An ATLAS leader takes on new physics and old journeys

A PhD program gets to the root of inequality

The new head of St. Andrews embraces history — and bucks tradition

Minding the Gap

Navigating culture and race, Glenda Carpio charts the geography of division
The graduate school of arts and sciences • harvard university

Colloquy
ALUMNI QUARTERLY

2 The Voyager
Charting a steady course toward the future of physics, John Huth casts an eye backward, seeking the wisdom of explorers from an earlier era.

6 Minding the Gap
Glenda Carpio explores alliances and schisms in American culture, telling new tales about race and immigration.

8 Colloquy with Louise Richardson, PhD ’89
Embracing tradition, and bucking it, at St. Andrews.

10 Rewriting the Social Compact
Interfaculty program in social policy plumbs the causes and consequences of inequality.

14 Alumni Books
GSAS authors on the phenomenon of social acceleration, the religious lives of young adults, images of Abyssinia, and a doctoral project that turned profoundly personal.

17 On Development
Connecting with three recent alums on why they support the Graduate School.

On the cover: Glenda Carpio, professor of African and African American studies and of English. Photograph by Martha Stewart.
Points of Connection

Last fall, I stepped away from administrative duties for a few hours each week to resume another role, one equally challenging (and on many days considerably more fun): that of teacher. I led a graduate seminar in History of Science that explored new methods for understanding disease, medicine, and society, methods ranging from historical demography to cultural studies. These topics are home to me, academically speaking, and although it wasn’t always easy to carve the time away from dearly responsibilities, I relished the chance to reconnect to my “other” life as scholar and mentor.

Returning to the classroom reminded me not only of the talents of our Graduate School of Arts and Sciences students, but of the strong connection between those students — the whole GSAS enterprise, in fact — and Harvard’s larger pedagogical mission. Two undergraduates took my class, expanding their coursework in their concentration while pursuing a more advanced track with graduate students. Their interactions with our students served as one small example of how the Graduate School makes vital contributions to the life of Harvard College every day.

As a more comprehensive example, take the Graduate School’s increasing emphasis on preparing its students to become excellent classroom leaders. The resources deployed by the Bok Center for Teaching and Learning are designed to support graduate students in all facets of pedagogical training: in assessing student work, of course, and communicating clearly (no matter your native language), but also in the subtler arts of persuading an audience, engaging controversial topics, and analyzing one’s own performance.

To the undergraduates, graduate student teachers are not just the section leaders who articulate what the professor said in lecture; they are role models, confidantes, and mentors whose enthusiasm actually deepens the learning experience. Our best graduate student teachers — the ones nominated each spring for the Bok Center’s teaching awards — are innovative in their lesson planning and classroom style, devoted to finding creative ways to elucidate the toughest concepts.

The strength of our graduate students, as both teachers and research partners, is one of the reasons why the most highly regarded academics in the world want to come to Harvard. And now our students are teaming with faculty on another project with direct benefit to the College and the University: designing courses for Harvard’s new undergraduate General Education curriculum, which took effect last fall.

In 2008 we launched the Graduate Seminars in General Education, in which students engage with faculty on central conceptual and analytic themes, course design, and pedagogy. The seminars give faculty who want to develop new courses the opportunity to first offer a graduate seminar in which all the essential questions of course design are carefully assessed. And the graduate students who enroll in the seminars get to be the first teaching fellows when the finalized courses are selected for inclusion in the undergraduate curriculum.

There are 14 Graduate Seminars in General Education up and running this term. And at least four Graduate Seminar–derived courses are scheduled to enter the General Education curriculum in 2010 and 2011. Two will begin this spring: American Food: A Global History, taught by Joyce Chaplin (History); and Asia in the Making of the Modern World, taught by Shigeihisa Kuriyama (East Asian Languages and Civilizations) and Parimal G. Patil (Sanskrit). The Harvard College students who enroll in these courses will experience all the excitement that comes along with inventive, intellectually rigorous courses, but they’ll be in the hands of teachers — faculty members and graduate students alike — who’ve planned the ride very carefully. With kinks worked out and learning opportunities enhanced, these new undergraduate courses promise to be stimulating for all involved, another proof of the benefits Harvard accrues when it puts all its parts together in service of the whole. Connections matter.
CHARTING A STEADY COURSE TOWARD THE FUTURE OF PHYSICS,
JOHN HUTH CASTS AN EYE BACKWARD,
SEEKING THE WISDOM OF EARLIER EXPLORERS
On November 20, 2009, after more than a year of repairs, particle beams began zooming once again at the world’s most powerful particle accelerator, the Large Hadron Collider, located at the CERN laboratory near Geneva. On December 8, for the first time, the ATLAS detector recorded particle collisions at the record energy of 2.36 TeV (depicted here). Scientists hope to achieve collisions of 7 TeV early this year, potentially yielding extraordinary insights into the nature of the physical universe. You can follow along at http://atlas.ch.

By Bari Walsh

John Huth is a physicist who works at the edge of our knowledge of the universe, diving deep into complex ideas and designing experiments to test their veracity. He’s devoted the last 15 years to building one of the key experiments at the Large Hadron Collider, the huge particle accelerator that promises revolutionary insights into the nature of the known (and unknown) world.

So why has Huth lately been spending his time with a pencil and paper, drawing ancient-looking charts and thinking about astrology? It turns out that he’s been indulging a recently acquired intellectual passion, shifting focus from the new physics to the old art and science of navigation.

