

Swarthmore Swarthmore

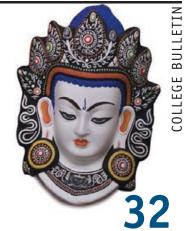
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Moving on: A short story

The minivan with Maryland plates is straining to contain four years of books, blankets, clothes, electronics, and unidentified gear. The new graduate's parents—hours after proudly snapping photos of their daughter in cap and gown—look bewildered by the array of stuff. On the sidewalk is a lacrosse stick (they didn't know she had one), a large stuffed bear, and a plastic laundry basket full of rumpled sheets.

Their daughter is distracted. Friends keep interrupting, hugging, sharing quiet words. Packing the car doesn't mean much to her. This last day of college has been filled with rituals—other people's rituals, mostly. Her diploma, cinched in garnet ribbon, sits on the dashboard, alongside the rose she wore at the ceremony, which

Their daughter is distracted. Upstairs, her room is echoing and empty; a few hours' drive lies ahead—and a life.

is wilting now but still quite beautiful. Her head is bursting with ideas and plans and memories. Like a frown, a wandering cloud eclipses the afternoon sun. A nervous breeze tugs at the corner of one of her sheets, filling it with warm June air, urging it to fly from the basket. Upstairs, her room is echoing and empty; a few hours' drive lies ahead—and a life.

She can't take Swarthmore with her.
What's in the car are just her things. Most could belong to any student—notebooks,
CDs, a computer, a file of graded papers—

yet she has with her other markers of her college years: a china mug from orientation, a T-shirt from Peru, two treasured ticket stubs, a deck of cards with all the aces missing. (Along the way, she's discarded more aces than she's saved.) At this moment, it's what's in her mind that really matters.

The last thing in the car is a potted ginkgo tree—a gift from the Scott Arboretum. She remembers the coleus the arboretum gave her freshman year. It got all leggy in her dorm room, reaching for the sun, then died the summer she saw Machu Picchu. The baby tree will have to ride to Maryland in her lap. She'll try to plant it somewhere—but there's so much to do ahead. No promises, she thinks.

Her friends are gone now, and that breeze is threatening rain. Start the car; it's time to move on.

—Jeffrey Lott



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FORESIGHT AND FORTITUDE

I would like to reinforce the understated sentiments about Professor Peter Van de Kamp expressed by Professor John Gaustad in "Barnard's Wobble" (March *Bulletin*). He stated that "in terms of the rest of Van de Kamp's career, he did very important, accurate work."

Indeed, it is almost impossible to identify a scientist alive today with the foresight and fortitude of Professor Van de Kamp, who in the late 1930s began a systematic search for extrasolar planets, knowing it would not pay off for decades. The fact that it took until the 1980s for "other observatories" (many of which were staffed with Van de Kamp's own students) to begin to publish their own results is a testament to the advanced state of his research program at Swarthmore.

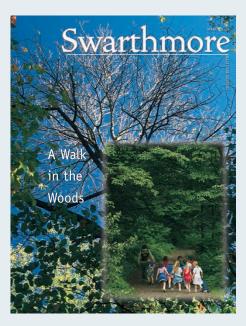
Only the naïveté of a starry-eyed freshman during a pilgrimage to the home of the legendary retired professor more than 20 years ago could have caused me to ask him if he had plans to write an autobiography. Even today, I am skeptical of his reply that there would be little interest in his story. I can well imagine that there would be considerable interest, both inside and outside Swarthmore, in the saga of someone who was—and probably remains—the College's most famous professor. The sad but captivating tale of Barnard's star and the falling-out between Van de Kamp and Professor Wulff Heintz is but one small chapter of a full and rich story.

Douglas Braun '83 Boulder, Colo.

ASTRONOMICAL ACHIEVEMENTS

I read "Barnard's Wobble" with great interest and some sadness. I'm sure most
Swarthmoreans of my generation remember Peter Van de Kamp with high regard and fondness. His pioneering research at the Sproul Observatory was only one aspect of a true Renaissance man, combined as it was with his teaching, his directing of the College orchestra, and his Charlie Chaplin seminars. It is a shame that disappointment and controversy haunted him in his final years.

