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Letters

Fowl Word
The winter issue of your magazine had an article on “Translator of Geek” (p. 25). The word “geek” halfway turns my stomach. It’s an example of word-meaning change with the generations.
I am a child of the Great Depression, when jobs were scarce. There were derelicts and drunks at that time who would do anything for a few coins. With no TV, carnivals and traveling road shows were prevalent. They featured men who would bite off the heads of live chickens. These men were called “geeks.” I wonder what geek gave the term its modern meaning. It still makes my stomach quiver each time I see or hear it.
C. Hilyard Barr, C’48
La Canada Flintridge, Calif.

Bad Science
The two letters in the Winter 2006 issue about your “Creative license” article (Fall 2005) deserve a response. John Shirk, C’83, says that “Macro-evolution remains an unproven theory” because there are no known intermediate forms such as a “fish-with-legs fossil.” There are a great many intermediate fossils, including some marvelous whales with legs. Albert McGlynn, C’67, supports intelligent design over a long time but says that “If natural phenomena show complexity that is, at this point, ‘irreducible,’ acknowledging there might be a creator seems to be the intelligent approach.” He again uses the term “at this point” about “life forms that … appear to be irreducibly complex … where natural selection will not preserve functional intermediates.” The term “at this point” relates only to what we know now; it presupposes we will never learn how intermediates could have functioned. This is an abdication of reason and a regression to “God of the Gaps” theology. It is not science, and not even good theology.
Gerald M. Levitis, M.D., C’61
New York, N.Y.

Uncritical Acceptance
Letters in your winter issue criticizing “Creative License” (Fall 2005) ignore difficulties in arguments favoring intelligent-design creationism. Never mentioned by critics of evolution is the real source of their belief: uncritical acceptance of the Bible. They seem unaware that some of its passages advocate conduct repugnant to modern Western society, while others demand faith based on uncritical reading. The Ten Commandments, for example, demand the death penalty for failure to observe the Sabbath (Exodus 31:14-15, 35:2 and Numbers 15:32-36). Similar punishment is required for any number of infractions, like adultery and homosexuality (Leviticus 20:10-16), that are no longer regarded as offenses. And what would become of Original Sin, if someone were to point out how few of us earn our daily bread by the sweat of our brows in these days of air-conditioning or the ever-decreasing number of women who bear children in pain and suffering? Criticism of the lack of fossils illustrating key points in evolution is ridiculous in comparison to the lack of evidence for supernatural forces, beings and events fundamental to belief in creationism. Have any of its advocates ever witnessed someone rise from the dead or similar phenomena? Letters like those cited above only show how difficult it is to achieve a well-rounded education in a few short years, even at an institution as progressive as Penn.
John McCallum, C’53
Meridian, Mass.

Legendary Lecturers
The column on professor Alfred Rieber (“Story Time,” p. 6) in your recent issue caused me to think: Over the years, how many other professors in Arts and Sciences gave “legendary” lectures? How about John La Monte, the Henry C. Lea Professor of Medieval History, whose lectures on the third floor of College Hall back around 1950 drew standing-room-only crowds. Even friends from the Wharton School would drop in. Professor La Monte, unfortunately, died far too early. Maybe you could write about other legendary lecturers.
Bill Steltzer, C’51, GEd’57
West Grove, Pa.

Do you have a story about a legendary lecture or lecturer? Send us a letter. —Ed.

Penn Arts & Sciences Magazine welcomes letters and reserves the right to edit. Write us at 3440 Market Street, Suite 300, Philadelphia, PA 19104 or e-mail at penssas@sas.upenn.edu.
Architects tell us there is an intimate relationship between the contours and quality of a space and how people inhabit it. This is only too true for the spaces where the SAS faculty teach and study.

As an English professor, I taught for many years in the building that was, until this year, called Bennett Hall. When the helicopter atop Penn’s medical center revved up or swarms of leaf blowers assaulted the campus in the fall, I often had to stop talking — or start shouting. The building’s walls and windows were poor barriers against the racket of urban life. Over years of deferred maintenance, the structure had become dated and more than a little shabby.

With the renovation and reopening of the new Fisher-Bennett Hall this spring, all of that has changed. We now have a building that is soundproof, bright, technologically sophisticated and versatile. Next to restored or new classrooms and lecture halls, we have added lounges and studies, which allow students to continue the exchange of ideas begun in class. When faculty gather in these community spaces, they often share teaching strategies, confer about students and discuss research — activities crucial to university life.

In transforming the old structure to better support teaching and learning, we have built into Fisher-Bennett state-of-the-art instructional technology, which has become an integral part of the modern classroom. Some spaces were reconfigured to bring in more light, but we have also taken care to preserve the loveliest old features, like the grand staircase. The refurbished building, home to the English department and music teaching-and-performance spaces, tells everyone how highly the School of Arts and Sciences esteems the humanities. We cherish our links with the past, and we strive to understand our connection with those traditions.

As for the other half of the “arts and sciences,” we have also made progress in raising the caliber of space for science. The Carolyn Lynch Laboratory also opened this spring. It’s not the same old biology lab with petri dishes and microscopes. In addition to offering technologically advanced facilities, the Lynch Laboratory features the kind of interdisciplinary workspace essential for research in the life sciences today. Its flexible research modules can be reconfigured to accommodate cross-disciplinary collaborations and can adapt to unseen directions that advancing sciences will take in the future. The second phase of our life-sciences construction project, which will bring together our biology and psychology faculty, will extend that creative approach to space to teaching and learning.

Opening up and bringing light into Fisher-Bennett Hall is the perfect metaphor to capture how the School’s mission for teaching and research guides the building of new structures and the refurbishing of old ones. How we put together bricks and mortar can enliven the intellectual life of an academic department and brighten the educational experience of students. You can see the same effect in the other new spaces created this academic year: the McNeil Center for Early American Studies and the David B. Weigle Information Commons. Both are inviting places meant to enhance a lively academic community.

English department chair, Jim English, observes that faculty are spending more time in Fisher-Bennett Hall. “Every now and then we pause and just soak up the sunlight and the quiet,” he reports. “The improvement fosters better intellectual community, drawing us together into the building and making us more available to our students.” What more could you ask of a place? We have many challenges ahead in achieving the same kind of transformation of spaces for music, the life sciences and nanoscience, but we know that the effort is worth it.

See more about new SAS spaces on pages 18 and 31.
Because of the Bosnian War, people think of her country as “gray and destroyed,” she says, but “the river that goes through my hometown is very, very blue in my memories, and the trees and mountains are green.” Mostly, she remembers feeling “totally safe,” playing into the night on the streets and coming home from the discotheque in the early morning darkness. Even when Serb forces attacked Sarajevo in 1992 and began their march toward Bihac, townspeople refused to believe that bad things could happen to them. Hromadzic was 16.

The first artillery shell exploded in the middle of the night. “I jumped up, put on my favorite 501 Levi’s jeans and was ready to leave.” By that time, there was nowhere to go. The Serb army had filled the green hills surrounding the city with guns. “That first shell was followed by thousands and thousands more, and my town was under siege for three-and-a-half years.”

Serb gunners would target the schools at the start of class, Hromadzic recalls. She fought back by reading in the dim light of a foul-smelling lamp made from a shoe-string wick stuck into a bowl of fat. A first date with a new boyfriend ended with both of them wet and muddy from diving to the pavement when a shell blew apart a nearby district. Neighbors cooked together on wood stoves and gathered around a little TV powered by a truck battery to watch CNN or BBC reports on the war. “People were constantly commenting on how politics was different from everyday life,” she says. Refugees who had fled to Bihac told stories of murder, torture and rape. “There was a lot of sadness and anger at how slowly the world was reacting — at how they didn’t see that this was genocide.”

Her brother, who went to the front lines with a weapon in one hand and a philosophy book in the other, was severely injured by a grenade. Most of the fragments tore into his legs, and he couldn’t walk. Not long after, the siege lifted, and the family took him to a hospital in Zagreb.

“What I needed,” she says, “was to make sense of the 17 pieces of shrapnel in my brother’s body, of my lost friends and of thousands of destroyed homes and mosques.” The understanding she sought would have to cross “a gap” between her experience of the war and scholarly writings about it. Hromadzic received a full scholarship to Penn and studied anthropology, the academic discipline that she believes can get at the lived experience that political analysis and TV news cannot.

She has studied Bosnian War rape extensively, collecting stories from refugees that came to her town and other survivor testimony, and putting them at the heart of her analysis, which will be published in a forthcoming anthology. She is currently back in Bosnia-Herzegovina conducting ethnographic research for a Ph.D. dissertation that continues this emphasis on individual experience. The Dayton Peace Agreement, which brought peace to her country, created a unified state that is ethnically partitioned. The scars are too fresh for full reconciliation, she says. Through interviews and observation, Hromadzic is exploring what it means for young people to “live Dayton,” the tension between unification and segregation, in their everyday lives.