Inspired by a foggy, compass-less day in his kayak on Nantucket Sound, Huth has become fascinated by the methods long-ago explorers used to chart their position in the world, before the standard tools of navigation were developed. He created a freshman seminar called Primitive Navigation and began to probe the techniques and tools used by voyagers from the Middle Ages to the time of Prince Henry the Navigator, the Portuguese patron of discovery who adapted astrological techniques to guide 15th-century expeditions. He’s done so much research on the subject that he’s now at work on a book.

That remarkable diversity of interests is one of the things that makes Huth, Donner Professor of Science and former chair of the Department of Physics, such a good experimentalist. With the LHC now shooting its beams once more, 18 months after a malfunction shut down the huge experiment just days after it had launched, he’ll no doubt shift focus back to the future. But this is particle physics we’re talking about, so the past is never far behind. And that works for Huth, whose wanderlust extends in both directions.

Since 1995, Huth has guided the construction of essential electrical and computer systems for ATLAS, the largest and most complex of the LHC’s six particle detectors — and thus the largest and most complex detector ever built. The LHC, located at the CERN laboratory near Geneva, is a 17-mile-long underground hot-rod track on which beams of protons circulate and — guided by superconducting dipole magnets — smash into each other at unprecedented energy levels, creating conditions not seen since the first moments of the universe. In the popular press, the LHC is often called “the Big Bang machine.”

Building it has required an extraordinary multinational collaboration; ATLAS alone encompasses the work of more than 2,000 scientists from 37 countries and nearly 170 institutions. Huth managed the computing and physics for the U.S. part of the collaboration. Among the questions he thinks scientists will be able to tackle using the so-called new physics the LHC promises is how mass originated (oh, and what is mass, anyway?), whether dark matter exists, and whether all physical forces are unified. These questions have been tantalizing physicists for decades, as the limitations of the Standard Model, the reigning theory of particle physics, began to come into focus.

“Thirty years ago,” says Huth, “I was attending a summer school lecture by [future Nobel Prize–winner] Martinus Veltman. He said, ‘Right now, theorists are in the driver’s seat, but thirty years from now, experimentalists will be in the driver’s seat. We’re stuck, and we don’t know what’s going to happen, and we know something has to happen, and it has to be revealed by experiment.’ I remember thinking to myself, so I’m condemned to 30 years of basically filling out the theorists’ periodic table of elements. But
here we are, at that point where the experimentalists are finally in the driver’s seat.”

Huth hasn’t been stuck in idle, of course; at Fermilab in the early 1990s, he was part of the team that discovered the top quark, an elementary particle predicted by the Standard Model. But with the LHC, “the experiments, the accelerator, the computing, the collaboration — everything is at the frontier,” he says. “Y ou’re basically solving unsolved problems. There’s no engineering handbook you can turn to. Everything you do is going back to first principles in one way or another, whether it’s electrical engineering or mechanical engineering or computer engineering.”

Under Huth’s guidance, a team of Harvard faculty, postdocs, and graduate students designed and helped build a unique system for detecting and analyzing muons, which are like a heavy version of the electron, “bellwethers of a lot of interesting new physics,” Huth says.

One critical component of that work was the design of a novel electrical system that could read the signals from the muon detectors. “W e took a design that was mainly used for digital applications like computer chips and converted it to a mixed analog and digital design that was pretty nonstandard. The demands are extremely precise,” Huth says. “W e were pushing the envelope on everything — gas physics, semiconductor physics, all these basic physics — to be able to build these things.”

He also worked with computer scientists to develop a grid computing system, a World Wide Web–like construct that will both store and distribute the immense quantities of digital data that the LHC will generate. And like the Web, which was also created at CERN, Huth’s grid system has a good chance of becoming a mainstay of networked computing in applications and industries far beyond the LHC.

The work can seem nearly impenetrable in its complexity, but in Huth’s conception, there’s simplicity here, too, a powerful affirmation of inexorable truths. “Deep down, I always had this sense that the human world is kind of this artifice, and that if you scratch deep enough, you can get to bedrock reality,” Huth says, thinking back on what drew him to physics. “Experimental physics, for me, is like getting to touch the working things,” he continues. “Y ou don’t have to rely on what someone tells you. I think that’s what drew me to primitive navigation. I can walk around and know exactly where I am — no GPS.”

There’s a connection Huth traces between knowing your positioning in the world and knowing the world — achieving “a deeper appreciation for the stars, clouds, wind, and other natural clues that surround us.” On that same foggy day he set out paddling on Nantucket Sound, two fellow kayakers, embarking from a spot about a half-mile away, were lost at sea, having apparently gotten disoriented in the murk. The proximity of the tragedy was haunting, fueling his sense that attentiveness and observation — traits that modern conveniences and technologies often suppress — ought to be nurtured. The reward: nothing less than a new vision of the world and its wonders. And that sounds an awful lot like the rewards of ATLAS, another voyage of exploration where “the answer isn’t in the back of a book,” Huth says. “Y ou discover the answer on your own.”

“EXPERIMENTAL PHYSICS, FOR ME, IS LIKE GETTING TO TOUCH THE WORKING THINGS. YOU DON’T HAVE TO RELY ON WHAT SOMEONE TELLS YOU. THAT’S WHAT DREW ME TO PRIMITIVE NAVIGATION: I CAN WALK AROUND AND KNOW EXACTLY WHERE I AM — NO GPS.”

Inside the ATLAS experiment at the Large Hadron Collider near Geneva.
Glenda Carpio began her teaching career about as far away from Harvard as can be: in the overcrowded eighth-grade classroom of a chaotic and troubled public school in Compton, California. She’d joined Teach for America fresh out of Vassar College, brimming with all the idealism and romanticism a 22-year-old should have.

