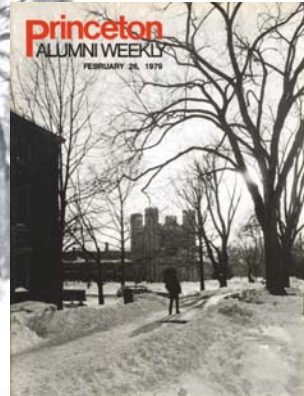
There are, of course, counterexamples. In places like Malaysia and Dubai, there are new economic models of development. The Arab uprisings have started to push back against political authoritarianism. Yet the forces of religious orthodoxy seem to be not only constant, but growing. Popular clerics who appear on Pakistani television are busy

*continues on page 62*

# Class notes



## From the Archives



In mid-February 1979 a snowstorm that swept the East Coast left more than a foot of white powder on campus. But inclement weather – and the fact that the University remained open and most classes met as scheduled – didn't seem to dampen the spirits of these unidentified

students. Bill Allen '79 captured their trek through the snow and shot the cover photo (inset) for the Feb. 26, 1979, PAW. Can any readers identify these students?

**Online Class Notes are password-protected.**  
To access Class Notes, alumni must use  
their TigerNet ID and password.

**Click here to log in.**



<http://paw.princeton.edu/issues/2012/12/12/sections/class-notes/>



“ I have truly enjoyed reading the Facebook feeds and e-updates from PAW. It is always nice to get the hard copy, but I love being able to incorporate all of the info into my day. ”

— Jackie Bruce '99

## comment

“ Inspiring  
Arrogant  
Touching  
Unjust Indefensible  
Hilarious  
Disturbing ”



See stories  
come alive  
**PAW Online**  
[paw.princeton.edu](http://paw.princeton.edu)

Perspective continued from page 42

calling minority groups, such as Ahmadis, non-Muslims — with deadly consequences. I remember seeing the bloodstains in an Ahmadi mosque in Lahore in 2010, shortly after an attack by religious militants. More than 90 people had died in attacks at two mosques. Within a year, the governor of the Punjab province, of which Lahore is the capital, had been assassinated for opposing draconian blasphemy laws, as was the federal minister of religious minorities. What was the basis or justification for those attacks?

Sooner or later, everybody comes into the sights of the bully pulpit: marginalized groups such as Ahmadis, other religious groups and Muslim minorities, and then so-called “moderates.” Sufi shrines that existed for centuries have been attacked and destroyed by extremist groups in recent months in Libya and Mali. When I was working for an NGO in the Gujarat province in India, many of my meetings were held in Hindu temples, sometimes during religious ceremonies. What would the view of the hardline Muslim orthodoxy be of me?

Traveling through the wider region, you quickly realize that while the bullies are strong and loud, they are surrounded by people who would like to see a pluralistic and prosperous society. These are people like the young activists I met in Libya. They are the Saudi Arabian entrepreneurs who have formed an organization dedicated to the empowerment of women in the workforce (Glowork). They include my Syrian friends who are helping to ensure that those fleeing conflict have a place of refuge, no matter their sect or creed. They are like my former colleagues, who have spent their entire careers in Pakistani villages working on local development.

I'm hopeful that these progressive forces within many Muslim communities and Muslim-majority countries can coalesce to form a stronger and wider constituency for change. Such a movement would be the most effective bridge between the Muslim world and the West, as well. ■



Taufiq Rahim '04

COURTESY TAUFIQ RAHIM '04

# Memorials

**Editor's note: PAW posts a list of recent alumni deaths at [paw.princeton.edu](http://paw.princeton.edu).**

**Go to "Web Exclusives" on PAW's home page and click on the link "Recent alumni deaths." The list is updated with each new issue.**

## THE CLASS OF 1935



**RICHARD ELLIOT FLEMING '35** Elliot died peacefully of natural causes Sept. 5, 2012, in Lancaster, Pa., just six days shy of his 98th birthday.

Born in Brooklyn, N.Y.,

Elliot grew up in East Orange, N.J., coming to Princeton from East Orange High School along with several classmates. He majored in economics, roomed with Howard Matthews, and was a member of Cloister Inn.

The majority of his professional career was spent in New York City as an executive with International Nickel Co., from which he retired in 1976. He and his wife, Connie, lived in Chatham, N.J., and spent the winter months in Stuart, Fla. In 1994, Elliot and Connie moved to Willow Valley Retirement Community in Lancaster.

He was a loyal Princetonian throughout his life. He enjoyed tailgating with his family and classmates at Cloister Inn before home football games and was a regular at Reunions. He was a member of the Nassau Club.

Elliot was predeceased by Connie, whom he married in 1944. He is survived by his three sons, Richard '68, and his wife, Midge; Douglas and his wife, Sarah; and David '73; in addition to four grandchildren (one of whom is in the Class of '96), and three great-grandchildren.

## THE CLASS OF 1938



**FORREST CRANMER '38** Forrest Cranmer, whom we knew as "Forry," died June 2, 2012, at his home in London, England.

Forry was born in Denver and prepared for college at Kent School. At Princeton he roomed freshman and sophomore years with John Evans and junior and senior years with Farish Jenkins and Frank Sandstrom.

Forry majored in modern languages, graduating with high honors. He participated in freshman Cane Spree, rowed on the 150-pound crew and class crew, and was a member of Cap and Gown Club.

He was in ROTC at Princeton, and after graduation was assigned by the Army to

North Africa as an artillery lieutenant. He completed his service in Italy as a lieutenant colonel in military government.

After the war, Forry worked in international banking, electing early retirement as a vice president at Bank of Boston, then moving to London with his wife, Betty, in 1970. Betty died in 2003.

Forry is survived by his son, Gordon '65, and his daughter, Sylvia, to whom the class extends sincere sympathy.

## THE CLASS OF 1940



**PHILIP CONWAY '40** Phil, of Ocean Ridge, Fla., formerly of Bronxville, N.Y., died Aug. 6, 2012.

He graduated from The Choate School before entering Princeton. During World War II, he served as a captain in the Army's Field Artillery in the European theater. Entering banking after the war, he rose to the position of senior vice president of First National City Bank (now Citibank) in August 1962.

Phil loved trout fishing, bird hunting, and golf.

He is survived by his wife of 71 years, Elouise Wright Conway; his son, Palen; daughter Elouise; and five grandchildren. To them, his classmates wish to offer their deep sympathies.

## THE CLASS OF 1941



**PETER C. G. HOPPIN '41** We have just learned of the Dec. 13, 2011, death of Pete Hoppin on Pawleys Island, S.C.

Pete came to Princeton from Staten Island, N.Y., and was a graduate of Phillips Exeter Academy. He left Princeton freshman year and unfortunately did not keep up with the class.

We do know that he joined the Army Air Corps and flew B-24s with the 446th Squadron in Europe during World War II and B-52s during the Korean conflict and with the Strategic Air Command. After retirement, he worked as a civil service negotiator.

Pete is survived by his wife, Marjorie June Hoppin; his daughters, Cynthia June Shuler and Sandra Gale Stigant; his son, Robert Chambers Hoppin; seven grandchildren; and five great-grandchildren.

**D. HUGH PENISTON '41** Hugh Peniston died July 18, 2012, at the age of 92.

He was born in Rutherford, N.J., and grew up in Los Gatos, Calif. He majored in English



at Princeton and earned a master's degree in divinity from Union Theological Seminary in 1944.

He was pastor of the First Presbyterian Church of Cottage Grove, Ore., from 1947 to 1979. Upon his retirement, he served as interim minister in several churches in Oregon and California. Twice he served as a trustee for Lewis & Clark College, for which he received an honorary doctor of letters degree in 1969. A dedicated humanitarian, Hugh became very interested in the issue of housing and was instrumental in the construction of facilities for senior citizens and low-income and handicapped individuals in Springfield and Cottage Grove, Ore.

Among Hugh's many interests were backpacking, hiking, canoeing, woodworking, photography, and stamp collecting.

In 1946, Hugh met and married Phrynette Waldvogel. They became parents of five children: Gary '70, Brian, David, William, and Sarah. After Phrynette's death, Hugh married Joan Metcalf Mattoon in 1998. She survives him along with his children and four grandchildren.