Last July, she and her brother climbed one of the highest peaks in the former Yugoslavia to celebrate the healing of his leg wounds. “It was the 10th anniversary of his survival,” she explains, “and he could walk, really, without fear.”

—PETER NICHOLS
Judging at Sundance

Much of Martha Farah’s career has been dedicated to understanding the mechanisms of vision, memory and other processes in the human brain. A professor of psychology and director of the Center for Cognitive Neuroscience, she has received a Guggenheim Fellowship and several teaching and research awards. Now she can add film festival juror to her impressive CV.

Farah was one of five science-minded academics and film aficionados to decide the Alfred P. Sloan Prize at this year’s Sundance Film Festival. The prize is a $20,000 cash award for films that focus on science or technology as a theme or depict a scientist, engineer or mathematician as a major character.

Several of the nominated films dealt with neuroscience themes. “That our mental lives come down to the function of a little three-pound organ is one of the more astonishing ideas to have come out of science,” she says, “and it is certainly worthy of contemplation and exploration by the artists and storytellers of our culture. There have recently been some excellent films in this vein, for example Eternal Sunshine of the Spotless Mind.”

This year’s Sloan Prize-winning film, House of Sand, deals not with neuroscience but with geology, astronomy and physics. It is the story of three generations of women living in a hut in the sand dunes of Maranhao, Brazil. It depicts the environmental consequences of shifting desert sands and recalls the 1919 solar eclipse that brought an international team of scientists to the region in order to prove Einstein’s general theory of relativity. Spanning 60 years, the film inconspicuously charts the introduction of such technological advances as the automobile, airplane, rocket ship and tape recorder.

Although House of Sand wasn’t her first choice to win the Sloan Prize, Farah says she thoroughly enjoyed her time at Sundance. “Unfortunately, I’m such a nerd that I didn’t recognize a lot of the movie stars,” she admits. “This nice guy named Terrence Howard came over and chatted with me at a party, like a totally regular guy, and I had no idea who he was. I got home and saw he starred in Hustle and Flow and was nominated for an Academy Award. Very cool!”

Kissing the College Goodbye

Graduates from the College of Arts and Sciences Class of 2006 were treated to an unconventional graduation address from the featured speaker, alumna Gloria Allred, CW’63. Allred is a leading feminist who has won many honors for her pioneering legal work on behalf of women’s rights. She invited her daughter, Lisa Bloom, an anchor for Court TV, to interview her at the podium in lieu of a traditional speech.

In the dark-wood, book-lined Lea Library on Van Pelt’s sixth floor, a group of 30 to 40 people gathered every other week in the spring to talk about — what else? — books. Humanities scholars, librarians and business experts came from New York, Texas and elsewhere to explore for seven weeks “The Book in America: Economic Aspects of the Material Text.” The seminar looked at changes in book production, distribution, sales and more from their British roots to current trends and future directions.

The course stemmed from a research project that Daniel Raff, an associate professor of management in Wharton, had undertaken on changes in the marketing of books due to the rise of superstores like Borders and competition from online dealers like Amazon.com. He was looking to scholars from the library and the School of Arts and Sciences to provide historical background and to help expose the business side of the book trade.

“That meshed with what has become a kind of cottage industry at Penn,” observes Daniel Traister, a rare book librarian and one of the organizers of the seminar along with English professor Peter Stallybrass, among others. Stallybrass has long led a seminar on book history on Penn’s campus, and many courses and programs in English, history, classics, art history and modern foreign languages delve into the subject of the book, Traister says.

“The seminar was lively and vibrant,” Raff adds, “a wonderful example of cross-disciplinary, cross-school conversations at Penn.” Traister describes the changes that have overtaken books in America in terms of a Dickens novel: “It’s as if Oliver Twist shows up and says, ‘Please, sir, may I have some more?’ and people say, ‘Yeah!’”
Dean's Forum Visitors

As supervisor of gifted education for the Lower Merion School District in Pennsylvania, Ellen Just Braffman, C’77, GEd’77, Gr’00, knows how to inspire greatness. As a Penn alumna, she also knows that one of the best ways to expose her young charges to leading ideas is through the SAS Dean’s Forum.

Braffman began the field trips in 2004, when she brought 25 students to hear David McCullough discuss leadership. In the weeks leading up to the event, her students read excerpts from McCullough’s most recent book. “They also did research on what other people said about leadership,” Braffman says, “and wrote essays about the leadership of John Kerry and George W. Bush, who were campaigning at the time.”

Forty students — including members of Lower Merion’s advanced-placement and honors physics classes — attended the 2005 Dean’s Forum, where string theorist Brian Greene explained how space and time intersect. In March, about 15 students from the district’s AP philosophy class, theory-of-knowledge class and philosophy club heard from eminent philosopher Harry G. Frankfurt. In his presentation, “On Bulls**t,” Frankfurt discussed why people have become so adept at misrepresenting themselves and how it frays the fabric of society.

In preparation for the day, Braffman’s high schoolers read Frankfurt’s book On Bullshit, discussed its contents and formulated questions for the speaker. “We use the forum as a vehicle to enrich the larger learning experience,” Braffman says. “After we return, it’s a matter of continuing the dialogue in class.”

Community in Crisis


Throughout much of the 20th century, a majority of Americans spent their leisure time being part of civic or social organizations such as the Rotary Club or sports groups. But over the past 25 years, attendance at club meetings has dropped 25 percent, the amount of time families spend eating together has decreased 33 percent and having friends over has fallen 45 percent, says Putnam, who calls for increasing social activism and promoting citizenship as a way to reverse these trends.

The decline of civic engagement in the United States that Putnam charted in Bowling Alone has worried a number of politicians and commentators. His ideas have been the focus of seminars hosted by President Bill Clinton at Camp David and British Prime Minister Tony Blair at 10 Downing Street. Putnam also founded the Saguaro Seminar: Civic Engagement in America, a program that attempts to bring together leading practitioners and thinkers to develop broadscale ideas to fortify civic connectedness in America.
Beethoven Lost & Found

While on vacation late last summer, music professor Jeffrey Kallberg received an e-mail asking if he could authenticate the manuscript of a composition that had been found in a cabinet of missionary files at the Palmer Theological Seminary. “Do you have any idea who you think it’s by?” he asked over the phone. “We think it’s Beethoven,” was the reply.

It wasn’t just a single-page sketch, the kind that turns up now and then, but a hefty, 80-page composition. “Most of these big manuscripts, people know where they are,” Kallberg says. “They just don’t appear out of the blue like this.” Kallberg is an expert in music of the 19th and 20th centuries and says he knows Beethoven’s hand “like the face of my own son.” He recognized the composer’s original work at once. Further study confirmed his initial impression.

The work turned out to be the Grosse Fuge, not the well-known string quartet but an arrangement for the piano (four hands), a work from the end of Beethoven’s life when he was exploring new directions in his music. What makes the manuscript interesting, Kallberg points out, is that the pages are marked with erasures and cross-outs in red pencil, suggesting that Beethoven was still composing as he copied the music. “It has all of these kinds of things that give you a real visceral sense of what he was doing, moment to moment, as he was creating this piece.” In December, the manuscript sold for $1.9 million at Sotheby’s.

Art of Change

To most viewers of paintings by Hieronymus Bosch or Pieter Bruegel, the first association is probably not with Darwin or Hollywood. Yet to Larry Silver, the James and Nan Wagner Farquhar Professor of History of Art, such analogies are apt. In his newest book, Peasant Scenes and Landscapes: The Rise of Pictorial Genres in the Antwerp Art Market, Silver re-envisions conventional notions about the impetus behind images produced in 16th-century Netherlands. His book debunks reductive labeling of these works as “landscapes” or “peasant scenes” and considers them “as the product of their social and economic setting.”

The city of Antwerp, which Silver deems “a major, international center at a decisive moment of change,” takes center stage. He contends that conditions there helped establish an art market based on public demand rather than commission. That led to one of the first moments in art history when artists became “brand names,” desired by collectors and the general public. This back-and-forth between artist and consumer is similar to the film industry’s response to audience demand, Silver argues. “[W]hat a genre can be at any moment results from this … negotiation, of an object with both its previous models and its contemporary examples, reinforced by the tastes of purchasers and aficionados.” He frames the period as a demand-driven continuum of styles, the artistic counterpart to the selective pressures of nature in the preservation and elimination of traits and species based on their “fitness” to the environment. In his view of “art as an evolving system,” Silver makes the subject relevant in this highly readable and thought-provoking study.

—JANINE CATALANO
Global Warming Counterpoint

Echoing the growing alarm of scientists, the April 3 cover of Time carried a special report on global warming that urged readers to “Be worried. Be very worried.” NASA meteorologists tell us that 19 of the hottest 20 years on record occurred after 1980, the magazine reported, along with other signs.