To be sure, hers was a well-earned romanticism; her life’s journey gave her the raw material to be a role model. At 12, and alone, she left strife-ridden Guatemala after her father was killed, to join her mother, then working as a maid in a wealthy Westchester, New York, household. She entered a typically well-funded suburban middle school, her life having shifted on its axis 180 degrees. She coped, and thrived, and was infused with a passion to explore the geography separating opportunity and its absence.

Going to Compton, “I thought I was going to be Malcolm X and revolutionize minds,” says Carpio, a recently tenured professor in African and African American studies and in English. “To my horror, I found out the students could barely read and write. I was amazed that a community that was so close to Hollywood, and therefore so close to so much of America’s power, could be so disenfranchised. I started thinking about what it is in American culture that can allow for that, for such disparities in such close proximity.”

Those two years in Compton (she taught fourth grade the second year) helped shape her PhD work at the University of California, Berkeley, and her first book, *Laughing Fit to Kill: Black Humor in the Fictions of Slavery* (Oxford University Press, 2008). She heard
how her students used humor to mediate their pain and anger, and she also heard them just being teenagers, calling out their friends in the game of verbal one-upsmanship known as "signifying." “When people talk about race in America, they often become so serious,” she says. “And it is very much a serious subject. But the people who are subjected to the worst consequences of racism are human. Too often they are represented only as victims or aggressors. I got curious about other forms of speaking and thinking about race.”

That curiosity led her to look at writers and performers who had perfected a form of humor she calls “conjouring” — absurd, exaggerated expressions of racial stereotypes. She grew interested in how that comedic form has been used, historically and by post-civil rights era humorists like Richard Pryor and Dave Chapelle, as a mechanism to grapple with and defend against the injustices of racism.

“Freud says we make tendentious jokes that mask aggression. But black humor is about relishing the exposure of it all,” she says. “It’s not about sublimating — it’s about calling someone out, putting the aggression out there.”

In the book, she traces the roots of that humor to the 19th-century writings of William Wills Brown and Charles W. Chesnutt, and further back, to the slave stories of Brer Rabbit and John and Master. She also explores the contemporary writings of Ishmael Reed and Suzan-Lori Parks, showing how those artists have used satire and burlesque humor to describe and transcend the violence of slavery and its latter-day mutations.

Her next book, which she’s beginning to plot now, will look at how immigration from Latin America has affected American culture and language, exploring in particular the ways in which Latino immigrants intersect with African Americans. “Historically, immigrants have had a contentious relationship to African Americans, because African Americans, tragically, have often been made refugees in their own country,” Carpio says. “To claim ‘American-ness’ has been a struggle — not because they aren’t American, but because they haven’t been recognized as American. So when non-Americans come into the country, they’re often taught to distinguish themselves from black Americans. But if those immigrants are brown, if they’re phenotypically closer to African Americans, they often end up being in the same social and political dire Straights.”

She’s looking at Junot Díaz and other immigrant artists and writers who are “thinking through this dilemma in American culture, about where race and immigration intersect. This is an interesting moment: The United States has had three big waves of immigration, and only the last one has involved immigration mostly from countries where people are not classified as white.”

Carpio has been at Harvard since 2002. Her intellectual passion and skills in the classroom — skills she credits to her Compton students — have made her a beacon for undergraduates and graduate students both. Like other young faculty members, she’s thoughtful about boundaries, about how wide to open the door to students and when to nudge it closed. But she doesn’t shy away from the challenge of finding the right balance, since mentoring is an obligation she takes seriously — and personally.

“As a kid, when people would ask, what are you going to do when you grow up, I never in a million years would have said I’d be a Harvard professor,” Carpio says. “But one of the ways I can see how this journey happened is that I’ve had really good teachers.” She says that without her mentors at Berkeley (Samuel Otter) and Harvard (Werner Sollors) she wouldn’t have seen her path or found her voice as a scholar. And she remembers another instance of quiet advocacy that nearly escaped her notice at the time.

“I found out after the fact that when I applied to graduate school at UC Berkeley, there was someone on the admissions committee who went to bat for me,” Carpio recalls. “I gather that I wasn’t a shoo-in, but that this person had read my file and found something there that was worth going to bat for. It was Professor Susan Schweik. I didn’t even end up working with her, because she did poetry and I was more interested in narrative, but any time I did anything good or worthy of notice in graduate school, somehow Sue Schweik would find out.

“I guess that personal journey is one of the reasons why I feel I want to give back. I look out for my students, because that looking out made such a difference for me.”

“I got curious about other forms of speaking and thinking about race,” says Glenda Carpio, professor of African and African American studies and of English.

Alumni Notes

Applied Mathematics
Lawrence A. Mysak, PhD ’67, was given the University of Alberta’s Distinguished Alumni Award (one of four for 2009) for “his pioneering research and inspiring teaching as a climatologist, mathematician, and oceanographer.” Mysak currently holds the Canada Steamship Lines Chair in Atmospheric and Oceanic Sciences at McGill University in Montreal, and he also serves as the president of the International Association of the Physical Sciences of the Oceans (IAPSO).

Astronomy
Ken Croswell, PhD ’90, has written an astronomy book for young people called The Lives of Stars. With vibrant photographs and clear language, the book leads young readers through an exploration of how stars are born, how they live, and how they die, explaining the relevance of all that to the development of life on earth.

Celtic Languages and Literatures
Kate Chadbourne, PhD ’99, has published a chapbook of poetry called The Harp-Boat, which recalls in colorful detail her childhood in Maine as the daughter of a lobarman. Chadbourne teaches Irish language and folklore at the Harvard Extension School.