## THE CLASS OF 1950



**DAVID LUKE HOPKINS JR. '50** Luke Hopkins died in Cockeysville, Md., May 23, 2012, from heart failure.

He attended Gilman School in Baltimore, then St. Paul's in New Hampshire. At Princeton, where his father was in the Class of '21, he graduated with honors in history and belonged to Ivy.

Weeks after graduation he married Suzanne Bunker. He then served two years as a Marine lieutenant before beginning a 42-year career at J.P. Morgan in New York, where he rose to executive vice president and managing director. At Morgan, he established and headed its Far Eastern division, headed trusts and investments and private banking. After retirement, Luke returned to his native Baltimore to help start Brown Advisory & Trust, becoming its first chairman and CEO.

Among the numerous boards he served on were those of Westvaco Corp., which his great-grandfather founded; the Garrison Forest School of Maryland; and the Metropolitan Opera Company.

Luke spent summers and sailed at a family home in Northeast Harbor, Maine. He especially enjoyed the three years he lived

there in the early 2000s.

Our sympathy goes to his wife, Suzanne, whom he affectionately called “Bunkie”; his daughters, Cassandra and Suzanne; son Robert; his brother, Porter ’52; sisters Florence and Katherine; and his extended family. His eldest son, David, predeceased him.



**WILLIAM I. MCCLOSKEY '50** Bill died of cardiac arrest June 6, 2012, in West Palm Beach, Fla.

He grew up in Overbrook, Pa., and graduated from the Canterbury School in Connecticut. At Princeton he studied civil engineering and belonged to Campus Club before he left in 1948. He then attended Villanova.

Before college, Bill worked for his father’s business, building concrete ships for the Normandy invasion. After college he returned to the business and supervised construction projects. Later in life, he became a stockbroker and vice president of Prudential Bache Securities in Bryn Mawr, Pa. He retired in 2005 and with his wife, Margery, moved to Palm Beach.

Bill was an avid golfer, bridge player, and storyteller. He was described as someone “who naturally made everyone feel a little happier, a little more alive to life.”

Margery, two sisters, four daughters, four sons, three stepdaughters, 18 grandchildren, and his former wife survive him. We extend our condolences to them.

## THE CLASS OF 1951



**JOHN H. DAVIS '51** Jack was born June 14, 1929, in New York, the son of Maude Bouvier and John Ethelbert Davis ’21.

A 1947 graduate of Deerfield, he majored in history at Princeton, was active in the Glee Club, Orange Key, and soccer. Jack belonged to Cottage and graduated *cum laude*. He roomed with Bill Dwight, Don Mathey, Gerry Mayer, Ralph Peters, and Don Scott.

Jack served in the Navy for two years as a navigation officer with the Sixth Fleet in the Mediterranean, where he was first exposed to Italy, its language, and its culture. After his service, he was granted a Fulbright to study at the Croce Institute in Naples, where he founded the American Studies Center and wrote for the next 13 years. His literary output was remarkable and included: *The Bouviers — Portrait of an American Family* (1969), *Venice* (an illustrated history, 1973), *The Guggenheims — An American Epic* (1975), *The Kennedys — Dynasty and Disaster* (1984), *Mafia Kingfish* (1989); *Kennedy Contract* (1993), *Mafia Dynasty*

(1994), and *Jacqueline Bouvier — An Intimate Memoir* (1996). He and Jacqueline Bouvier Kennedy Onassis were first cousins.

Jack died Jan. 29, 2012, from complications of Alzheimer’s disease. He is survived by his sister, Maude Sergeant Davis, and his cousins, Lee Ross and Neville Davis.



**RICHARD NASH JR. '51** Dick was born Sept. 28, 1929, in Baltimore to Richard and Louise Daly Nash.

A Gilman graduate, he earned a bachelor’s degree in basic engineering at Princeton, where he belonged to the “21” Club and Ivy, was vice chairman of the class memorial-fund committee, and roomed with Bob Akeley, George Buell, Jim Gorter, and Bill Griffith. Thereafter he served as a flight-deck officer on the USS *Oriskany* and the USS *Princeton*.

Dick and Sherrill Gray were married May 5, 1956. Initially, he worked for the Glidden Co. In 1965 he joined Maryland Specialty Wire, a subsidiary of Handy & Harman, as works manager, and in 1969 he was appointed general manager. In 1972 he was elected chairman of the board and president.

An avid boater, he sailed on Chesapeake Bay and in Martha’s Vineyard waters. He was a member of the Elkridge Club.

Dick died Jan. 11, 2012, of heart failure in Naples, Fla. He is survived by Sherrill; daughters Abigail Keller and Lydia Weiss; three grandchildren; and his sister, Kate Chittenden. His infant son, Richard Nash III; his daughter, Kate Boone; and brother Joseph Sarsfield Sweeney predeceased him. Services were held at the Episcopal Church of the Redeemer in Baltimore.



**PAUL FREDERICK OBRECHT '51** Fred was born May 29, 1929, in Baltimore to Fan Otis and George Frederic Obrecht.

A 1947 graduate of Gilman School, he roomed at Princeton with Charlie Albert, Cheddy Carey, and Dick Tucker. In 1948 he and Marilyn Wilson were married. Fred left in his senior year to join his father in managing the family feed and grain business, which had been founded by his grandfather in 1865. He changed the focus of the firm from hay, grain, and feed to an industrial warehouse operation in the name of P. Frederick Obrecht & Sons, now known as Obrecht Properties LLC.

In 1958, Fred’s brother, Charles ’56, joined the business. A year later the co-owners began developing the Moravia tract, Baltimore’s first industrial park. Later they expanded into brokerage and property management. He was a member of Green Spring

Valley Hunt Club and the Baltimore Country Club and was a former trustee of the Garrison Forest School.

Marilyn died in 2001, and Fred died Nov. 3, 2011. He is survived by his wife, Joy; sons Paul, George, Thomas, and Richard; daughter Susan Riehl; two sisters, Jane Emich and Nancy Victor; and Charles. Two sisters, Betty Ghezzi and Dorris Voneiff, predeceased him.

## THE CLASS OF 1953



**HOBART A. BURCH JR. '53** Hobe, who held national leadership positions in religious, social welfare, and governmental agencies — he was an assistant to the Secretary of

Health, Education, and Welfare — as well as academia, died of heart failure June 16, 2012, in Marathon, Fla.

Born in Appleton, Wis., Hobe’s high school was Elmira (N.Y.) Free Academy, his discipline at Princeton was English, and his primary interests were Theatre Intime and the Westminster Fellowship. His roommates included Don Ardis, Herschel Phelps, Jim Prah, Jack Thomson, and Tom Tobin. Interestingly he met his wife, the former Janet Barkley, on a long-distance blind date arranged by his Terrace clubmate Paul Brown.

His journey through life took him to Union Theological Seminary and Brandeis University, where he obtained a doctorate, and a five-year government assignment in Washington, D.C. He later served as a professor of social work and dean of the University of Nebraska School of Social Work.

We recognize with appreciation his service to his fellow man. Hobe was a doting and strong husband and father to wife Jan; sons David ’79 and Peter; and daughter Juanita Burch-Clay ’76, whose husband is Joseph A. Clay ’75. He also leaves 10 grandchildren and one great-grandchild.



**PETER C. ENANDER '53** Pete, who spent his entire business career with Chubb & Son and in 1970 established the Chubb Institute, a highly successful programming and systems

school, before retiring in 1992, died July 12, 2012, at Riverview Medical Center in Red Bank, N.J. The cause was bladder cancer

He came to Princeton from Plainfield High School, where he had excelled in basketball. He played the game freshman and sophomore years, then limited his sports to interclub competition in order to concentrate on his major, sociology. At Dial Lodge, he was on the club’s executive committee and worked closely with Dial’s vice president, Bill Plauth, who when informed of Pete’s death,



spoke of his “enthusiasm, kindness, and good fellowship.”

Pete married his college sweetheart, Maureen Gilbert, in 1955. As an NROTC graduate, he spent three years as a Navy supply officer. He was interested in class affairs and served several years as '53's agent for memorial insurance. Surviving besides Maureen are his daughters, Corrine Ford and Susan Jones; sons Christopher and Timothy; five grandchildren; and his brother, John. Pete accepted his fate as gracefully as he lived his life.