That might seem like evidence of global warming, but geology professor Robert Giegengack takes the long view. “Here’s what we know,” he told listeners who came to one of last spring’s Penn Science Cafés. “Is the globe warming?” he asked. “Yes.” What we’re not sure of, he said, is why.

Giegengack called the popular idea of global warming — the suggestion that burning fossil fuels has increased the concentration of carbon dioxide, which has warmed up the atmosphere, which has led to melting ice sheets, which has raised sea levels — a “simplistic hypothesis.”

“There’s a very well-documented history of climate now that goes back many millions of years,” he told the crowd. Earth scientists have collected piles of data from ice cores, seabed samples and other “natural archives” to reconstruct ancient climates. The data show there were periods when the carbon-dioxide concentration in the atmosphere was much higher than today and the Earth was warmer, but there were also times when the Earth was glaciated despite vastly higher levels of carbon dioxide. That record seems to violate the one-to-one correspondence between more greenhouse gases and higher temperatures.

“Over 600 million years there’s been lots and lots of dramatic climate change and in most cases we don’t really have a mechanism to explain what happened,” Giegengack observed. For much of Earth’s history, the globe has been warmer than any of the warm-up projections for this century, he said, and the natural archives document eras of climate change — warming and cooling — far more drastic than the warming trend underway now. “Those of us who study the long-term variation of climate are impressed by the enormous complexity of the climate system and the probability that the cause-and-effect relationship is not as starkly simple as the anthropogenic-greenhouse-gas-global-warming enthusiasts would have us believe.”

The real short-term environmental issues, Giegengack argued, include threats like tobacco, stored nuclear weapons, land mines left behind in war zones and more. “We’re killing off all the fish; we’re damaging the soil; we’re poisoning our water. Biodiversity is plummeting; ancient bacterial diseases are burgeoning. We’re not paying attention to the real problems. Global warming doesn’t even make it into my top 10.”

Gene Machine

Most everyone has heard of the Human Genome Project and has some notion of what DNA is. “In a very real sense,” Susan Lindee writes in Moments of Truth in Genetic Medicine, “at the dawn of the twenty-first century we live in bodies understood to be readouts of a master text that is a guide to personal health, success, talent, intelligence, and risk.”

Lindee is a professor in the Department of History and Sociology of Science. In her new book, she traces the key intellectual and institutional innovations in human genetics, mostly from the mid 1950s to the 1970s, that transformed how medical researchers understand disease. “The idea is that all human disease is a genetic phenomenon subject to technological control,” she asserts. But human genetics is far more than a revolution in science and medicine. It is there in our language, legal decisions, business initiatives, resource allocations, popular culture, public policy, even in our most intimate relationships. “It has become an idea with social force,” she argues. In addition to cancer, obesity and other maladies, scientists have been tracking genes for intelligence, personality, athletic ability and other traits.

“It is the way we assess fetuses, discuss cloning, or explain our own life narratives,” writes Lindee. DNA, heredity and genes are the “moment of truth” that tell us the truth about what’s wrong with us, what’s right and who we are.
Say No, and No, Until You

BY SUE RARDIN

The Penn graduate students traveling with art history professor Michael Meister had already visited a number of Indian temples. Says Mandavi Mehta, “We weren’t really expecting to come across this big mystery monument, which is what it ended up being for Professor Meister.” The professor himself, who has studied hundreds of temples in India and Pakistan, had at last been able to include in the itinerary of a study group the remote and little-known rock-cut ruins at Masrur in the Himalaya foothills of northern India. He is very glad he did.

Western scholars reporting visits to Masrur have considered it a cluster of single-towered temples or shrines — the largest at the center — that were carved and excavated to honor various deities and rulers. Looking at the ruins that day in June 2004, Meister thought otherwise.

He judged that the complex of towers had been designed in the 8th century as a single temple to the god Shiva and that, besides having been severely damaged by earthquakes, it had never been finished. Further, he began to suspect that Masrur could prove to be an exciting historical link, a hitherto unrecognized forerunner of the “temple mountains” of Cambodia that culminated in the multi-towered, brilliantly carved 12th-century Angkor Wat, the largest religious monument in the world.

Meister’s paper supporting this view was the cover article in the March 2006 issue of the Journal of the Society of Architectural Historians.

First, though, he had to study the temple’s remains and respond to his emerging interpretation in the way he tells students to respond to theirs: Say no, and no, until you have to say yes.

From a private balcony outside his corner office on the third floor of the Jaffe History of Art Building, Meister can look down with his architectural-historian’s eye on the buildings across 34th and Walnut streets, much as he stood on a ridge in Himachal Pradesh, India, that day, looking down into the remains of the temple at Masrur. Meister is the W. Norman Brown Professor and a specialist in the art of India and Pakistan with a focus on temple architecture. When he walks back into his office from the campus balcony, his shoulder
almost brushes eight weighty volumes of the *Encyclopedia of Indian Temple Architecture*, which he edited. Darielle Mason, Gr’95, the Stella Kramrisch Curator of Indian and Himalayan Art at the Philadelphia Museum of Art, who earned her Ph.D. under Meister, says his work on temples combines “meticulous analysis of structure, carving and organization with penetrating, often brilliant, interpretation to decode the historical development and embedded symbolism of these monuments.” It was these skills and 30 years of on-site research as well as knowledge of scholarly literature that Meister brought to bear on what he was seeing at Masrur.

Facing the first outcropping of India’s sacred Himalayas, Masrur is unusual in being itself carved out of a mountain ridge. That is, it wasn’t built stone by stone but was entirely hewn down from the top. All shaping and internal spaces were created by cutting away rock and hollowing out the inside of mountains. Envision it as a huge sculpture whose raw material is a rock ridge. Viewed from the best-preserved east side, says student Mehta, “the site really is magical.”

The study group examined the ruins for much of the day. Meister searched for clues to the site’s original plan. He found several.

On the least damaged east face of the complex, an entry portico leads into a pillared hall that ends at a square central sanctum, the temple’s most-sacred inner space, which is under the central tower. Most of Masrur’s other towers are shaped as though for separate temples, but none have sanctums. In fact, two towers cover stairways to the roof.

Both the north and south faces contain damaged remains of large excavations that had never been completed. Inside, Meister could see areas of remaining stone that he surmised had been intended to be hewn into pillars. These two excavations, he reasoned, might have been planned not as unrelated chambers but as additional pillared halls leading to that central sanctum. He also thought, with growing excitement, that the severely damaged west face might have been the intended site of a fourth passage to the sanctum, a complexity common in later Cambodian temples but little known in earlier Indian ones.

Back in the central sanctum, Meister studied the walls and ceiling. The ceiling was fully carved with an elegant lotus pattern, but the walls remained only roughly finished. Entrance to the sanctum is through the eastern pillared hall. But the unfinished rock face on the sanctum’s other three walls suggested the plan had been not to leave those walls in place but to excavate passageways through them, creating at least two other entrances through those never-finished pillared halls on the north and south. Perhaps a fourth entry had been intended from the west as well.

When the study trip ended, Meister returned to Philadelphia armed with photographs and measurements, eager to study the sparse literature about Masrur against his own findings and determined to say no as long as it was necessary. Most of all, he went home to work on his computer with three old and very important drawings.

Meister is not the only observer to conclude that Masrur is a single temple. In 1913, the first European known to have visited the site, a British colonial civil servant,
perceived the monument’s unity and reported it in an obscure publication. He sent his material on to a British archaeological officer, who rushed to the site with his professional staff. The archaeologist’s report of 1915-16 “corrected” the observations of his less-credentialed predecessor and described the site as containing a multitude of temples. But the senior Indian draftsman on the archaeologist’s team had visited Masrur as early as 1887. This man produced three exceptional drawings of the monument, which were published with the archaeologist’s report. Although credited there for “excellent drawings,” the Indian draftsman remains forever unnamed. Meister believes he saw Masrur as a single temple — even, perhaps, with four entries — and his precise drawings provided evidence to help prove it.

Arriving at home, Meister greeted his wife and then headed to his basement study to put the materials into Adobe Photoshop. He scanned the Indian draftsman’s ground plan, which included precisely measured details of the temple’s single existing portico on the east side and the pillared hall and sanctum to which it leads. Reproducing those internal elements digitally, he superimposed them on the ground plan to the north and to the south, exulting each time the rudimentary excavations on the drawing precisely received his hypothesized additional halls and porticos.

He also used the draftsman’s other two drawings, a roof plan and a cross-section, in tandem with his own findings to build compelling evidence of the unity and complexity of what he believes is the original plan for the unfinished temple. The accuracy of the old drawings made that possible. “For me to have replaced those drawings from scratch or to have recovered evidence visible early in the last century would have been almost impossible task.”