Chemical Physics
Sheema Khan, PhD ’89, lives in Ottawa with her husband and three children, working as a patent agent and writing a monthly column for The Globe and Mail on issues pertaining to Islam and Muslims. In November, she published Of Hockey and Hijab: Reflections of a Canadian Muslim Woman, a collection of her columns from 2002 to 2009.

Fine Arts
Julia Meech, PhD ’76, is co-editor of Designed for Pleasure: The World of Edo Japan in Prints and Paintings, 1680–1860. The book brings together paintings, prints, and illustrated books featuring images known as ukiyo-e, or “pictures of the floating world.” It is an art that encompasses landscape motifs as well as pleasures of theatres and other urban entertainments, providing a glimpse into a time of enormous social and economic change in Japan.

Diane Radycki, Ph.D. ’93, has published “American Women Artists in Munich” in American Artists in Munich: Artistic Migration and Cultural Exchange Processes (Munich: Deutscher Kunstverlag, 2009); and “Pictures of Flesh: Modersohn-Becker and the Nude” in Woman’s Art Journal, Fall/Winter 2009 — the first American anthology on the modernist painter Paula Modersohn-Becker (1876-1907). The issue also includes papers delivered at the 2009 College Art Association meeting in Los Angeles, in the session on Modersohn-Becker that Radycki chaired.
When Louise Richardson was installed last March as principal and vice chancellor of St. Andrews University in Scotland (the equivalent U.S. role is university president), she spoke of marrying tradition with progress, embracing historic strengths while nurturing an increasingly global student population and pushing the frontiers of research. In many ways, Richardson herself personifies those goals.

A native of the Republic of Ireland and a longtime expert on international security, she was one of a relative few political scientists who saw the centrality of the study of terrorism in the years before September 11. As an administrator, she is the first woman, and the first non-Briton, to lead St. Andrews, a 600-year-old institution that is the third oldest university in the English-speaking world. The weight of tradition hangs heavy with that kind of history, as Richardson found out early, when a controversy erupted about whether the famed Royal and Ancient Golf Club, which also makes its home in St. Andrews, would bend rules excluding women and offer her a membership, as it had her two male predecessors. (It didn’t.)

Before accepting the job at St. Andrews, Richardson, PhD ’89, government, spent her entire career at Harvard, beginning as a member of the faculty in the Department of Government and winding up as executive dean at the Radcliffe Institute for Advanced Study. Along the way, she taught one of the most highly regarded undergraduate courses in the Faculty of Arts and Science, Terrorist Movements in International Relations; produced the critically acclaimed 2006 book What Terrorists Want, among others; and helped Radcliffe complete its evolution from woman’s college to world-class institute for scholars in residence. She has spoken to audiences across the country and internationally about combating the terrorist threat and has testified on that subject before the U.S. Senate.

Colloquy asked her to reflect on her current administrative role and on the challenges of moving forward while embracing the past.

You worked under Drew Faust at Radcliffe. Did that prepare you in any sense for your current job?

I had been head tutor in the government department when I went to Radcliffe— that was the only administrative experience I’d had. So coming to Radcliffe as executive dean was a very big step. As I observed Drew and worked with her, I thought a lot about leadership, and I certainly feel I’m more effective leader today, having been a number two. We effected quite a considerable transformation in Radcliffe, and I learned an enormous amount in the process.

And how did it shape your leadership style, do you think?

I really question the notion that one has a particular leadership style; I think different situations require different styles of leadership. In the early years at Radcliffe, when we were going through a very difficult time financially, I think I practiced a leadership style that was quite different from several years later, when we had established Radcliffe and secured it financially and organizationally. I think I was free to be much more collaborative, say, than I felt I had the freedom to be early on. I try to exercise flexible leadership, depending on the challenges at hand.

You’ve spoken of using tradition as a platform upon which to build the future at St. Andrews. How does an institution with so much history manage to be forward-looking?
Obviously, one cannot be in a place like this without having an enormous sense of responsibility to the past and to those who’ve gone before you. But when you think about it, they didn’t make the university what it is by thinking about a bout what the philosophy people, they kept their eyes firmly fixed on the future. I believe that we are animated by the same ideals that animated scholars who came here 600 years ago.

But hasn’t St. Andrews gotten along fine without an endowment? We’re not just competing in Scotland anymore. A third of our students are Scottish, a third are from the EU, and a third are from outside of the EU. So we’re now competing globally and recruiting faculty globally, and in order to do that, we need investments.

The case I would make is this: when the people who are now at their prime earning power in the UK were at university, the marginal tax rate was over 90 percent, and there was only about 4 percent of the population going to university. Today the marginal tax rate is about 50 percent, and 50 percent of the population are going to university. So you don’t have to be a numbers cruncher to calculate that we need to generate more funding from elsewhere, if we’re to stay at the top, and that’s certainly my aspiration.

What are your other challenges?
Every seven years, the British government does a research assessment exercise, where every department in every school is rigorously compared to all the others. Our philosophy department ranked number one in the UK, and our physics and chemistry both came joint second. One really likes to invest in success, but then what do you do about the programs that didn’t do well? Do you divest, or do you try to bring them up?

One thing that has really surprised me is how much more bureaucratized higher education is here than in the US. The fact that we are publicly funded means that we have replicated so many of the government processes in responding to the government demands. I have been on what’s been described a s a bureaucracy -busting binge since I got here. One of my goals is to give the academics back more of the most valuable resource, time.

Are the issues around your being a woman in the past now?
Not yet. These issues have been much bigger than I imagined they would be here. I’m very different from my predecessors in this role, in a whole variety of ways. That has been very significant. I am acutely conscious that I am a role model, and I feel a keen sense of responsibility in that. I’m quite careful about how I navigate the woman piece.