**C. RODERICK O'NEIL '53** Rory died July 28, 2012, of complications of ALS (Lou Gehrig's disease) at Greenwich (Conn.) Hospital.

At Princeton Rory roomed with Cap and Gown clubmates Bruce Arnold, Jack McGovern, Peter Ross, and Buzz Taylor. He belonged to the Chicago Club and majored in English.

After graduation, he joined Northern Trust in Chicago and received an M.B.A. from the University of Chicago. Moving to New York, he headed the trust department at Manufacturers Hanover Trust, then became chief financial officer at The Travelers Companies. He later established his own consulting firm, O'Neil Associates.

His philanthropic activities are too numerous to mention, but in Hartford his most lasting achievement was founding Riverfront Recapture, a nonprofit agency that restored the Connecticut Riverfront to a series of parks, boat landings, and performance spaces.

In addition to Nancy, his wife of 61 years, he is survived by his sons, Brian '74, Timothy '76, Kevin '78, and John; daughters Sarah and Anne; two brothers, Terry and Tom; and 13 grandchildren. Rory's strength and courage in his final illness were an inspiration to all whose lives he touched through a long career in business and public service.

**THE CLASS OF 1954**



**RUDI M. BREWSTER '54** Rudi Brewster died Sept. 7, 2012, of complications of pneumonia at Scripps Memorial Hospital in La Jolla, Calif.

Born in Sioux Falls, S.D., he graduated from Washington High School. At Princeton, he matriculated at the Woodrow Wilson School and became president of its honorary debate society. A member of Quadrangle, he also managed the University Band.

Rudi was a member of NROTC. He was commissioned on graduation and went straight into flight training, after which he

flew anti-submarine aircraft off a carrier out of San Diego. On completion of his tour of duty, he attended Stanford Law School and began practicing law in San Diego in 1960. In 1984, President Reagan appointed him to the U.S. District Court. He took senior status in 1998.

Rudi was an avid outdoorsman. He continued to fly. He refined his skill at playing clarinet and played alongside U.S. District Judge Marilyn Huff, a pianist. He was passionate about his membership in the San Diego Rotary.

The class is honored by his service to our country and extends its sympathy to Gloria, his wife of 58 years; their children, Scott, Laurie, and Julie; and eight grandchildren.



**JESSE W. PAGE III '54** Jesse Page died Sept. 17, 2012, at Durham Regional Hospital with his family at his side.

Born in Pinehurst, N.C., he graduated from the Tabor Academy. At Princeton, he was a history major and a member of Cottage Club. After graduation, he served in the Army in Korea and was discharged in 1961. He went to work for Chrysler Corp. before starting his own business in Chapel Hill — Page's American Service — and later, in the 1970s, Page Tire and Automotive. In 1984, he started car-wash businesses that remain in operation today. His many hobbies included sailing and boating, gardening, and music.

Jesse started the Chapel Hill Community Garden Project. In 1984, he and his wife built a farm in Chatham County, where they raised horses and enjoyed gardening.

The class is honored by his service to our country and sends its condolences to Martha, his wife of 57 years; their children, Rebecca, John, Mary, Laura, and Caroline; nine grandchildren; and one great-grandson.



**WELLS STEWART '54** Wells Stewart died Sept. 18, 2012, in Kerrville, Texas.

Born in San Antonio, he prepared for college at the Lawrenceville School. He became a history major at Princeton, where he was a member of Charter Club and the Varsity Glee Club. After Princeton, he earned a law degree from the University of Texas Law School.

Wells was appointed assistant district attorney in Harris County and later became judge of the 308th District Court of Texas. He was a member of numerous civic organizations, serving as director of the board of regents of Texas Southern University, the Houston Association of Big Brothers, and Goodwill Industries, and as vice president of

the Houston Youth Symphony and Ballet. Wells shared his many hobbies and interests with his friends and family.

He is survived by his wife, Susan; his children, Margot, Catherine, Wells Jr., Laurence, Shannon, Ryan, and Forrest; and 13 grandchildren. The class extends its sympathy to them in their loss. Memorial contributions may be made in his name to the Church of St. John the Divine, 2450 River Oaks Blvd., Houston, TX 77019.

**THE CLASS OF 1955**



**MOSES WILLIAMS JR. '55** Moses Williams Jr., son of Moses Williams, was born Oct. 18, 1933, in Boston, and died July 14, 2012, in Cambridge, Mass.

He prepared for Princeton at Middlesex School. At Princeton, Moses wrote his thesis on John Keats, joined Elm Club, and participated in Whig-Clio, choir, and the Undergraduate Schools Committee of Orange Key. His roommates at 68 Little were Morris R. Brownell III, Hunter Ingalls, and Dick Rawls.

Admonished to speak up in class, Moses complied with outstanding success — finishing high in his German class at the Army Language School. After his Army service, Moses worked with Chase Manhattan in Germany and Girard Trust in Philadelphia. He left Girard in 1972 and moved to Bangor, Maine, where he was a child-abuse specialist with the Penobscot-Piscataquis school system.

Returning eventually to the Boston area, Moses had various teaching and social-service positions. Waiting to be admitted to the Soldiers Home, Moses was struck by a hit-and-run driver and was fitted with an artificial right leg. From 1996 on he lived in the Soldiers Home, where, as he said, his fortunes progressed erratically upwards.

Moses is survived by his sister, Harriet H. Nichol, and his nephew, James W. Nicol. To them, the class extends its sympathy.

**THE CLASS OF 1957**



**KENNETH MICHAEL ABSHER '57** Mike Absher died Aug. 25, 2012, of pancreatic cancer in Bryan, Texas. He was 77.

Raised in San Antonio, Mike was a 1953 graduate of Exeter Academy. At Princeton Mike majored in philosophy, served as head announcer at WPRB sophomore year, earned a varsity letter in fencing, and was entertainment chair for Key and Seal.

After Army and municipal service in San Antonio, Mike commenced a 31-year career with the CIA in 1961. His service included intelligence support during major events such as the Cuban Missile Crisis and the

breakup of the Soviet Union. Mike was twice awarded the Intelligence Medal of Merit and received the Medal for Civilian Service in Vietnam, among numerous other citations of merit.

Following his retirement in 1993, Mike taught at the University of Texas and at the National Defense Intelligence College, published several articles, and consulted on the President's Commission on the Roles and Capabilities of the U.S. Intelligence Community, the Joint Terrorism Task Force, and Assessments of the North Korean Missile Launches. At the time of his death he was on the board of the National Defense Intelligence College Foundation.

Mike's first wife, Patricia, died in 1981. Remarried in 1985, he is survived by his wife, Cynthia, and his daughters from his first marriage, Leslie and Evelyn. The class will miss this brave and patriotic American and sends condolences to his family.

## THE CLASS OF 1958



**WILLIAM B. HACKENBERG JR. '58** Hack, of Ambler, Pa., died July 11, 2012.

He came to Princeton from Germantown Academy in Philadelphia. At Princeton he majored in psychology, was an avid sports fan, and roomed with Al Stender and Ferd LaMotte in his senior year.

Hack received an M.B.A. from the Wharton School at the University of Pennsylvania in 1960. He spent several years as a management consultant with Price Waterhouse and joined the Korman organization, a real-estate developer in the Philadelphia area, in 1972. He served as a director and vice president of operations for 34 years. Hack also was a supporter of Hope Partnership for Education; Siloam, a support organization for people living with AIDS; the Augustinians of Villanova; and the Sisters of Mercy in Merion, Pa.

To Lynn, Hack's wife of 48 years; his daughter, Debbie; and his four grandchildren, the class sends its sincerest sympathy.



**JUTSON C. MEININGER '58** Jut died suddenly of natural causes Feb. 8, 2008.

He came to Princeton from Wood-Ridge (N.J.) High School, where he was valedictorian of his class. Considered a child prodigy, he entered Princeton after having won a national piano competition. A year later, Jut decided to call an end to his musical career and switched to economics.