But to the most exciting part of Meister’s hunch, the original plan for a fourth entrance on the west, he still had to say no. There was not yet enough evidence to say yes. Little but rubble remained, where much damage from earthquakes and collapse had occurred. The draftsman’s drawings did detail a few west-side base moldings that had survived till his era, but these needed to be confirmed.

So four months after his first trip, Meister returned to Masrur. His companions this time included grad students John Henry Rice and Melissa Kerin. The team searched the west side of the ruins for remnants of moldings that could be compared with the old drawings and with corresponding moldings and ornamentation on the better preserved east face. Rice’s own high point on this expedition was brushing aside a clump of vegetation and finding surviving moldings. Meister reports, “We came back with enough fragments of evidence to say ‘these drawings are accurate; there were other stairways and halls, and a fourth entrance was intended on the west face.’ Then I could finally say, ‘OK, I have the right to take the existing east plan and flip it over to the west,’ which immediately suggests a complexity that forms a model for Angkor Wat” and the Cambodian temples that preceded it.

As a historian, Meister had to seek context for what is unique about Masrur. Why those striking differences in its design and its unusual location so near the Himalayas?

While some aspects of the temple, such as the design and decoration of its towers, were typical of 8th-century middle India, the hypothesized four faces with multiple entries and towers were not. The typical Indian temple had one entry and one tower, which was meant to suggest a mountain peak rather than a range. Further, Masrur was located in a hill area thought to

Masrur is unusual in being itself carved out of a mountain ridge. All shaping and internal spaces were created by cutting away rock and hollowing out the inside of mountains.
have been under the political influence of Kashmir at that time.

Back in Philadelphia, Meister spent the next several months studying historical literature and found evidence that during the 8th century the power of a king of the wide Indian plains expanded into the lower ranges of the Himalayas, introducing a new style of architecture there. Further, during that period, the Indian mythical ideal for the most exalted temples also included the simulation not of a single peak but of a mountain range, which meant religious monuments with multiple towers. Foreshadowing later temple mountains of Cambodia, this image certainly matches Masrur, which is cut out of a ridge of mountains as if to echo the first range of snow-capped Himalayas facing the temple on the northeast. Mandavi Mehta had noticed that: “It did look like a mountain range, carved out of a mountain range. That was amazing.”

Next, architectural history. What support could Meister find for those four sides and the placement of towers? Among Masrur’s towers, Meister’s reconstruction identified five as primary: the largest, central tower and a tower over each of four pillared entry halls. Of these last four towers, only two remained, with no pillared halls beneath them, though the two unfinished excavations were appropriately located. And as Meister knew, putting such a tower over a pillared hall was not a common option.

He found significant support in an important 8th-century text studied by Stella Kramrisch, Hon’81, the great doyenne of Indian art who was Meister’s predecessor at Penn and a curator at the Philadelphia Museum of Art. In her study of this ancient text, which lists 101 types of temples, Kramrisch recorded that the premier 101st type “has 5 [towers], 4 [pillared halls] and 4 doors. The [halls] being in the four directions, the entrances at the cardinal points, this cross-shaped temple would have one central [tower] and each [hall] would have a lesser [tower] of its own.”

There it was. That was what he had found at Masrur. Meister said yes. Kramrisch herself, in her extensive survey of Hindu temples, had never seen such a temple. Writing in 1946, she observed, “Where in reality [this temple] was built and when, cannot be said as yet.”

Saluting his revered predecessor and India’s skilled draftsman of nearly a century ago, Meister believes that, with the temple at Masrur correctly understood, Kramrisch’s wistful conclusion need no longer stand. The evidence seems firm that where and when this exalted type of temple was created can finally be said.

—SUE RARDIN

BEING THERE

Michael Meister in the first exploration of the Indian temple at Masrur, and Citron says it was inspiring to be “working towards a critical understanding of the site together.” But what Meister proceeded to do with that day’s work amazed them. “We were there with him,” says Mehta. “We spent as much time looking at the temple, and what’s fascinating to me is that he came away and had the tools to create this whole paper out of it. Just that whole process of being there with him, seeing the same thing and then seeing what he could do with it was revelatory.”

On the second excursion, students John Henry Rice and Melissa Kerin were familiar with Meister’s developed hypothesis about the temple and knew what to help him look for. It was extraordinary, says Rice, “to see that raw, first-order analysis and excitement as it was happening in real time, before it’s distilled through decades and decades of scholarship and pedagogy.” Kerin says they watched Meister “doing what he always demands of us: not to get carried away with what we want to see. Always say ‘no’ about a hypothesis or idea until you have proven it with the visual evidence.”

—SUE RARDIN
POLITICAL SCIENTIST SAYS GOVERNMENT CAN’T FIX 21ST-CENTURY PROBLEMS WITH 20TH-CENTURY TOOLS
LISTEN UP, WASHINGTON

By Larry Teitelbaum • Illustration by Jason Hinebaugh

Political Science Professor Don Kettl grew up in a town deeply divided along racial lines. York, Pa., just north of the Mason-Dixon Line, seethed with tension. Race baiting by the cops didn’t help. Nor did the steady drip of violence, the crumbling industrial base and the loss of jobs. This nasty brew simmered until one day, like a valve releasing steam, York blew its top.

Two years after riots in Detroit and Newark, York had its racial reckoning. For five days in July 1969, the town burned. Sixty people were injured and two — a white police officer and a black woman visiting from the South — were shot to death. Kettl, then a high-school student, watched columns of smoke rise from the city center, and it left an impression: things fall apart. He brooded and wondered what went wrong. Why had the city’s leaders failed to turn down the temperature?

Motivated by the troubling experience of watching his burg spin out of control, Kettl, the Stanley I. Sheerr Endowed Term Professor in the Social Sciences and director of the Fels Institute of Government, has devoted his life to studying public policy. He wants to know why bad government happens to good people. That is why, on a brisk day last December, exactly 100 days after Hurricane Katrina, he is in the Cannon Caucus Room in Washington, D.C., to sift through the wreckage of another monumental failure: the federal government’s fractured response to the deluge.

He and his compatriots — academics, policy analysts, journalists and insurance executives — have gathered for a symposium, co-sponsored by Penn. They are rolling the waters, asking hard questions and offering unsolicited advice on how to better manage risk so that the next time — rest assured, there will be a next time — the response is, shall we say, crisper. Kettl is leading a discussion on rebuilding the gulf. He puts this out there: Should the whole country pay for a local catastrophe just to cover the people who did not buy insurance? In his view, it might make more sense for people in danger zones to pay into an insurance pool, which could induce insurance companies to lower premiums. Then he goes on to criticize federal, state and local governments for being more interested in protecting bureaucratic turfs than in protecting the citizens of New Orleans.

Kettl blames rigid bureaucracies and inflexible leaders who insist on paint-by-numbers government for our travails.

“People want their problems solved; they don’t fuss over who solves them,” Kettl writes. “But the challenges demand a higher level of truth telling … and a commitment to engage citizens in a frank debate about the realities of what government should and should not seek, and what it can and cannot do.”

Public administration, in all of its vainglorious fallibility, has been the subject of Kettl’s impressive output. The Yale graduate is the author or editor of a dozen books and monographs, two of which,
HE WANTS TO KNOW WHY BAD GOVERNMENT HAPPENS TO GOOD PEOPLE.

Don Kettl

The Transformation of Governance and System Under Stress, were named best books by the National Academy of Public Administration. This urge to commit scholarship has taken Kettl on a Baedeker’s tour of college campuses — with stops at Columbia, the University of Virginia, Vanderbilt and the University of Wisconsin. Two years ago, he was recruited to Penn to head the Fels Institute, one of the country’s premier leadership-development academies. He thus returned to Pennsylvania after 34 years in exile.

During the intervening years, as Kettl prospered, York, his hometown, descended further. If anything, the divisions have become worse, if more dispersed, with whites abandoning the city for the suburbs. Meanwhile, the economy has continued to falter. Kettl remains quite interested in his hometown. Fels is conducting a research project there. Researchers have compiled data on abandoned property and are looking into what can be done to help neighborhoods in transition before they reach the tipping point. Read: encourage stabilizing development. Even though he is not doing the work himself, the approach is vintage Kettl. He gravitates to problems. He’s an inveterate troubleshooter and the definitive multitask-forcer, testifying before Congress 10 times and serving on innumerable panels and commissions, studying everything from nuclear waste disposal to air pollution generated by coal-fired power plants. Denmark once asked him to advise the country on the global forces shaping government. Gradually, he has built more than a resume: he’s built a national reputation as a perceptive observer of government.