And the golf controversy?
I haven’t spoken publicly on that, and I won’t, other than to say that I don’t have time to play golf.

It’s been almost a year — what do you love about St. Andrews?
I love the physical surroundings, the beautiful medieval town at the edge of the sea. I love the scale. We’re big enough to compete with bigger universities for the best students, most competitive research funding, and best academics, and yet we’re small enough really to have an impact on the life of every student who comes here. We’re small enough that the philosophers can get to know the physicists just spontaneously.

The other thing I love is the sense of affection for the university that the current students and the alumni have. Very early on I was told that once a year I had to meet with all the elected student representatives and the heads of student societies. I went into this meeting braced for a long night of complaints about high rents and bad food and all the rest of it. Well, it took me ages to be able to say anything, because the students kept telling me what an extraordinary institution it was. And when they raised issues like high rents, I’d say, “Here are the reasons why the rents are as they are, help me think about how we can change this.” And they were completely constructive. The students and staff are utterly committed to the place in a way I really hadn’t experienced elsewhere.

That has to serve you well when it comes to meeting one of your big challenges, raising an endowment.
There isn’t a culture around educational philanthropy in the UK. Scottish students pay no tuition. They see education as something they pay for in their taxes, just like the roads. So that is going to require a cultural shift and a lot of persuasion on my part. We don’t have the same tax advantages for philanthropy as in America, anywhere. Scottish, a third are from the EU, and a third are from outside of the EU. So we’re now competing globally and recruiting faculty globally, and in order to do that, we need investments.

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INTERFACULTY LEARNING

REW Rif THE SOCIAL COMPACT

PROGRAM IN SOCIAL POLICY BRIDGES THE DISCIPLINES TO EXPLORE THE CAUSES AND CONSEQUENCES OF INEQUALITY
“As politics have changed, the contribution of social scientists to the policy conversation has really been marginalized. That’s something we’re trying to reassert.”

By Bari Walsh

When Bruce Western looks at America today, he sees a social landscape fractured by thirty years of turmoil in the labor market, a drastic reshaping of the American family, and a politics that has often abandoned the idea that government can or should be the source of inspiration or solution.

On the other hand, it’s a great time to be running a graduate program in social policy, Western says with a smile. As chair of the joint GSAS–Kennedy School PhD programs in social policy — among the 15 interfaculty programs that the Graduate School administers with other Harvard schools — he directs analysis of a broad range of issues key to the social fabric of America and Europe: education, family structure, political participation, employment, immigration, and housing, among others. Students explore these diverse issues through a common lens, one that focuses on the causes and consequences of inequality.

“In a way, these PhD programs are very much a creature of their time,” says Western, professor of sociology and also director of the Harvard Multidisciplinary Program in Inequality and Social Policy. “Economic and social inequality has been growing in the United States over the last three or four decades, and partly this is happening because public policy efforts at redistribution have become weaker and weaker. At their most ambitious level, our programs are trying to contribute to new solutions to some of the most fundamental social problems facing the country.”

That long reach is facilitated by the “discipline-plus” structure of the two social policy PhD programs — one based in the Department of Government and the other in the Department of Sociology. Students are admitted to one of those home departments and develop a thorough grounding in that discipline. In their second year, they embark on the social policy sequence and advanced research, working with faculty members from the disciplinary departments in the Faculty of Arts and Sciences and in the Kennedy School.

The main curricular focus is the Proseminar in Inequality and Social Policy, which Bruce Western, chair of the interfaculty PhD programs in social policy, says rising levels of inequality and insecurity in the U.S demand a new role for social scientists.

INCARCERATION AND INJUSTICE

“Back in 1995 or 1996, I was having a conversation with a friend of mine from graduate school who worked in criminal justice,” says Bruce Western, then a sociologist at Princeton working on comparative welfare states and labor markets. “She joked, ‘Oh, America doesn’t have a welfare state, we have a penal system.’

That provocative remark proved auspicious, steering Western’s research for the next decade as he set about tracing connections between social and economic inequality and the growth of the prison population in the United States. In a series of papers, and in his 2006 book, Punishment and Inequality in America, Western showed that as limited-government politics took hold in the 1980s, weakening social service institutions, ‘we grew a massive penal system to help manage the social problem of idle young men in inner-city neighborhoods. The solution of limited government was really illusory.’

As large numbers of African American men were imprisoned in the 1990s, stratifications in American society became more pronounced and acquired new durability. Statistics on unem-
As he visited prisons and spoke with the people who populate them, Western was struck by “how powerful these institutions are,” he says. “They’re very compelling institutional settings, where everyone’s movements are minutely surveilled and regulated. The line between the prisoners and everyone else — that’s a line that everyone’s watching.” He became convinced that mass incarceration, a phenomenon that’s largely invisible to whole swathes of American society, is a civil rights challenge, “a profound threat to social justice.”

Now at work on a “more macroscopic” book about the rise of social and economic inequality over the past 30 years, he’s looking not just at prisons but at the decline in unionization, the rise in single parenthood, and a political climate that sidelined policies to address the ramifications of those and other social transformations. “And this financial crisis is a very challenging event,” he says. “For people in my field, working on poverty and inequality, we’re not used to thinking about financial institutions as a really significant influence. These last 12 months are making me think we need to have a story about the changing role of finance in American social and economic life. I don’t think we’ve caught up with this as social scientists.”

employment and wages were artificially skewed, Western argued, as an entire segment of the population was removed from the calculus. And the legitimacy of the criminal justice system was gravely compromised in the very same poor communities that most need protection from crime.
“The policy piece is very serious,” adds Edin, professor of public policy and management at the Kennedy School. “We really want students to understand the context in which their research is going to be used and received. And that’s a tricky kind of thing, something you would almost never learn in a traditional academic department.”