In the late 1960s he became acquainted with and trained by Bob and Mary Goulding in developing the psychological theory of Transactional Analysis (TA). With the

encouragement of Bob Goulding, Jut wrote *Success Through Transactional Analysis*, a best-seller geared to bring TA principles to the business community. This was followed by *How to Run Your Own Life*, a self-help book for the public. Jut was identified by *Business Week* as a pioneer in applying TA to business-management situations, noting that his book was used by the policy committee of Citicorp, a longtime client.

In recent years, Jut returned to his consulting business and was finishing two books on TA geared to fine-tuning the business-community model. Prior to his death, he had engaged the services of literary agent Jacques de Spoelberch and had obtained book endorsements from classmates as well as other Princetonians.

To Elissa, his wife of 44 years, the class extends sincere condolences.



**JAMES W. VALUSKA '58** Jim died peacefully May 5, 2012, at home in Steubenville, Ohio.

He came to Princeton from Mingo High School in Mingo Junction, Ohio, where he was valedictorian of his class. At Princeton, he won letters in track and in football, where he was an outstanding end. He was renowned as a first-class pool and dart player at Cottage Club.

Jim confided to Dave Grubb, one of his roommates, that he had several goals in life: get a medical degree and practice in Steubenville, marry his high-school sweetheart, and — because he loved golf — join a country club so he could play whenever he wished. He achieved them all.

After college he earned his medical degree from Columbia and completed his internship and orthopedic residency at the University of Minnesota. He also served in the Navy as a lieutenant commander in Vietnam. Jim returned to Steubenville in 1969 and served his community as an orthopedic surgeon until he retired in 2002. He was a diplomate of the American Academy of Orthopedic Surgery, served as vice president of Jefferson County Medical Society, and was chief of surgery at the former Ohio Valley Hospital and St. John Hospital.

He is survived by Evelyn, his wife of 52 years; four daughters; a son; and 11 grandchildren. To them and his extended family, the class sends sincerest condolences.

## THE CLASS OF 1960



**ROBERT D. LEWIS '60** Bob died July 13, 2012, from complications of leukemia following surgery.

He was born in Pittsburgh and prepared for Princeton at

Mount Lebanon High School, where he was a member of the band and played tennis and basketball and ran track and cross country.

At Princeton, Bob rowed on the freshman and varsity crews, was president of the Chemistry Club, and was a member of the freshman swimming team, the Glee Club, and Cap and Gown. He went from Princeton to Columbia Medical School and completed a residency in oncological surgery at Roosevelt Hospital in New York. After serving as a surgeon in the Air Force with tours in Iran and Spain, Bob specialized in oncological surgery at Swedish Medical Center in Seattle and served as chief of staff at Seattle General Hospital. He also held a faculty appointment in surgery at the University of Washington.

Bob coached soccer and baseball for several years and also was an avid soccer player, bicyclist, golfer, skier, and tennis player. He climbed many of the mountains in Washington and Oregon.

Bob's wife, Marcia McGreevy Lewis; his daughter, Karen; son Gregory; stepchildren John Keister, Matt Keister, and Megan Schmidt; five grandchildren; and brother William Lewis, survive him. To them all, the class extends sincere condolences.

## THE CLASS OF 1961



**VERNON E. CLOSE '61** Vern suffered cardiac arrest July 19, 2012, and could not be revived.

Born in Collbran, Colo., he came to Princeton from Grand Junction High School. At Princeton he majored in English, wrestled, was active in IAA sports, and was president of Elm Club. His senior-year roommates were Gard Heidrick and Bob Fuller.

Following Princeton he worked at Bankers Trust in New York City while earning an M.B.A. at New York University at night. Wishing to return to the West Coast, Vern joined Security Pacific National Bank in Los Angeles and then in San Francisco. He and Judy were married in 1978. Following a two-year tour in London with the bank's International Banking Group, he returned to Los Angeles after Bank of America had acquired Security. He retired in 2000 after 30 years in banking, joined a consulting firm, and became engaged in nonprofit work. A loyal classmate, Vern was assistant treasurer of our 50th-reunion committee.

Vern is survived by Judy; his brother, Carl, and his wife, Martha; and their children.

## THE CLASS OF 1962

**GREGORY GUROFF '62** Greg died peacefully July 11, 2012, of lung cancer, at home in Chevy Chase, Md., with his family by his side.



Family members included Kathie, his wife of 49 years; brother Buzz; son Alec '90; daughter Liza; and six grandchildren. Many of us saw Greg at our 50th reunion, which he courageously attended despite his condition.

He came to us from Evanston Township (Ill.) High School. Originally interested in math and physics, he gravitated to Russian studies, perhaps reflecting being an immigrant musician's son. He became a lifelong student/associate of the redoubtable Cyril Black, as an undergraduate and then a Ph.D.

Greg taught for a decade at Grinnell College, and then was drawn to the United States Information Agency (USIA), where he spent nearly 20 years — in Moscow (as cultural attaché) and in Washington (running exchanges with the Soviet Union, including a laudable high school program).

Upon leaving USIA in 1996, he founded the Foundation for International Arts and Education, serving as president until his death. He was particularly proud of the exhibition they produced, *Russia's Age of Elegance: Mir Iskusstva (The World of Art)*, which came to Princeton's Art Museum.

Greg was widely admired and respected by his many friends, American and Russian.

**THE CLASS OF 1966**



**JOHN J. NAGORNIAK '66** The Class suffered a blow Sept. 7, 2012, when we lost John Nagorniak after a long illness.

A Buffalo native, John graduated from the Nichols

School. At Princeton he majored in mathematics and belonged to Dial Lodge. He was a member of the Bridge Club and manager of the Student Room Agency.

After graduation John moved to Boston and entered the John Hancock Insurance actuarial-training program. Two years later he enrolled in the Sloan School of Management at MIT. After receiving his M.B.A., he returned to Hancock to work in financial analysis and stock-market strategies. From there he moved to State Street Bank, serving as senior vice president and chief investment officer, and then to Franklin Portfolio Associates, where he was CEO and later chairman of the board.

Ever loyal to Princeton and our class, John was for many years a mainstay of Annual Giving, serving a term as national chairman. He also served as president of the Princeton Alumni Association of New England and for many years as our class treasurer.

John is survived by his wife, the former Jill Hampton; son Peter; daughter Joy '97; and two grandchildren. The class extends heartfelt sympathy to them all.

**THE CLASS OF 1972**



**DOUGLAS C. SPROULL '72** Doug died Aug. 9, 2012, in St. Louis after a courageous battle with pancreatic cancer and just three weeks after the death of his wife of 38 years, Helen

"Gigi" Rand Sproull. He is remembered for resolute cheerfulness and joy in the company of family and friends during his struggle and as a devoted father and doting "Pops" to his three grandchildren.

Doug came to Princeton from St. Louis Country Day School. Freshman year he roomed in Witherspoon and then teamed with Dennis Murphy to live in Henry and Foulke halls sophomore and junior years. The pair roomed in Cannon Club senior year, joining Tad LaFountain to become one of the "Cannon 13," the club roster in 1972. A biology major, Doug played freshman soccer and varsity golf, and during home basketball games donned coat and rep tie to help operate the scoreboard. He worked at Warson Brands, an occupational-safety shoe company he co-founded in 1986. Doug was unable to attend our 40th reunion, but classmates sent Reunions garb to him. He wore his green Cannon T-shirt constantly during his last days.

We extend condolences to his brother, Stuart L. Sproull and his wife, Carolyn; daughters Alison Sproull Desloge and Vassa A. Sproull; his son-in-law, Davey Desloge; and his grandchildren, Tucker, Cooper, and Finnley.

**THE CLASS OF 1973**

**WILLIE L. WILLIAMS '73** Willie transitioned from this life to eternal rest April 15, 2011, in Seattle.

Willie came to Princeton from Chief Sealth High School in Seattle, where he starred in football, basketball, and track. At Princeton he also played football and was part of the dynamic backfield with Bill Early on the undefeated freshman team. He roomed with Clarence Beatty and majored in history with a concentration in African and Afro-American studies.

After Princeton, Willie committed himself to serving underprivileged communities and took his first job teaching in the Trenton, N.J., public-school system. He continued his teaching career in various positions in the Seattle Public Schools, Seattle community colleges, Lakeside School, and ITT Technical Institute. His work went beyond the classroom, as he was active with the local Black Prisoners Caucus and countless community boards, task forces, and advisory councils in the Seattle area. He was an active member of the Church of Christ, and his spirituality was reflected in his work. He earned a master's

degree in education from Antioch University and was about to receive a Ph.D. in education from Nova Southeastern University in June 2011.