John DiIulio, the Frederick Fox Leadership Professor of Politics, Religion, and Civil Society who headed President Bush’s faith-based program, has watched Kettl up close. They collaborated on a study of the Clinton-Gore reinventing-government initiative at the Brookings Institution in the early 1990s. DiIulio declares, “There’s no question that Don is the country’s leading scholar of public administration. … He’s easily not only the best but also the most influential. No one has published more books and articles that are more widely cited.” And the kicker: his prodigious scholarship “is matched by an incredible humility and kindness and generosity that are somewhat rare in academia.”

It’s true. Kettl’s aw-shucks manner belies his prominence. He projects incredible humility and kindness and generosity that are somewhat rare in academia.

He’s built a national reputation as a perceptive observer of government.

On this day, as he chats in his office, the bespectacled Kettl is wearing a black and gray tweed Lands’ End sport coat — made in Wisconsin, just like Kettl. That is to say, Kettl made his bones at the University of Wisconsin. He spent the longest stretch of his career there, 1990 to 2004 — long enough to become the director of the Robert M. LaFollette Institute of Public Affairs and a shareholder of the Green Bay Packers. While in Wisconsin, he chaired two commissions, one on campaign finance reform, the other on state-local partnerships. The latter, an ambitious effort that was billed as a mini-constitutional convention to restructure government, stalled, as did campaign finance reform. The legislature failed to enact the campaign commission’s call for tougher enforcement of spending limits and public financing of elections. That failure led to scandals and convictions of several state legislators. The man who appointed Kettl, former Governor Tommy Thompson, shares Kettl’s taste for good government and innovation and has nothing but praise for him.

H E LISTENS TO ALL SIDES. HE’S EXTREMELY PATIENT.

He lets everyone have their day in court,” says Thompson, who resigned as secretary of Health and Human Services in the Bush administration at the end of 2004. “To this day, I don’t know what his political leanings are.” For the record, Don Kettl identifies himself as nonpartisan. Utmost, he’s a wonk, a label he embraces. To him, government is the ultimate fixer-upper, a grand self-improvement project. Which is why he loves the opportunity to write a column in Governing magazine, a must-read among politicians and public administrators nationwide. Every two months, Kettl gets to uncover emerging issues and road test ideas. Invariably, his columns touch on an aspect of federalism, another major interest.

Listen to him on Medicaid: “If you think Social Security’s finances are bad, experts are saying, wait until you see Medicare. In the states, they’re whispering that if you think Medicare is bad, wait until you see Medicaid. … Medicaid is a different program in every state.”

On the U.S. Supreme Court: “the Court has seemed to back
away from a strong states’ rights commitment. In addition to reining in state power over wine sales, the justices overruled state efforts to legalize medical marijuana and to contest clean-air standards.”

The work appeals to Kettl. “It’s the effort of improvement, as opposed to simply conducting autopsies on failed programs, that engages me most,” he says. A self-described newspaper junkie, Kettl’s insights come mostly from reading and retail reporting. He likes to put his boots on the ground, as he did on a recent trip to New Orleans, which continues to resemble a post-op patient: disheveled and disoriented. He talked to regular people and to mayoral candidates. “I heard some of the most stirring calls to citizenship” from mayoral candidate, Lieutenant Governor Mitch Landrieu. “One of the things he says, ‘It would be a serious mistake to rebuild New Orleans. What we need to do is re-imagine New Orleans.’” And, Kettl reports, ordinary folk who stayed on share Landrieu’s optimism. “They’re not going to let the storm beat them, and they’re going to come back. … That’s a spirit that’s remarkable and inspirational.”

JUST LIKE THOSE CITIZENS, KETTL REFUSES TO BECOME DISPIRITED, despite a lack of faith in leaders, as voiced by a 17-year-old in New Orleans who told Kettl he will never trust his government again. To Kettl, New Orleans, like America, like York, is a work in progress: nothing that a little imagination and grit can’t fix. “The challenges are huge, but there are people who are trying their very best to rise to them,” Kettl says. “And that’s one of the hopeful things in the country right now.”

Larry Teitelbaum is editor of the Penn Law Journal.

CLOSE TO THE CAPITAL

You don’t need a cartographer to notice how close Penn is to the centers of power in the nation’s capital — 130 miles, give or take, from the Schuylkill Expressway to the Beltway. This proximity had been on Don Kettl’s mind since he came to Penn. He believes the University ought to capitalize on its location and increase its presence in D.C. So he and other academics in the School of Arts and Sciences caucused and proposed the Washington Internship Program.

At bottom, the program represents Penn’s bid to become a voice at the table when the president, Congress and government agencies deliberate issues such as homeland security, energy dependence and global warming. “The closest great university to the capital is Penn,” says Kettl. “It’s our goal to have a greater impact on national politics.”

Placing students in strategic internships is one vehicle for achieving such dominance. As Kettl sees it, in addition to the stock placements of political science majors on the Hill, there are transparent benefits to posting pre-med students at the Food and Drug Administration or chemistry majors at the Environmental Protection Agency or economics majors at the Federal Reserve Board. Once students observe the drug approval process or see how regulatory policy gets made, they’ll get turned on and resolve to return after graduation. “They will become sought after by people who are looking for future leaders, and that’s an opportunity to improve the quality of governance in Washington,” says Kettl.

Penn is flush with Washington area alumni — 12,000 to 14,000. So there are plenty of people, inside and outside of government, with whom to make connections. After serving the internship over the summer, students will take a course in the fall when they will compare notes and discuss experiences.

And while students are the focus, they are by no means the only game in town. Kettl sees ancillary benefits for faculty too as the Penn brand proliferates. “As you look around this campus, the thing that I’ve been struck by is just the vast reservoir of talent,” he says. “You can’t take any question that matters and spend more than 30 seconds without coming up with an absolute army of some of the world’s best thinkers on any subject. A lot of what we’re doing here either is, or ought to be, of keen interest to the people framing policy.”

To learn more about Washington internships or to offer internship opportunities, contact Deirdre Martinez at 215-746-3849 or martined@sas.upenn.edu.

—LARRY TEITELBAUM
The School of Arts and Sciences is proud to welcome four additions to its landscape of advanced teaching and learning environments. A campus staple since the 1970s, the McNeil Center for Early American Studies (1) now has a permanent home that will help it further the knowledge of America’s complex roots. The renovation of nearby Fisher-Bennett Hall (4, 5, 6) brought up-to-date classrooms, acoustically perfect rehearsal spaces and state-of-the-art screening rooms to the campus landmark.

April saw the opening of the Weigle Information Commons (3) on the first floor of Van Pelt-Dietrich Library. It creates a space where technology can be integrated with support resources to help students make the most of their studies. A few weeks later the School welcomed Carolyn Lynch Laboratory (2) to the western edge of Kaskey Memorial Park, where it will transform the study of the life sciences at Penn.

—JOSEPH MCLAUGHLIN

For more information on these additions to campus, please see the Dean’s Column “More Than Bricks and Mortar” on page 7 and Last Look on page 31.
From Hill Field’s expansive lawn to the greenery of Kaskey Memorial Park, new SAS spaces are blooming alongside the season’s rich floral tapestry.

1. The building on Hill Field supports the McNeil Center and captures the spirit of its intellectual focus on early American history.
2. Lynch Laboratory offers advanced facilities and the kind of interdisciplinary workspace essential for research in the life sciences.
3. The Weigle Information Commons allows students to work on all aspects of an assignment — from brainstorming to the finished product.
4. Penniman Library in Fisher-Bennett Hall was transformed into the Judith S. Rodin — Class of 1966 Undergraduate Study Center.
5. Faculty offices benefit from updated fixtures, enhanced lighting, soundproofing and beautiful views of campus.
6. The fourth floor of Fisher-Bennett Hall features new music practice and performance spaces, including the Gary and Karen Rose Recital Hall.
Blinking pixels on Marija Drndic’s computer screen twinkle like stars from a distant galaxy. The computerized flashing represents the activity of nanocrystals, minuscule specks of matter that pulse with energy on the outskirts of scientific inquiry. Understanding this blinking effect, tracking the intensity of the specks over time and regulating the fluorescence of a single particle are among the goals of Drndic and her laboratory team.

“We want to know how to control this blinking, because it is an obstacle for many applications where nanocrystals could be used as fluorescent markers,” says Drndic, an assistant professor in the Department of Physics and Astronomy. A single nanocrystal, for example, could be used to tag DNA molecules or proteins.

“Nanotechnology is a still-emerging field of science aimed at studying and manipulating objects on a very small scale,” she says. “We are working with particles as small as a nanometer in size, which is 10,000 times smaller than the diameter of a human hair.”

Drndic investigates the optical and electrical properties of these nanocrystals as well as nanowires and biomaterials. While much of this work is in its infancy, some early discoveries have earned her the highest honor a young scientist can achieve. In June 2005, she traveled to the White House to receive the Presidential Early Career Award for Scientists and Engineers (PECASE).