For example, “we have a student who’s looking at mixed-income neighborhoods in the United States, their origins and prospects for stability,” Edin says. “One of the things she’s found is that one type of neighborhood that’s able to sustain a profile as a mixed-income neighborhood is a gentrifying neighborhood that has a hard stock of public housing in it. So, that’s interesting, but it’s not enough for our students to find something like that and put it out there. It’s important for them to understand what a policymaker might make of this, and how it could be used, or should be used.”

On issues like those and others, the program seeks to develop ideas “in a very dynamic social context,” says Western — “a context that is vastly different from when our main social welfare state institutions developed, first in the 1930s and then in the 1960s.” American families face new, perhaps unprecedented, levels of insecurity and risk, Western says, and social policies that speak to this new reality have yet to develop.

“As politics have changed, the contribution of social scientists to the policy conversation has really been marginalized,” Western says, “and I think that’s something we’re trying to reassert. The agenda is very nonpolitical in that way. If we have questions about healthcare reform, we do have to know what it will cost, how much will coverage be extended, what services can be covered efficiently. These are empirical questions that social science can help provide an answer to — and we should use social science to answer them, rather than just opinion or anecdote.”

**AGENDA FOR GOOD GOVERNANCE**

What factors combine to push an issue on and off the political agenda in America? That’s the question of interest to Jacqueline Chattopadhyay, a fifth-year student in the government and social policy program. Her dissertation focuses on fluctuations in government and public attention to consumer protection issues — “not so much about tangible goods, as in the 1960s, but in areas of health insurance, medication, and home loans,” she says.

“We hear political candidates talking about making those goods more affordable and making sure more people have access to them. That’s certainly an unfinished project,” says Chattopadhyay. “But it’s also important to look at the quality of what people are accessing, and at risk mitigation involved in using those goods. I’m interested in when government and people pay attention to the latter. What pushes these things up on the agenda? Do they ever get pushed up before they reach crisis points?”

Chattopadhyay says she started thinking about research “as a public good” while still an undergraduate at the University of California, Irvine. She was drawn to the social policy program because “I wanted to be in a political science program that gave me a firm grounding in the discipline’s traditions and methods, but that simultaneously encouraged me to think about the literature in other social science areas and in public policy. A program like this, that institutionalizes communication between departments, helps prevent a situation where you have research trajectories going along in parallel but never intersecting, just staying in their silos.”

**CRIME DOESN’T STRAY**

“The general perception about crime is that it can happen at any time, anywhere, to anyone. We’re finding that’s really not true,” says David Hureau, a second-year student in sociology and social policy and a research associate in the Harvard Kennedy School’s Program in Criminal Justice Policy and Management.

Working alongside Kennedy School senior research associate Anthony Braga (a longtime leader in strategic crime prevention in Boston and elsewhere) and Andrew Papachristos of the University of Massachusetts Amherst, Hureau geocoded a rich set of data from the Boston Police Department to show that over the past 30 years, about 4.5 percent of Boston’s 28,000-plus street segments (corners and blocks) produced 75 percent of the city’s shootings. About 88.5 percent of the city’s street segments didn’t experience a single shooting in that period. “Even for us as researchers, who are aware of the concentration of crime, that was pretty staggering,” Hureau says.

As he begins to shape the interests that will guide his doctoral work, he’s finding the right fit in a program that “generates research that is useful to policymakers but that also has strong theoretical questions associated with it,” he says. “For policymakers who are planning deployment of police officers and street workers, the message is that the field you’re playing on is much smaller than you might have considered. Then the theoretical questions are, does this durability in violent crime coexist with durability of other social variables like poverty and single-family households? What’s the directionality of the causal arrow?”
When panic disorder (PD) was defined in 1980, it reflected a new biological approach to mental illness, emphasizing the role of neurotransmitters and physiological factors. This approach brought valuable treatments and, especially, medications, but it viewed PD narrowly, as a single entity. In these historical and cross-cultural essays — involving survivors of Rwandan genocide, Tibetan refugees, and Cambodian and Chinese patients — the authors show that PD varies by culture, reflecting local understandings of well-being and distress.

That social life is moving at an ever-more-rapid pace is a truism. But contributors to this volume note that the idea has found little room in social science theory. To remedy that situation, the editors combine classic statements of the problem (e.g., from Henry Adams and Georg Simmel) and current analyses of such acceleration — in the economy and social infrastructure, our workplaces and leisure-time activities (or lack thereof), and, particularly, the political realm. Scheuerman's concluding essay thoughtfully assays the problematic effects of social acceleration on civic engagement.

The follow-up to a 2005 study of American teenagers, this insightful volume continues tracking a nationwide sample of individuals, now entering adulthood. With its survey and interview approach, Souls in Transition draws striking insights from its subjects. Besides outlining the divergent experiences of mainline and evangelical white Protestants, black Protestants, and Catholics, the authors also find that — for many subjects — young adulthood represents a low point in religious practice and sentiment, citing the age group’s tendency to skirt difficult issues by embracing a lazy, “people are different” relativism.
DISTANCING ENGLISH
A Chapter in the History of the Inexpressible
By Page Richards, PhD ’94, English and American literature and language

Taking Walt Whitman’s 1855 preface to Leaves of Grass as its starting point, this small but dense volume explores the inexpressible — the gap “between what can be said and what can never be said.” Richards is particularly concerned with the emergence of a distinctly American literature. She emphasizes the difficulties posed by the incomplete separation of American and British English, invoking writers like Noah Webster, Hawthorne, Poe, Melville, H. L. Mencken, and Wallace Stevens, among others.