Willie is survived by his lifelong love, Glenda Williams; three children, Brandi, Jonathan, and Maisha; and a grandson, Ade.

**THE CLASS OF 1976**

**EDWARD F. CORSON IV '76** Edward Corson died Dec. 13, 2009, in Plymouth Meeting, Pa., of a long-term heart problem.

Ted graduated from Chestnut Hill Academy in Philadelphia and began with the Princeton Class of 1972, including high school friends Roger Kyle '72, Glenn Haas '72, and Glenn Morris '72. Ted lived in Wilson College, sang in the Glee Club, was a member of Theater Intime, and played piano at Colonial Club during Saturday coffee-house nights. Ted's 1972 performance as Charon in the production of Aristophanes' *Frogs* was described as "definitive" by *Daily Princetonian* theater reviewer James O'Donnell.

After taking a few years off, Ted graduated from the music department in 1976. He moved to Morristown, N.J., and began his career as a secondary-school private music instructor at Morristown-Bear School. A few years later he switched career tracks to computer programming, working at Deloitte Haskins & Sells. At the time of our 10th reunion, Ted submitted to the reunion yearbook that his "Life = Computers and Music (Composition and Singing)." In 2003, he moved to his father's home in Plymouth Meeting.

The class sends condolences to his father, Dr. Joseph Corson, his sisters, and brother.

**THE CLASS OF 1979**



**DWIGHT M. COLEMAN '79** The class lost one of its most gregarious members when Dwight M. Coleman died Sept. 7, 2005, from heart problems.

A larger-than-life presence with a laugh and a heart as big as his home state of Texas, Dwight came to Princeton from St. Mark's School in Dallas, where he excelled academically and athletically. At Princeton, Dwight majored in geology and was a starter at offensive tackle in football. He also lettered in wrestling, played lacrosse, and was a member of Cottage. He was described as "a dignified giant of a man" and "the biggest cheerleader on campus."

After graduation, he took graduate courses at the University of Texas and worked with oil companies as an exploration geologist. He then founded and ran his own firm, DMC Energy, until his death. He was a member of the Association of Black Princeton Alumni,

and interviewed applicants to Princeton.

Dwight loved the Dallas Cowboys, the UT Longhorns, jazz, Princeton and his classmates, and, above all, God and his family. At the time of his death he was survived by his wife, Alma; daughter Megan; sons Miles and Matthew; his cousin, Kevin Teal '87; and legions of loving relatives and friends.

The class mourns Dwight's passing and extends sincere, belated sympathy to his family.

## THE CLASS OF 1984



**CHRISTOPHER REZNYK '84** Chris Reznik died Aug. 23, 2012, after a yearlong struggle with cancer.

Rez, as his friends called him, was a psychology major from Iselin, N.J., who was heavily recruited to Princeton as a sprinter. Unfortunately, an injury freshman year prevented him from competing with the varsity team. Instead, Rez became involved in intramural track, basketball, and football. His friends and roommates, including Jim-Bob, Glik, Becky, Jordie, Cathy, and Brahns, remember him as being the fastest guy they had ever seen. On the basketball court, he executed a beautiful left-handed jumper.

Rez, who was co-owner of the Hoagie Man on campus, loved to go to the clubs and was a talented card player. He was always a gracious host, inviting his friends over to his house when they could not fly home for school breaks.

After Princeton, Rez became quite successful in the insurance industry, eventually settling in Florida and becoming a senior vice president of Assurant Solutions. He is survived by his wife, Kathy; his children, Steven, Amanda, and Libby; his parents, Richard and June; and his siblings, Russ and Kim. The class extends its deepest sympathy to Rez's family and friends. He will be sorely missed.

## THE CLASS OF 1987



**WILLIAM CHAPMAN DEWEY '87** Chapman Dewey died unexpectedly of a heart attack July 19, 2012.

Chapman came to Princeton from Memphis University School, where he was class salutatorian, a National Merit Scholar, and yearbook editor. At Princeton, he majored in religion, and was a member of Quadrangle Club, the Campus Crusade for Christ, and Whig-Clio.

After Princeton, he received a medical degree from the University of Tennessee, completed a residency in psychiatry at Emory University, and was the chief resident

in psychiatry at Grady Hospital in Atlanta. At the time of his death, he was practicing psychiatry in Rome, Ga.

Chapman will be remembered for his humor, faith, and gentle heart. His clever nicknames and warm smile always lifted the spirits of his many friends. A true Southern gentleman, his kindness and great faith inspired those who knew him. When he came back to Old Nassau to celebrate his 25th reunion, he reminded us all what a joy it was to share his company.

He is survived by his fiancée, Susan Taylor; his mother Ann; brothers Edward and Tucker; and his sister, Jane, and her family. The class extends deep sympathy to his family and many friends.

## THE CLASS OF 1990



**JOHN D. HUNTER '90** John Hunter, loving father, devoted husband, caring son, and generous friend, died from cancer, Aug. 28, 2012. He was 44.

John was raised in Dyersburg, Tenn. After Princeton, he earned a Ph.D. in neurobiology in 2004 from the University of Chicago.

John was most proud of his three daughters, Rahel, Ava, and Clara. He was their soccer coach, swim teacher, choir fan, and debate partner. John, his wife, Miriam, and their girls were beloved members of Chicago's Hyde Park community.

John's doctoral research advanced the understanding of timing in the neural code. He pioneered the Python open-source computer language, best known for creating matplotlib, widely used programs for scientific graphics.

John was especially proud when matplotlib ensured the safe landing of Rover on Mars in 2004. John taught Python workshops and discussed programming advances at international scientific meetings. In the last six years, John took his quantitative modeling skills to the financial industry, working for Tradelink, an investment firm in Chicago.

John is survived by his wife and daughters; his mother and stepfather, Sara and Joe Wolfe; his grandmother; sisters; and step-sisters. A fund for the education of his daughters has been established at <http://numfocus.org/johnhunter>.

## Graduate alumni

**WARREN J. NORTH '57** Warren North, an aeronautical engineer who participated in the formation of NASA, died April 10, 2012, at the age of 89.

North was a pilot in World War II, and then earned a bachelor's degree from Purdue

in 1947. He was an engineering test pilot at the Lewis Flight Laboratory in Cleveland, and earned a master's degree in aeronautical engineering from the Case Institute of Technology in 1955. In 1957, he earned a second master's degree in aeronautical engineering from Princeton.

After Princeton, he joined NASA and served on the selection team for the seven original astronauts. North worked on the Mercury, Gemini, and Apollo projects, rising to chief of the flight crew operations division at the Manned Spacecraft Center in Houston. He was involved not only with astronaut selection, but also with training, evaluation, and designs for spacecraft operations. He retired from NASA in 1985.

After retiring, North built his own plane and continued flying until his final year. He also established a nonprofit foundation and spent the next 26 years advancing literacy through the Spalding Method of teaching reading developed by his aunt.

North is survived by his wife, Mary; three children; and four grandchildren.

**ALAN E. ROGERS '68** Alan Rogers, a computer scientist who once headed Mobil Oil's London Engineering office, died Nov. 20, 2011. He was 81.

Born and educated in England, Rogers graduated from Oxford in 1951. In the British military from 1951 to 1953, he received a master's degree from Oxford in 1955, and went to Canada that year to work for White-Westinghouse on missile-guidance systems.

In 1957, he moved to Princeton to work for Electronic Associates, a computer-systems maker specializing in simulation. Concomitantly, he earned a master's degree in electrical engineering from Princeton in 1959. In 1965, Rogers began teaching computer science as an associate professor at the University of Delaware.

After completing his doctorate at Princeton in 1968 in electrical engineering, he returned to industry with Mobil in 1969. Heading its London engineering office, Rogers managed the instrumentation and control systems of Mobil's six European refineries.

After holding positions in London and New York, and writing a book, *The Story of Mobil Engineering*, he retired in 1988. He then did computer consulting work and became active in local politics.

Rogers is survived by Traudi, his wife of nearly 57 years; two sons (including Martin '78); and two grandsons. A third son, Philip '79, died in 2005.