She reaches under the hood in her lab and lifts a tray of vials filled with substances in a dazzling array of color. Inside the vials, about half the size of her index finger, are nanocrystals of exquisitely ordered
atoms. “Nanocrystals exist in a rainbow of colors,” she explains. “For example, 2-nanometer cadmium selenide nanocrystals emit a blue light, while 8-nanometer particles emit red. The sizes in between are green, yellow and orange. The color shifts depend on size. This is because electrons occupy a well-defined energy ladder, and the spacing of levels in this ladder increases as the nanocrystal size decreases.”

Because nanocrystals are so small, they are governed by the laws of quantum mechanics, rather than classical physics. The latter describes the motion of objects that range in size from planets to molecules. Drndic is taking an atom’s-eye view, where different laws hold sway. Here, where electrons overlap and interact, collective and complex properties appear, and novel results are possible. Among these unusual effects are the differing splashes of color that her nanocrystals exhibit at room temperature.

“This is important because in the past, people have mostly studied quantum effects in nanostructures that were bigger than this,” she explains. “You had to cool down the structures to very low temperatures, however, to see these effects.”

According to Drndic, research at room temperature is significant for new applications such as transistors and memory or logic devices. Her work may one day have application, too, in the area of sensors. The properties of nanocrystals depend on their environment. By studying the light emitted from particles, researchers might be able to detect the kinds of molecules that are around them.

“Another possible application is quantum computation, which is probably far in the future, if at all,” she adds. “Theoretically, if you do computations quicker, you could solve a variety of currently unsolvable problems related to encryption or cryptography.”

Nanoelectronics program officer Chagaan Baatar in the Department of Defense, Office of Naval Research, who recommended Drndic for the PECASE Award, says the nomination is a two-step process. The candidate first must win the Navy’s Young Investigator Program (YIP) Award, another highly competitive honor. “In 2004, Dr. Drndic emerged as the top YIP candidate in the electronics division and went on to become one of only two PECASE nominees by the Navy in that year. Her research in nanocrystal-based electronics holds great potential for future Department of Defense applications requiring ultra-low power, high density electronic components.”

Drndic was born and raised in Belgrade in the former Yugoslavia (now Serbia), although she spent years of her childhood living and traveling throughout Africa with her grandparents. “At a very early age, I became interested in big questions like, Why are we here? and What is the meaning of life? Also, my paternal grandfather had a physics degree in celestial mechanics, and he would explain why the sky is blue and reasons for other everyday phenomena.” Stories of the stars and sun sparked her imagination, and she was drawn to reading books about scientists and science. She started college at the University of Belgrade but transferred to Harvard in her junior year, in part because of the civil war, which had just begun. Most of her family had left the country and were urging her to leave as well. She earned a Ph.D. from Harvard in 2000 and then spent three years working as a Pappalardo Fellow at MIT before coming to Penn in 2003.

For her thesis research, Drndic developed microelectromagnets, minute wires engineered into circles and lines or combinations of these. “Our first experiment was to make a magnetic mirror for atoms,” she says, sketching the microelectromagnet she designed. The line depicting the nanowire snaked back and forth across the paper, creating a dense fabric of parallel lines. “If you connect this device to a big power supply and put a voltage across, you get an electrical current. And when you have an electrical current, you have a magnetic field. It is the geometry here that is important.”

The magnetic field produced by this configuration allows atoms to bounce off the magnet just as light reflects off a mirror. If the atoms come toward the magnet perpendicularly to the surface, they bounce back on a perpendicular line. If they come in at an angle, they will go out at an equal reflection angle.

“The fabrication of this device was challenging because when you put a lot of electrical current through the wires to get a strong magnetic field, the wires get too hot and burn, so you destroy your device.” When she first proposed her goal in a paper, her professor — a famous atomic physicist — declared that it could not be done.

“For now, this research is ‘out there’ too. It’s difficult to pinpoint where the impact is going to be.”
Unruffled, Drndic moved forward, solving one technical problem after another until she succeeded. “Eventually I put micron-size gold wires on sapphire, because sapphire is a good heat conductor, and it worked. It’s funny because this device is a very simple idea, but it became a pretty big hit.” Because microelectromagnets allow physicists to manipulate atoms in ways impossible in the past, the magnets have had far-reaching effects in only a few years.

“One of the things we are excited about now,” Drndic says, “is the synthesis of a variety of nanocrystal shapes.” She replaces the vials under the hood in her lab and moves to a computer nearby. The computer is connected to the lab’s atomic force microscope, which uses a sharp tip to probe minuscule surfaces with great accuracy. By moving the tip around, an image of the surface can be made and transferred to the computer screen.

Drndic points to colorful images of dumbbells, tetrapods and other shapes. These structures, what nanoscientists call “devices” — a mere 20 nanometers in diameter — have been fashioned from nanocrystals, which often self-assemble because of forces between the particles. Drndic and her team are studying this self-assembly as well as what properties the devices may have. “When you put a voltage across these devices, the current can behave differently depending on the configuration of the nanocrystals in your device.”

Drndic also is looking at possible biomaterial mergers in chemistry, wherein she and her colleagues will interface nanocrystals with proteins, DNA and polymers. “One reason would be to make metallic wires out of DNA,” she says, referring to the double-stranded molecule of life. DNA’s two strands unravel and separate during replication, and each strand serves as a template to grow a new one. This precise and predictable copying of genetic information onto new complementary strands of DNA is the basis for inheritance. “DNA has nice properties of recognition and could possibly be used to create circuitry,” Drndic says. “For now, this research is ‘out there’ too. It’s difficult to pinpoint where the impact is going to be.”

She hopes to make tiny nanocrystal devices with only one, two or three particles. Ultimately, she wants to electronically control the individual nanocrystals in these devices. Achieving this could one day result in applications from quantum electronics to biology and medicine.

A sign on the blue door leading into her lab reads: “Erasmus Darwin held that every so often, you should try a damn fool experiment. He played his trombone to his tulips. This particular result was in fact negative.”

Drndic may not be serenading tulips, but she has been seduced by the intricacies of science at the edge and loves grappling with solutions to baffling problems. “Taking nanocrystals that are unexplored, exploring them more, then discovering and building applications are all important,” she says. “History typically shows that something insightful and useful comes out of adventures in research.”

Patricia McAdams is a freelance science and health care writer living in Kennett Square, Pa.
After a Pakistani woman was gang raped under the orders of her tribal council, she did something unheard of in Southern Punjab. Shunned by her community and ignored by the government, Mukhtaran Mai told her story to journalists and human rights groups until her attackers were brought to justice.

Mai was the victim of an honor punishment, an eye-for-an-eye form of justice in which tribal elders allow a “wronged” family to inflict the same harm that it has endured. Women are most often the victims, and they usually end up disavowed by their family or killed.

Mai’s compelling battle to fight an occurrence of honor punishment is the subject of a new documentary by Mohammed Naqvi, C’01. His film Shame tells the story of her transformation from an uneducated peasant woman to an international symbol for women’s rights. It will air later this year on Showtime.

“A lot of the films that I choose are international in scope and somewhat human-rights oriented,” Naqvi says. “What makes Mukhtaran exceptional is the fact that — not only did she fight back — but the six men who raped her were put on death row. It’s made her the Rosa Parks of the 21st century and a national hero in Pakistan.”

In the five years since he graduated, Naqvi has compiled a resume that includes credits as director and producer on several documentaries and independent features. The common thread running through many of his productions is a focus on issues surrounding his home country of Pakistan.

As a child, Naqvi spent considerable time in the United States, including summers and two years of elementary school in New York City. He returned there after graduation and began producing and directing off-Broadway theater in a company he founded. The 9/11 terrorist attacks gave him an opportunity to break into filmmaking. When the news media reported on the Middle East, Naqvi detected a bias in how they treated Islam. “The media had people all over Afghanistan and Pakistan, but because of their cultural background they produced everything from a very Western perspective,” he says.

He pitched an idea to The New York Times for an hour-long documentary examining madrassas, Islamic religious schools that are thought to be breeding grounds for terrorists. “The fact that I speak fluent Urdu, that I grew up in Pakistan and that I am a Muslim meant that people were less guarded with me than the Western media,” Naqvi says. The resulting film, Terror’s Children, won the Carl Spielvogel Award from the Overseas Press Club of America. The award is given to the best international broadcast reporting that shows a concern for the human condition and has been shown at film festivals around the world.

Among his upcoming projects are finishing a screenplay about honor punishments, which is based on several real-life examples, and finalizing the release of Big River, a Japanese-Pakistani-American venture that he produced. “It’s basically a road movie about three strangers traveling through the southwest United States — a Japanese tourist, an American girl, a Phoenician and a Pakistani,” he explains.