GOLDEN LEGENDS
Images of Abyssinia, Samuel Johnson to Bob Marley
By W. B. Carnochan, AB ’53, PhD ’60, English and American literature and language

In exploring the sources of the popular image of Ethiopia, Carnochan ranges widely. Besides the titular Johnson (whose Rasselas is set there) and Marley (a deathbed convert to the Ethiopian Orthodox Church), he highlights the writings of radical Sylvia Pankhurst; a tireless supporter of Ethiopia after Mussolini’s 1935 invasion; starchy Evelyn Waugh, an apologist for the Italian takeover; and many others. But the book focuses on travel narratives — and resembles them in its readability and preference for the journey (the getting there) over the ultimate destination.

Mandate for Change
Policies and Leadership for 2009 and Beyond
Edited by Chester W. Hartman, AB ’57, PhD ’67, regional planning

This collection of essays, by a veritable who’s who of liberal activists, offers a top-to-bottom agenda for change. Specifically, Mandate for Change is meant to inform the actions of the Obama administration as well as to rally broad support for progressive alternatives to what its contributors see as the bankrupt principles of the previous administration, which Chester Hartman characterizes as being free-market (but favoring large corporations), anti-government (that is, opposed to government activism domestically), and interventionist (prone to aggressive and often unilateral government activism abroad).

ENABLING CREATIVE CHAOS
The Organization Behind the Burning Man Event
By Katherine K. Chen, PhD ’04, sociology

Chen notes Americans’ hostility to large-scale organizations, as evidenced in such pop-culture icons as the comic strip Dilbert and the television series The Office. On the other hand, the annual Burning Man event — a gathering of countercultural artists and kindred spirits — draws nearly 50,000 people to Nevada’s Black Rock Desert, making it a truly large-scale activity, but one that’s largely self-organized. Chen’s interest centers on how those involved negotiate the opposing hazards of under- and over-organization, as well as the sometimes antagonistic responses of local authorities.

THIN PLACES
A Pilgrimage Home
By Ann Armbrecht, PhD ’95, anthropology

Thin Places is, by turns, a personal memoir, closely observed anthropological journal, and literary vision quest. Armbrecht recounts her lifelong yearning for “some sacred essence I did not have words for, something I knew . . . mostly by its absence.” Her doctoral research in a remote Himalayan village, a community deeply rooted in the land, revealed something of what she had long sought. Though her journey was marked by profound losses (particularly the breakup of her marriage), she ultimately achieves a deeper existential grounding.

TRUST ME
Helping Our Young Adults Financially
By Kenneth Kaye, AB ’66, PhD ’70, human development, with Nick Kaye

In a time of “boomerang” offspring and “helicopter” parents, this book is a natural — perhaps necessary — response. The authors, father and son, address the financially and emotionally fraught terrain that opens when children (often repeatedly) seek money from parents. Having been there, the authors know whereof they speak. To avoid misunderstandings and recriminations, Kaye pére stresses the importance of clarifying the expectations and terms of “the Deal.” Trust Me also offers practical advice on personal finance and cautions against the lure of credit-card debt.

Reviews by James Clyde Sellman, PhD ’93, history
HIGH HONOR FOR A CHEMIST
Richard N. Zare, AB’61, PHD’64, the Marguerite Blake Wilbur Professor in Natural Science and Howard Hughes Medical Institute Professor at Stanford University, will receive the 2010 Priestley Medal, the highest honor bestowed by the American Chemical Society, at the national meeting of the ACS in March. The award is given in recognition of a lifetime of distinguished service to the field of chemistry. Zare is renowned for his research in the area of laser chemistry, resulting in a greater understanding of chemical reactions at the molecular level. His development of laser-induced fluorescence as a method for studying reaction dynamics has been widely adopted in other laboratories. He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences, among many other honors.

WE BREAK FOR WINTER
Thanks to Harvard’s new calendar, January was a rare unstructured month for graduate students — a time largely free of grading, teaching, and other obligations, perfect for recharging intellectual batteries and taking advantage of resources easily overlooked in the heat of the term. To that end, GSAS hosted a flexible January series of seminars, workshops, and extracurricular opportunities to help students make good use of the winter break. There were timely and topical professional development opportunities, research seminars in the social sciences, a hands-on seminar series on the history of the book, writing groups, wellness workshops, jazz and game nights at Dudley House, and even a ski trip or two.

GSAS ALUM TO LEAD CHILE
Sebastian Piñera, PhD ’76, economics, a businessman who owns shares in Chile’s largest airline, a television station, and its top soccer team, will assume office in March as the country’s new president — its first center-right president in twenty years. Piñera has vowed to use his presidency to create jobs, mitigate poverty, and bring the power of the private sector to bear in stimulating economic growth. He defeated former president Eduardo Frei in a runoff election in January and will take the reins from the term-limited current president, Michelle Bachelet; he had run unsuccessfully for president in 2005 and was a senator between 1990 and 1998. Piñera is known for having introduced Chile to credit cards in the 1980s, and he’s promised to bring his business acumen to the presidency. He has said he will create a million jobs and double Chile’s per-capita income of $12,000 a year by expanding the country’s growth to 6 percent a year.

DARK KNIGHTS
The Harvard-Smithsonian Center for Astrophysics (CFA) is opening its doors — and the night skies — to middle-school students from three Massachusetts communities this year, betting that astronomy will help excite young learners about science, math, and technology and keep them engaged at a time when many begin to tune out. The endeavor is called ITEAMS (Innovative Technology-Enabled Astronomy for Middle Schools), and it’s funded by the National Science Foundation and coordinated by Bruce Ward, senior research associate at CFA.