*Graduate memorials are prepared by the APGA.*

# Princeton exchange

## For Rent Europe

### PARIS ST GERMAIN & ISL - CALL TODAY!

Superbly-restored centuries-old elegance in St. Germain 7th and Ile St Louis. Sunny. Fireplaces. Antiques. Latest bath, kitchen. Maid service. Discounts. Pleasant, attentive help from owner!  
**415-847-0907**  
**www.passionate-for-paris.com**

**PROVENCE:** Stunning, updated farmhouse, magnificent Mediterranean/mountain views. Antiques. Lovely kitchen, gardens, pools. 609-924-7520. gam1@comcast.net

**ROME:** Bright, elegant apartment. Marvelous beamed ceilings. Antiques. Walk to Spanish Steps, Trevi Fountain. 609-683-3813, jetas5@comcast.net

**ITALY/TUSCANY:** Ancestral villa with sweeping views. Olive groves, vineyards, gardens. Antiques. Updated kitchen, baths. Pool. 609-683-3813, jetas5@comcast.net

**PARIS, SW FRANCE, PROVENCE, ITALY.** Comfortable apartments, homes, chateaux. www.FrenchHomeRentals.com 503-219-9190.

 **PARIS 6TH LEFT BANK** overlooking Seine, Notre Dame, Louvre. Sunny, charming, furnished apartment. Fireplace, beamed ceiling. 212-988-0838.

**PROVENCE.** Delightful five-bedroom stone farmhouse, facing Roman theater. Pool, WiFi. 860-672-6607. www.Frenchfarmhouse.com

Villa rentals in **ITALY** and **GREAT BRITAIN.** *Conde Nast Traveler* rated one of BEST villa agents worldwide. Catalogs: Britain, no charge. Italy properties: online. Suzanne B. Cohen & Associates, Inc. 207-622-0743, www.villaeurope.com

**PARIS, LEFT BANK:** Elegant apartment off Seine in 6th. Short walk to Louvre, Notre Dame. 609-924-7520, gam1@comcast.net

**PARIS, MARAIS:** Elegant, 2 bedroom, 2 bath apartment, vibrant Pompidou museum/sidewalk café quarter on 13c pedestrian street, full kitchen, w/d, AC, cable. desaix@verizon.net, 212-473-9472.

**FRANCE, DORDOGNE:** Lovely 18th century manor house and/or cottage with private pool, tennis, trout stream, horse riding and cook. Telephone: 011-33-553-227-608. www.dordognerental.com

 **FRANCE/PROVENCE:** Charming hilltop village of Venasque near Avignon. Restored medieval house with apartments. Courtyard and rooftop terraces. Sensational views. \$850-\$1,500 per week. See www.chezkubik.com, Padraic Spence, 413-274-6839.

**FLORENCE COUNTRY** house on 54 mountain acres. Fantastic views. \$100/day. www.ganzitalianhouse.com E-mail: gganz@comcast.net

**ROME HISTORIC CENTER:** 2-4 bedrooms. Elegant and spacious. All modern conveniences, including Wi-Fi. 503.227.1600; tkim@stollberne.com

**FRANCE, PARIS-MARAIS:** Exquisite, sunny, quiet one-bedroom apartment behind Place des Vosges. King-size bed, living/dining room, six chairs, full kitchen, washer, dryer, weekly maid service, WiFi, \$1350 weekly. 301-654-7145; louvet@jhu.edu

**PARIS, Montparnasse:** Elegant top-floor, one bedroom duplex, 150 sq/ft terrace. WiFi. Weekly \$1,095. ideces@princeton.edu

**PARIS:** 'Chic, creative, and spacious.' 2 gorgeous luxury 2BD/2BA apartments 5 minutes by foot from the Louvre and the Palais Royal. Both are bright, sunny, and renovated by top Parisian designers. Sleeps 4. Ashley Maddox '94, www.whereidstay.com

**PARIS:** Ile St. Louis, elegant top-floor apartment, elevator, updated, well-appointed, gorgeous view. Sleeps 4, maid 3x week. WiFi, TV etc. Inquiries truff@mindspring.com, 678-232-8444.

**PARIS LUXEMBOURG,** Port Royal and Saint Jacques, full of light, large one bedroom apartment, 75m.sq., completely redesigned, elegant furnishing, antiques. 950 euros/week, g-mallard@northwestern.edu

**PARIS, SQUARE HECTOR BERLIOZ-9TH:** Beautiful 3BR/2BTH, full-floor condo, 4th floor, elevator. Long or short term (minimum 2 weeks). Details: www.parisflat4u.com or 415-922-8888.

**PARIS 1ST:** Sunny, quiet, comfortable furnished 2-bedroom. Available January for long-term rental. 2500E/m. mja.architecture@gmail.com

**VACATION VILLA RENTALS** in Tuscany, Italy. www.DoWhatYouLoveinItaly.com

**ELEGANT APARTMENTS:** Available in Saint Petersburg Russia, BA Argentina, Miami, Princeton, Sofia and Varna Bulgaria. japter@princeton.edu

**"MOST BEAUTIFUL VILLAGE IN FRANCE"** Spacious house, lively, enchanting medieval village. Dordogne-Lot. www.maisonsouthernfrance.com, (\*2012 French vote)

**FRANCE, PROVENCE:** Spectacular Chateau Grimaldi outside Aix-en-Provence in private 12-acre park — vacations and weddings. 10 bedrooms, 8 bathrooms, pool, tennis, olive grove, chapel. www.chateaugrimaldi.com, info@chateaugrimaldi.com, '87.

**SUPERB 200-YEAR-OLD FARMHOUSE** one hour from Bordeaux. Gardens, pool, on 5 private acres overlooking Canal Lateral. Two-story beamed living room, 17C fireplace, study, 4 bedrooms, modern conveniences. Chiz Schultz '54. www.maisonducanal.com 845-353-2016. Swisschiz@aol.com

## Caribbean

**WATER ISLAND.** Private family compound. 2 to 20 guests. See www.water-island.com, '73.

**ST. JOHN, USVI:** 5 bedroom, 3 baths, waterfront villa, pool, total ac. Villa Villekula, www.perfectsunsetrentals.com, '59.

**BERMUDA:** Lovely home — pool, spectacular water views, located at Southampton Princess. Walk to beach, golf, tennis, restaurants, shops, spa, lighthouse. Sleeps 15. ptigers@prodigy.net, '74.

**ST. JOHN, US VIRGIN ISLANDS:** Hillcrest Guest House, Clean, Comfortable, Ocean views. www.HillcrestStJohn.com, 340-776-6774.

**ST. JOHN:** 3 BR, 4 1/2 Bath Villa, Cinnamon Stones, on North Shore. Magnificent views of BVI's. Joel Black '60. To view: www.islandgetawaysinc.com/cinnamon-stones.html or call Kathy @ 888-693-7676.

**MONTEGO BAY, JAMAICA:** All Inclusive Vacation rental property. Contact Keith Johnson at hcvilla.com or 917-257-6210.

## United States Northeast

**MAD RIVER, SUGARBUSH AREA:** Farmhouse, 6BR, 3BA, fireplace, sleeps 19. 2 day minimum. William M. Iler '51, 978-922-6903.

**WELLFLEET:** 4 bedroom beachfront cottage with spectacular views overlooking Cape Cod National Seashore. 609-921-0809 or warrenst@aol.com

**NANTUCKET:** Dionis. 3BR, 2BA, decks, views, walk to beach. 530-758-6659. doctorpaula@comcast.net, '66, p'86.

**STRATTON, VERMONT** ski house. Walk to gondola. 3 bedrooms. Gail Barcelo, 609-921-3383. gbarcelo@princeton.edu

**United States Mid-Atlantic**

**WASHINGTON, DC:** Luxury building, furnished 2 bedroom, 2 1/2 bath condo, indoor pool — near American University. Available December 14–March 14. Long or short term rental (minimum 1 month). Contact: annewzim@comcast.net, 202-213-0692, w'57.

**United States West**

**BIG SKY MONTANA:** Charming 4 BR log home on 20 acres beautifully furnished, spectacular views, Big Sky sunsets, skiing, hiking, fishing and golfing within 5 minutes. Close to Yellowstone National Park and Bozeman. Enjoyment all 4 seasons. 610-225-3286. jgriffi644@aol.com, s'67.