Naqvi would like to establish himself as a New York director. In Hollywood, he says, the economics of what will be profitable dictate which films get made, while there is freedom to pursue all kinds of experimental and mainstream projects in Manhattan. “The filmmaking community here in New York is much more well versed and intelligent, so hopefully I’ll continue to choose good projects and build my production company.”

—JOSEPH MCLAUGHLIN
It's three in the afternoon, and Eric Umansky, C’00, is washing down muesli and yogurt with a large latte at Tazza, a café down the street from his Brooklyn Heights walk-up. It looks like breakfast, but it's not. Four years ago, when he started writing the Today’s Papers column for Web magazine Slate, it would take him from 10:30 at night 'til five in the morning to read the entirety of the following day’s New York Times, Washington Post, Wall Street Journal, Los Angeles Times and USA Today and file his analysis in time for readers to digest it with morning coffee. Since then, he’s crested the learning curve. Now he clocks out at the more reasonable hour of 4 a.m. and wakes up at 11 instead of noon. Breakfast was about four hours ago.

Umansky spends his daylight hours blogging and writing the occasional op-ed and reported piece for the LA Times, The Washington Post and American Prospect, among others. This surfeit of writing makes it all the more surprising that he once suffered from a debilitating case of writer’s block. “My last two years at Penn,” he says between bites of granola, “I don’t think I turned one paper in on time. I had a paralyzing fear of writing.” He adds: “I had a couple of incompletes to deal with before I could graduate.”

He is as modest about the scope of these incompletes as he is about his accomplishments — he didn't actually receive his B.A. in comp lit until 2000, six years after he was supposed to graduate.

Umansky is well aware of the irony that he makes his living as a writer yet was once helpless at the sight of a keyboard. To be fair, one of the papers he sat on was a 50-page beast for an applied urban studies class. And it’s not like he wasn’t busy with other things. He studied in Mexico for a semester. He took another semester off and worked for Ed Herman, a professor emeritus at Wharton who edited Lies of Our Times, a magazine that focused on the distortions and censorship in major media. After leaving campus, Umansky went to work at Mother Jones, where he started as an intern and was hired as Web editor. This was 1995 — the early days of the Web. He and his colleagues created campaign-finance databases before the Federal Trade Commission had even digitized its records. And his regular photoblog, Must Read, was for many at that time a never-before-seen format.

It was exciting, but after four years in an office, Umansky wanted to travel. He made plans to volunteer with a human rights group in Colombia, but his mother worried about the danger. Instead he volunteered in East Timor, which was nearly as dangerous but not on his mom’s radar.

He set a deadline to hand in his incomplete papers before leaving for Indonesia. A true procrastinator, he then worked on other (more fun) projects, including an essay for Salon exposing incompletes as
the scourge of academia. Finally, to his graduation officer’s amazement, he handed in the overdue papers.

Now a bona fide college grad, the writer filed dispatches from Indonesia with *Mother Jones*, *The Christian Science Monitor* and the *Jewish Daily Forward*. When rioting overcame the referendum in East Timor and journalists and aid workers were evacuated, he caught the last commercial flight out.

Back at home, he started subbing on weekends for a former *Mother Jones* colleague who was writing Today’s Papers for *Slate* and eventually took over. A self-described news junkie, he was a natural fit. His editors encourage him to be funny, but he’s ultimately considering the substance of the news. “And there are very tight deadlines,” he says. “So I can’t putz around.”

Writing the column is more challenging than simply creating an abridged version of breaking news. Umansky faces the same obstacles newspapers do — if an event happens in the middle of the day, most people know about it by the next morning. What can he add that the typical reader doesn’t already know? “It’s a game of triage,” he says. “In a very short amount of time, I need to read a lot and write a lot, and if I can’t add anything new, I may as well skip it.” Among the elements he adds is a meta-commentary on the coverage. When President Bush announced earlier this year that by the end of 2006, Iraqi forces would control most of Iraq, *The Washington Post* played it big, framing the speech as a plan for disengagement. Umansky contrasted the *Post*’s piece with *The New York Times*’ deeper analysis that the so-called goal was immaterial, since the insurgency was focused in a small area.

It’s obvious from the occasional angry e-mail that editors and reporters are returning the favor by reading him daily. Bill Keller, executive editor of *The New York Times*, once advised him to get out of his pajamas and do some real reporting so he’d see that it wasn’t so easy.

For the record, Umansky does change out of his pajamas, either to go to the gym, to a coffee shop or to a place his mother would rather him not go — like Cuba. He traveled there in the summer of 2004 on a tourist’s visa because he didn’t want Castro’s cronies to know he was a journalist. That would’ve been inconvenient, since his mission was to interview dissidents and independent reporters who had either already been released from jail or who hadn’t yet been arrested. (An Argentinean journalist who had tried the same thing a year earlier had been held for two days and expelled from the country.) Umansky’s daily dispatches appeared in *Slate*, and he profiled an independent Cuban journalist for *The New York Times*.

As for the writer’s block and procrastination, they’re still around. But acknowledgment is the first step, and coping strategies go a long way. When he brings his laptop to a coffee shop, he takes the wireless card out so he can’t go online, and he makes use of a program that blocks distracting applications. And nothing’s more motivating than a graveyard shift, “The impulse to sleep,” he says, “ends up outweighing the impulse to procrastinate.” Ultimately what keeps him in line is the thought of losing his rent money and sullying his professional reputation. These are far more motivating than, say, graduating from college.

Caroline Tiger, C’96, is a freelance journalist and author in Philadelphia.

"THE IMPULSE TO SLEEP ENDS UP OUTWEIGHING THE IMPULSE TO PROCRASTINATE."
Social anthropologist and historian Steve Feierman has been studying medicine in Africa for more than 40 years. In the early 90s, when he was appointed professor in the Department of History and Sociology of Science, he started traveling there with Penn’s Africa Health Group, which included faculty from the medical and nursing schools as well as Arts and Sciences. “What we were finding from working together was that our own ideas were being transformed by the fact that we were talking to one another,” he recalls. Some of the physicians discovered that clinical problems “looked different” when seen through the lens of local customs and social conditions. “I myself found that I wasn’t thinking deeply enough about medical issues. I thought this was enormously productive and wondered, Why don’t we try to do this with students?”

The eight graduate students met one evening each week to prod, pick at and query readings and case studies covering epidemiology and health policy, traditional healing in Africa, the effects of Western medicine models there, the ethics of medical work in poor countries and the burden of diseases from malaria in Tanzania to AIDS in Botswana. After an hour’s discussion, a guest speaker would come into the classroom to make a presentation. “The guest is usually a Penn person who is involved in a major research project in Africa,” Feierman says.

One evening, pediatrics professor Kwaku Ohene-Frempong stopped by to explain the facts of life and death in his home country of Ghana. About ten years ago, he created a sickle-cell-disease screening program for newborns in a nation that had little money for public health, no screening infrastructure and no laboratories. “Sickle cell disease is the same in Africa and America,” he told the class, ticking off symptoms of this now-manageable genetic disease, “but environmental differences mean that it has a much worse effect on Africans.” He hinted that he could use some help with setting up an insurance plan so families could pay for treatment.

Says Feierman, “Students get to hear about a project, discuss the realities of research in Africa and make contacts that are potentially useful in finding a research topic and a place to do it.”

Those contacts would be important because by the end of the semester, each student had to present a research plan for a project that would be undertaken in Africa over the summer. Funding for the seminar and the students’ research is provided by the pharmaceutical company Merck.

“The course is really an extended orientation — to Africa, to issues, to different people’s perspectives,” observes Elise Carpenter, an
M.D./Ph.D. candidate who took the seminar in 2002. “You’re not going to know what you think and what questions to ask until you go to Africa.” Carpenter journeyed to Botswana and worked as an intern with the African Comprehensive HIV/AIDS Partnership. The experience there changed the focus of her dissertation, which will look at the partnership’s rollout of a nationwide program for AIDS treatment and prevention. She now plans to study Botswana more intimately throughout her career as an academician.

Feierman says most of the projects yield knowledge that is useful, “research that has an impact on people’s lives.” He adds that, like Carpenter, “many of the students change their career plans after the seminar so as to keep on working in Africa.”

Over the summer, this year’s class will disperse to Rwanda, Zambia, Zimbabwe, Malawi, Lesotho and elsewhere in Africa. Answering Ohene-Frempong’s call, Jemima Frimpong, a Wharton Ph.D. student on the health-care management track, will investigate the ability of Ghanaians to pay for private health insurance. She was moved by a film the class viewed, Donka, which documented a European-model hospital in Guinea that was unable to take care of those who needed it most but could not pay. It is a common plight in Africa. “The unbelievable access and delivery issues in the film motivated me to focus on the health-services delivery crisis in developing nations,” she explained. “I thought Ghana would be a good place to start.”