Students involved in the program, from Cambridge, Lynn, and Fall River, connect to CFA through an online interface, performing a series of exercises led by their teachers and then giving directions to robotic telescopes located at the Harvard Observatory and the Whipple Observatory in Arizona. The students receive e-mails of the resulting images — planets, moons, galaxies, and nebulae. Because the telescopes follow the students’ instructions, Ward tells the Harvard Gazette, the images they take can be imperfect: over- or underexposed, off-color, or blurry. By correcting their mistakes, students learn not only about the objects they’re targeting, but also about light and color, distance and perspective.

Now the CFA is making the online interface available to the general public. Visit http://mo-www.harvard.edu/OWN to learn how you can operate your own ground-based “micro-observatory,” a network of real robotic telescopes that you’ll command via the Web.
ON DEVELOPMENT

GOING STRONG

It’s been 10 years since they left GSAS. Three members of the Class of ’99 talk about what they gained and why they give.

By Leigh DuPuy Carlisle

A CONFIDENCE BUILDER

Memories of friendships at Dudley House and overcoming challenges in the lab are just two of the reasons Kirsten Price Essenmacher, PhD ’99, molecular and cellular biology, has given consistently to GSAS since settling in Palo Alto, California.

“My experience at Harvard gave me so much confidence,” says Essenmacher, who worked in biotechnology after Harvard and now, as the mother of young children, devotes her time to local environmental activism. “I’m a better public speaker, volunteer, and writer because of my time at GSAS,” she says.

The analytic skills she developed at Harvard inspire her to question the status quo, a proclivity that comes in handy in her efforts to preserve community green space or promote water conservation in northern California. “I love to look at problems and ferret out the inconsistencies — it’s the greatest challenge,” she says.

To continue to nurture her intellectual curiosity, Essenmacher regularly attends alumni events sponsored by the Harvard Club of Silicon Valley. “It’s a great way to connect back to the University, hear amazing speakers, and meet others near me who are alumni.”

AN UNEXPECTED TURN

For Timothy Rand, AM ’99, giving to GSAS is one way to acknowledge the importance of the scholarship and fellowship support he received during his academic career, without which he might never have discovered a new life in Cambridge.

A former Wall Street analyst and founder of a computer start-up in the 1980s, Rand came to the University to pursue a master’s degree in the history of science. “My experience at Harvard shook me,” says Rand, “and it was just what I needed.”

One surprise was finding a passion for the works of Shakespeare, which Rand uncovered in a thesis on how theater served as a catalyst for scientific creativity in ancient Greece and Elizabethan England. He has lectured on the Bard at the Boston and Cambridge centers for adult education and performed in local theater productions. An active blogger, Rand is excitedly planning a new essay on the nexus of Shakespeare and wine.

“Harvard informed my journey and I can’t imagine what my life would be without it,” he says.

A FOCUS ON SUCCESS

Dmitri Vezenov, PhD ’99, chemistry, admires Harvard’s dedication to bringing the best people together, regardless of financial need. “The faculty and students at Harvard are like no other,” he says. “They make Harvard a stimulating intellectual environment.”

Vezenov gives to Harvard in recognition of this vital student support. A beneficiary of fellowship support himself, Vezenov is grateful for how that support allowed him to focus on his research without the distractions that financial worry can cause. Now an assistant professor at Lehigh University in Pennsylvania, he knows well the impact that financial aid has on the lives of his own students.

Vezenov took a detour in his academic career; after Harvard, he worked in industry, developing optical storage technology using nanoscale science. He often had occasion to draw on his Harvard training, and he’s continued that practice at Lehigh. “My time at GSAS taught me that the best chance for success is to focus on the problems that no one else is addressing,” he says. “This is what makes innovation possible.”

For information about how you can support the Graduate School Fund, and about how that support helps students, visit alumni.harvard.edu/give/graduate-schools/gsf.
ALUMNI WEEKEND  |  APRIL 9–10, 2010
Featuring a keynote address by global health leader Paul Farmer

We hope you’ll plan to attend the Graduate School’s annual Alumni Weekend (April 9–10), a festive and intellectually vibrant gathering that features symposia by some of Harvard’s most compelling faculty members.

The main program begins Saturday morning with a keynote address by Paul Farmer, PhD ’90, anthropology, MD ’90, Maude and Lillian Presley Professor of Social Medicine in the Department of Global Health and Social Medicine at Harvard Medical School. Farmer, a founding director of Partners in Health, the renowned health care nonprofit, is a leading voice in global health and development issues.

A reunion of alumni from East Asia programs will kick things off on Friday. If your degree or dissertation focused on East Asia, you’re invited. Stay tuned for details.

GSAS DEBUTS ON TWITTER AND FACEBOOK
You’re invited to join us in the brave, not-so-new world of social media. For the latest news on all things GSAS, follow us on Twitter (twitter.com/harvardgsas) and become a fan on Facebook.

SAVE THE DATE: REGIONAL ALUMNI EVENTS
MARCH 23 | CHICAGO
APRIL 22 | TORONTO
Visit the GSAS alumni website (www.gsas.harvard.edu/alumni) for details as they emerge, or contact gsaa@fas.harvard.edu.

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The HAA Global Pass connects more than 190 Harvard clubs in more than 70 countries by allowing members of participating clubs to attend events at other participating clubs, on a space-available basis, at the local member price. The perk gives alumni an opportunity to engage with an integrated, yet diverse, global Harvard community. Find out more at www.clubsandsigs.harvard.edu. ☞