**DEER VALLEY:** 2BR European chalet ski condo sleeps 6. 100 yards to lift. www.redstaglodgedeervalley402.com, jpyros@pyros.net, '80, p'12. 570-822-8577.

**KEYSTONE COLORADO:** 4 bedroom 3 bath log home. Sleeps 12. Two car heated garage, WiFi, 3 TVs, laundry. New kitchen and bathrooms. Three daily passes to Keystone, Breckenridge & A Basin included. For rates and brochure email cwfour@swbell.net, '51.

**SOLANA BEACH, CA:** Beachfront 2BR, spectacular ocean views, 22 miles to SD airport. 203-820-1048, FreeVee@aol.com, www.VacationBeachHomes.com/vrp/unit/Ocean\_Front\_mid\_level\_condo\_in\_Seacape\_Sur\_complex-1147-12067-1, \*76, p'04.

**Travel Services**

**TAILOR-MADE VACATIONS SOUTHERN AFRICA:** Let me help you create your dream vacation. Princeton '89, 14 years in Cape Town. Travel expert. LynnBolin6@gmail.com

**Wanted to Rent**

**NYC:** '84 alumna looking to rent a furnished, 1-bedroom apartment. Flatiron District or Gramercy Park preferred. January–June 2013. megeve10@hotmail.com

**Real Estate for Sale**

**BOISE IDAHO REAL ESTATE:** www.startpackingidaho.com

**PRIVATE COMMUNITIES REGISTRY:** Take a self-guided tour of the top vacation, retirement and golf communities. Visit: www.PrivateCommunities.com

**SUMMIT/SHORT HILLS AREA**  
**Call Suzanne Lear, P96 P96 P00**  
 28 years of experience in home sales in these desirable NYC train-line communities.  
**www.NewJerseySuburbs.com • 908-868-5245**  


**ARIZONA:** Scottsdale, Paradise Valley, Phoenix and Carefree. Houses, condos and lots. Rox Stewart '63, Russ Lyon Sotheby's International Realty. 602-316-6504. E-mail: rox.stewart@russlyon.com

**SCOTTSDALE, ARIZONA:** Home of Michael Konner '55, 2,700 s.f., corner lot, 3 bedrooms, 3 1/2 baths, detached casita, 3 car garage, gated community with fitness center and pool. Call our Realtor, Joanne Eannacone, 602-803-0633.

**MYRTLE BEACH REAL ESTATE:** www.homesatmyrtlebeach.com

**IDAHO REAL ESTATE:** www.BuyIdahoRealEstate.com

**Real Estate For Sale-For Rent**

**REAL ESTATE BLOGS:** www.realestate-supermarket.com, www.otroska.tv, www.santacruzrealestatebroker.com, www.valtra.org

**BALTIMORE TOWNHOUSE:** 3 BR, 3.5 BA, cheery, sunny 1,920 square ft end townhouse, with den, DR, brick patio. 133 Fireside Circle, Baltimore, 21212 on Zillow.com, \$305,000. ejr2629@gmail.com, '76.

**Art/Antiques**

**BUYING EGYPTIAN ANTIQUITIES:** Send information. Benson Harer '52, wbjr1@gmail.com

**Books**

**FREE BOOK ON ARTIFICIAL INTELLIGENCE.** Write email: davethecoyote@hotmail.com, '82.

**Calling All Princeton Authors!**  
 Reach 65,000 readers in our seventh annual 'Guide to Princeton Authors' summer reading *special advertising section*.  
**Cover dates: June 5 & July 10, 2013**  
**Space deadlines: April 23 & May 2**  
 Contact Advertising Director Colleen Finnegan  
 cfinnega@princeton.edu, 609-258-4886

**Educational Services**

**COLLEGE/GRADUATE SCHOOL CONSULTANT AND WRITING SPECIALIST.** Guidance throughout the college and graduate school admissions process. Teaching in general writing skills (7th grade and up). Contact Allison Baer, Ph.D. (Princeton '96, Columbia '03) at 212-877-9346 or visit www.allisonbaerconsulting.com

**Health & Fitness**

**SAN JOSE BOOT CAMP:** www.sanjosefitnessbootcamp.net

**Holiday Gifts**

**CUSTOM BRANDED GIFTS:** Beautiful journal books made in the USA by women-owned business. Also brochures, boxes and marketing materials. Contact us for price quote and more information. Emily Lewis Penn '77. info@inqueuedesigns.com

**Personal**

**SINGLE PRINCETON GRAD?**  
 Date accomplished graduates, students and faculty from the Ivy League and other top ranked schools. Join our network today.  
**THE RIGHT STUFF**  
 www.righstuffdating.com • 800-988-5288

**COMPLIMENTARY MEMBERSHIPS FOR MEN** seeking a meaningful relationship. Manhattan-based matchmaker. 212-877-5151; fay@meaningfulconnections.com, www.meaningfulconnections.com

**MEET YOUR MATCH:** To place your personal ad, contact Colleen Finnegan, 609.258.4886 or cfinnega@princeton.edu

**Professional & Business Services**

**LITERARY DESIGN**  
 Writing Services—20 Years Experience  
**WRITING • EDITING • FICTION • NON-FICTION**  
 CALL (540) 338-4636 OR (703) 979-8162  
 Email: literarydesign@infionline.net

**Princetoniana**

**RARE 1888 PRINCETON PHOTO ALBUM SCRAPBOOK:** Nine 8 x 10 photos, twenty smaller photos. View photos @ http://www.flickr.com/photos/89060526@No5, Best reasonable offer Dec. 12 thru Dec. 21. Before making offer email rosemayazrose@earthlink.net for additional info 1-928-303-3301.

**WEDGEWOOD BLUE PRINCETON UNIVERSITY PLATES:** Full set (12), including Nassau Hall, Chapel, Blair. \$3,000 O.B.O. Contact Jim at (845) 357-6561, jmettler39@aol.com, '66.

## Position Available

**PERSONAL ASSISTANT:** Highly intelligent, resourceful individual with exceptional communication skills and organizational ability needed to support a successful entrepreneur. Primary responsibilities include coordinating a complex schedule, assisting with travel, and providing general office help in a fast-paced, dynamic environment. An active approach to problem-solving is essential. Prior experience assisting a high-level executive is a plus. We offer a casual atmosphere in a beautiful space, working as part of an extraordinary group of gifted, interesting individuals. Excellent compensation and benefits, with significant upside potential and management possibilities. Please e-mail your resume to [execucruiter@gmail.com](mailto:execucruiter@gmail.com). Please note that, due to the high number of respondents, we will unfortunately be unable to reply to every inquiry.

**FAMILY MEDICAL COORDINATOR:** Extraordinarily intelligent, highly organized individual needed to assist in logistics, research, and various administrative tasks for medical and health-related projects for a Manhattan family. The right applicant will be meticulously detail-oriented, and will be able to collaborate with other professionals as well as work independently to see projects through to completion. Considerable weight will be given to unusual academic distinction and other intellectual achievements. A scientific background is a plus but is not required. This is a full-time position with a highly attractive compensation package and significant upside potential. Please send your resume to: [pmrrecruit@gmail.com](mailto:pmrrecruit@gmail.com)

**PERSONAL CHILDCARE ASSISTANT; HOUSING INCLUDED:** New York — Devoted professional couple with three wonderful, school-aged children seeks highly intelligent, amiable, responsible individual to serve as part-time personal assistant helping with child care, educational enrichment, and certain other activities at various times during afternoons, evenings, and weekends. Assistant will have a private room (in a separate apartment with its own kitchen on a different floor from the family's residence), with private bathroom, in a luxury, doorman apartment building, and will be free to entertain visitors in privacy. We would welcome applications from writers, musicians, artists, or other candidates who may be pursuing other professional goals in the balance of their time. Excellent compensation including health insurance and three weeks of paid vacation, and no charge will be made for rent. This is a year-round position for which we would ask a minimum two-year commitment. If interested, please email resume to [nannypst@gmail.com](mailto:nannypst@gmail.com)

**HIGH-LEVEL PERSONAL ASSISTANT NEEDED.** Seeking highly intelligent and organized individual for High-level Personal/Executive Assistant role, with responsibility for keeping a busy professional and parent on track professionally and personally. This person will help oversee a small staff and assist in managing day-to-day operations and long-term projects. Duties will include researching and producing "bottom-line" reports for principal, managing communication and information flow to/from principal, and helping to coordinate staff activities. Strong project management, communication, and research skills are a must; previous managerial experience is a plus but not required. This is a year-round, full-time position with excellent compensation and benefits. Please email your resume and cover letter to [hlparecruit@gmail.com](mailto:hlparecruit@gmail.com)



Princeton  
Alumni  
Weekly

## Looking for Talent?

Reach  
65,000 smart,  
accomplished  
Princeton alums  
interested in advancing  
their careers. Place an ad  
for your job opening in PAW  
now. Advertising options  
include display, classified  
and online ads.