—PETER NICHOLS
Keeping Distinguished Company

Christopher Browne, C’69, Penn Trustee and chair of the SAS Overseers, says that “academic distinction should be defined by excellence in research, outstanding teaching and a strong commitment to making Penn a forum for open dialogue.” That’s why he funded five Christopher H. Browne Distinguished Professorships in the School of Arts and Sciences, one for each of the School’s divisions — humanities, social sciences, natural sciences — and two for areas deemed important by the dean. Psychology professor Robert Rescorla, Gr’66, was appointed to the first Browne chair in 2000. The distinguished professorship served as a recruitment tool to attract political science professor Rogers Smith from Yale. Other Browne chair holders are Warren Ewens, professor of biology, and Liliane Weissberg, professor of Germanic languages and literature. The fifth Browne chair was given to anthropology professor Jeremy Sabloff, C’64, when he stepped down after 11 years as director of Penn’s Museum of Archaeology and Anthropology and returned to the classroom.

For some, a generous man is one who would give you the shirt off his back. For Daniel Janzen, a world-renowned tropical ecologist who holds the DiMaura Chair in Biology, a generous man would give you the shoes off his feet.

That’s what Paul DiMaura, C’65, did a few years back while visiting Janzen and his biologist wife, Winnie Hallwachs, at the Area de Conservación Guanacaste, a government-owned conservation area in northwestern Costa Rica where Janzen is technical advisor. “When Paul and [his wife] Karen arrived at our house, a tin-roofed shack, they looked around, and impulse-donated,” explains Janzen. “Both of them took off their shoes and asked us if we could use them — new Nike sneakers. My reply? ‘Most decidedly.’”

DiMaura’s generosity extends well beyond footwear. He has been supporting Janzen’s Costa Rican rainforest-preservation efforts since 1995, when the two met and discovered a shared interest in conservation biology. A decade later, after creating an endowed term chair, DiMaura expanded his support to endow the DiMaura Chair. This, he says, will “advance the understanding of the world’s species and ecosystems” and provide a permanent source of funding for Janzen, whom he calls an “energetic and intelligent individual who has dedicated his life to something very important.”

DiMaura, equally committed to supporting the next generation of ecologists, has established an endowed scholarship and a research internship for undergraduates interested in conservation biology.

Although DiMaura is a real estate entrepreneur, his 40 years of visits to the Florida Everglades piqued his concern for the environment. “I was shocked to see how pesticides and the activities of large agricultural industries … had destroyed this area,” he explains. According to Janzen, this awareness is what distinguishes DiMaura as a visionary supporter. “Paul actually understands what we are trying to do here. He can see well beyond the bottom line … and measures the world’s fitness by more than dollars.”

—BROOKE ERIN DUFFY
Win-Win
When College dean Dennis DeTurck spoke at an SAS Board of Overseers meeting last year, his remarks caught the attention of Ron Moelis, C'78, W'78. A principal of L&M Equity Participants, Ltd. in New York City, Moelis is a long-time supporter of endowed scholarships in the School. “It’s something that makes me feel good about giving to Penn,” he says, “but I was looking for opportunities where I could integrate the academic mission with what I perceived as charitable giving for those in need.” DeTurck’s presentation on Access Science, a program of Penn’s Center for Community Partnerships, described just what he envisioned. “It was an opportunity to take giving to a new level,” says Moelis, who pledged $500,000 to create the Moelis Access Science Endowed Fund. Notes DeTurck, who directs Access Science, “The program provides a terrific opportunity for our students to enhance their own understanding of science, even as they work to improve math and science education in West Philadelphia Schools. We are thrilled that Ron’s gift will help make our efforts a permanent part of the undergraduate experience.” Typically, students enrolled in the program’s academically based service learning courses learn the subject matter of their classes by teaching some version of it to grade- and high-schoolers. “It’s not just the inner-city kids who are going to benefit by this,” Moelis observes. “The Penn students will see a part of life they do not get to see growing up. If done right, it could make a difference in lives on both sides.”

At Your Discretion
The renovation of Fisher-Bennett Hall. The launch of the College Summer Research Institute. The increase in research support for newly hired faculty in the sciences. These are among the most ambitious projects the School has undertaken in recent years, and none of them would have been possible without funding from the SAS discretionary endowment.

A uniquely flexible resource, this fund includes gifts from alumni, parents and friends who entrust the School to allocate their support in a way that will have the greatest impact on Arts and Sciences’ students and scholars. “The dean’s discretionary fund allows the School to seize opportunities for advancement, whether in the case of hiring a new faculty star or launching a new academic program,” notes Dean Rebecca Bushnell. “We are deeply grateful for this kind of support.”

This year, the School has seen an unprecedented increase in its discretionary endowment, following a series of leadership gifts from Judith Zarin and Gerald Rosenfeld, Par’09, Laurence B. Simon, C'68, G'74, and an anonymous Penn-parent couple. According to Simon, who for more than 10 years provided discretionary support to the College before making a $1 million unrestricted commitment to SAS in February, “A Penn education to the future leaders of our society is the most important gift that I can give.” He explains, “The School, under the inspired leadership of Rebecca Bushnell, has a unique opportunity to influence and educate the best of our children. They are the ones that will make the difference in the future, and I am proud to support SAS in this important endeavor.”
Packing in the Pasta

BY ALYSSA ROSENZWEIG

“Dad, it won’t fit in the pan!” I cry as I shove more pasta into the extra-deep 3.5-inch springform pan we bought to prevent this problem. “I promise you, there is no more room!”

From the clatter and cluttered counters in the kitchen, it is obvious we are making Timballo di Capellini, Seven-Layer Pasta Pie. My dad finishes wiping remnants and juices from our oak cutting board before strolling over to address the problem. (Clean as you cook, he always preaches, so the delay does not strike me as a move of exasperation after a long day in the kitchen.) His hands join mine in a sticky blanket of buttered angel-hair pasta and tomato béchamel sauce, massaging and coaxing the last bit of pasta to congregate with the rest of the pie, which will be sheathed in parmesan cheese and baked until bubbly, brown and fragrant.

Seven-Layer Pasta Pie has always been our special recipe, called upon for special occasions or special guests. I guess you could call it our “specialty.” I have moved five times in my life, and my dad and I have made it in every house. Even during the six-month stay in Minnesota, there was a weekend when the duplex was filled with the aroma of pasta pie. It is almost as if a house isn’t christened our home until the walls have absorbed its smell and the furniture has been reminded of it. (As much as I scour my hands with lemon juice, my dad still claims, Having garlic soaked into your hands for a week is one of life’s greatest pleasures.)

My dad and I dance a dance in the kitchen that is so natural it would appear choreographed to an observer. I hand him the paring knife before he reaches for it; he reminds me the grated carrots go in before the crushed garlic, knowing I would otherwise be scuffling through the cookbook. Italian Family Cooking: Like Mama Used to Make. There are over 200 recipes, but we only use one. (Sorry, Mama, my dad joked one day.) Lay the book flat and the spine yields the pasta pie recipe. The book’s edges are crinkled from wet hands. Drips of béchamel sauce and drops of melted butter spatter the pages.

Our pasta pie is like the standard layered cake, but instead of frosting between layers, there is alternating sliced zucchini and squash, sautéed sausage and chicken. Instead of cake, there is pure angel-hair pasta tangled in a 100-percent-from-scratch tomato sauce. (Please fit in, please fit in, we silently plead as we assemble the ingredients.) The pie is so dense most people are full after a tiny piece. And there is no need for side dishes: all the components of a meal are already there.

Now we have made it through a morning of searching for the freshest ingredients, three pages of cookbook directions and nearly five hours in the kitchen. Why can’t it all fit in? Maybe it was the extra-spicy Italian sausage my dad insisted on buying at the market. (You know how much I love my Italian sausage, Lyssa.) Or could the chicken be to blame, chopped up into “bite-sized” chunks that would satisfy a T-Rex? (It’ll shrink down once we sauté it. You’ll see.) Either way, the pan is bulging and overflowing. Each extra pinch and ounce “for good measure” adds up.

There is nothing we can do about it. This always happens, yet we still act surprised and are determined to condense it all to prevent the inevitable leftovers — which aren’t technically leftovers if they never make it into the meal in the first place. But that’s another argument. Until next time, we will be scouring the Internet for a 4-inch deep springform pan.

Alyssa Rosenzweig is a freshman in the Computer and Cognitive Science program. She and her dad can be found dancing in their kitchen in Birmingham, Mich.
Following a Shakespeare recitation section they taught on Fridays, English Ph.D. students Ian Cornelius and Stephanie Elsky walk down the grand stairway in the newly renovated Fisher-Bennett Hall. The English department was moved to Market Street while the building underwent a top-to-bottom, inside-out transformation. “I like the skylights and soundproof windows,” Elsky offers. “It’s great to be back from exile,” adds Cornelius.

“Time to turn back and descend the stair”

—T.S. Eliot