Contact: Colleen Finnegan,  
advertising director, for more  
information 609.258.4886,  
[cfinnega@princeton.edu](mailto:cfinnega@princeton.edu)

PRINCETON EXCHANGE

Classifieds  
that work!  
Buy, Sell,  
Rent, Trade!

### CATEGORIES:

For Rent, Real Estate,  
Art/Antiques, Gifts,  
Professional & Business  
Services, Books, Web-  
sites, Personal, Cruises,  
House Sit, Wanted to  
Buy, Position Available,  
Princetoniana, Music,  
Educational Services  
**AND MORE...**

\$3.50 per word includes  
print and online ad.

**Frequency discounts  
up to 30% available!**

To place your ad in an  
upcoming issue contact:  
Colleen Finnegan  
[cfinnega@princeton.edu](mailto:cfinnega@princeton.edu)  
609.258.4886

# Final scene

P  
72

**Edwards Hall** Mid-October brought a glorious mix of color and shadow. A week later, Superstorm Sandy took down more than 100 trees.

*Photograph by Ricardo Barros*





# MANY THANKS

*Consider the numbers: 65,120 of you made gifts to Aspire.  
8,338 of you volunteered. How many students and faculty  
will benefit from your generosity? **Too many to count.**  
From all of us to all of you: **Many, many, many thanks.***





# PRINCETON VARSITY CLUB

The PVC mission is to implement and support programs that perpetuate and enhance the Performance, Values and Community of Princeton Athletics and University, and thereby contribute to "Education Through Athletics."

2012-2013

## PVC BOARD OF DIRECTORS

### Current Members

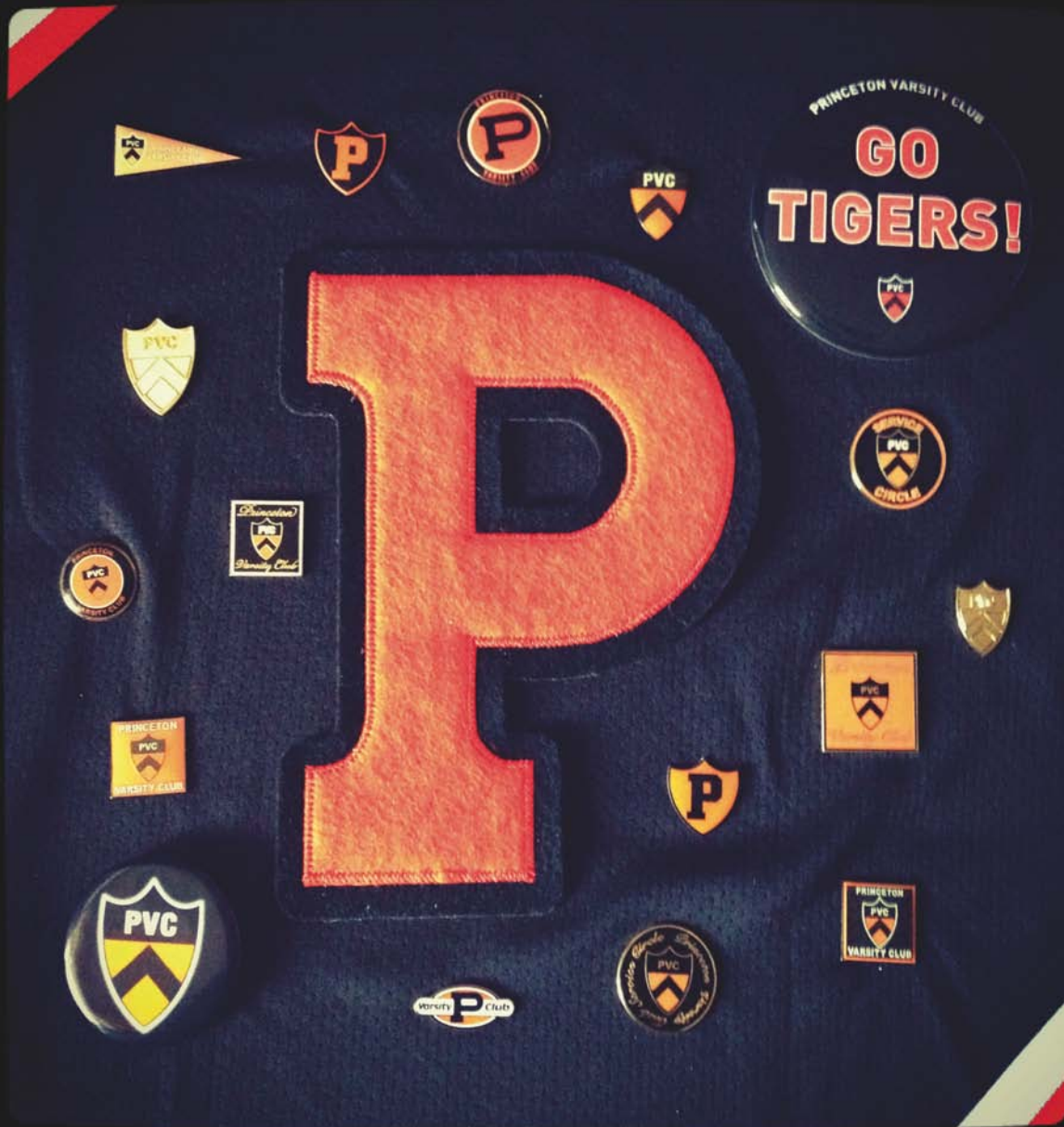
- Alan Andreini '68
- John Berger '74
- Y.S. Chi '83
- Janet Morrison Clarke '75
- Bill Ford '79
- Ed Glassmeyer '63
- Emily Goodfellow '76
- Bert Kerstetter '66
- Chanel Lattimer-Tingan '05
- Podie Lynch '71
- Steve Mills '81
- Mike Novogratz '87
- Caroline Buck Rogers '77
- Rod Shepard '80
- Frank Sowinski '78
- Terdema Ussey '81
- Frank Vuono '78
- Bill Walton '74
- Mark Wilf '84

### Emeritus Members

- Hewes Agnew '58
- Jim Blair '61
- Gog Boonswang '96
- Ralph DeNunzio '53
- Paul Harris '54
- Richard Kazmaier '52
- Tara Christie Kinsey '97
- Michael McCaffery '75
- Richard Prentke '67
- John Rogers '80
- Margie Gengler Smith '73

### Ex Officio Members

- Royce Flippin '56
- Gary Walters '67



## HONOR THE PAST, ENSURE THE FUTURE, BE A PART OF THE TRADITION

The Princeton Varsity Club recognizes the long tradition of athletic, academic and alumni success at Princeton University. It also recognizes that current varsity athletes, alumni letter winners and friends and supporters of Princeton Athletics represent a strong community built upon shared values and experiences.

The PVC offers current and former student-athletes, along with all supporters of Princeton Athletics, the opportunity to gather, serve, collaborate, and celebrate all that makes Princeton Athletics unique. Without the generous support of **Lifetime Members**, **Service Circle Members**, **Annual Members**, and **Annual Donors**, the PVC would not be able to offer broad-based initiatives and events that benefit all Princeton student-athletes.

The PVC would like to thank our members for their dedication to Princeton Athletics. To support the PVC, visit [www.PrincetonVarsityClub.org](http://www.PrincetonVarsityClub.org).