The final sentence of the article alludes to "entirely different methods and instruments" that are today being used to accomplish what Dr. Van de Kamp thought he had accomplished in 1963—the detection



of extrasolar planets. Preeminent among these is the Hubble Space Telescope, specifically its fine guidance sensors (FGSs). Two of Hubble's three FGSs provide the signals to keep the telescope pointed at individual stars with unprecedented accuracy for hours at a time. The third FGS serves a dual purpose—as a guidance backup and as an additional science instrument that can detect and resolve binary star components as dim as magnitude 17, with only a few milli-arc-seconds of separation. That Wulff Heintz was right concerning Van de Kamp's work on Barnard's Star has, in fact, been demonstrated most recently and definitively by the Hubble FGSs.

However, as Dr. Otto Franz, astronomer at the Lowell Observatory and member of the Hubble Astrometry Science team, said to me after reading the *Bulletin* article, "Van de Kamp's failure regarding Barnard's star does not nullify or even diminish the astrometric achievements attained at the Sproul Observatory by him and his associates, notably the work published by Sarah Lee Lippincott '42 and her collaborators on astrometric (unseen) low-mass stellar components to nearby stars." He went on to say that Swarthmore astrometry has played a seminal role in formulating astrometric projects for the Hubble FGSs.

My keen interest in all of this derives not only from my association with Swarthmore but from the good fortune that I had to be able to spend seven years of my engineering career contributing significantly to the manufacture of the Hubble FGSs. Although I've worked on many interesting and highly fruitful aerospace projects, I would have to rank Hubble at the top for its challenge, accomplishments, and unique connection to my years at the College.

ROBERT ROWLEY '61 Danbury, Conn.

WHERE CREDIT IS DUE

In the interest of clarifying a misconception about the College's affiliation with the Maryland National Bank Association (MBNA), I want to assure our alumni and parents that their names were not sold to MBNA for the affinity credit card offer. The College provided a list of names and addresses to print on a brochure. MBNA is prohibited from using that data for any other reason.

There's no denying that this is a business proposition for MBNA, but the bank has also offered an attractive interest rate to Swarthmoreans and a means, for those who are interested, to identify their ties to the College. In return, the College receives a small royalty that supports the financial aid endowment.

We realize this program does not appeal to all as a way to demonstrate support of the College but trust that, as with everything else, there is room for differing opinions. However, we do acknowledge and thank the hundreds who have subscribed to the credit card and whose purchases are providing an additional stream of income for student scholarships.

DIANE CROMPTON
Director of Development Operations

SAY IT AIN'T SO

Say it ain't so, Al Bloom! Swarthmore College, with one of the nation's oldest football programs, cannot be casually tossing that program in the dustbin, can it? Now I know how three million Dodger fans felt when the O'Malley family tore the heart out of Brooklyn in 1957.

Intercollegiate athletics exist at Swarthmore in their purest sense. Whether it is football, wrestling, or badminton, well-rounded scholar-athletes play for the joy of the game. That football survived for more than a century and was on an upswing is something to celebrate and cherish.

I do not attribute ill motives to President Bloom and the Board of Managers.

Please turn to page 79

STUDENTS PROTEST "RACIALIZED" POLICE TREATMENT



n April 13, about 70 students and a few faculty and staff members, dressed in black, marched quietly down Magill Walk and around the streets of the Ville. They were protesting a recent incident involving College students that led to accusations of "racialized policing" by Swarthmore borough police.

Early on the previous Sunday, April 8, three African-American students from another college assaulted Randy Keim '02 in his Mertz Hall room after a Delta Upsilon party at which the four apparently argued. They beat him badly enough to require hospital treatment. About an hour later, Swarthmore borough police entered the offcampus apartment of Nii Addy '02 and Prince Achime '01.

Keim later said he had mentioned Achime as possibly knowing his assailants. In an apparently unrelated incident, a female student from Bryn Mawr was arrested for assaulting Keim earlier that night.

Addy and Achime claim the police entered their apartment while they were sleeping, then questioned and searched Achime. Soon afterward, officers received a tip from the College operator that a phone call had been made from the Willets Hall room of Sanjay Richards '03, requesting a taxi to 30th Street Station. Suspicious that the call was from the assailants, officers entered Richards' room without his permission, he says, told him to step into the hallway, asked if he had drugs or weapons, and then frisked him. "There was no reason for the search because we clearly did not fit the description the victim gave of his assailants," Richards later told The Swarthmorean. "I think we were searched because we were African Americans."

"I felt like [I was questioned in that manner] completely because of my race," Achime told *The Phoenix*. "No question on that one." Addy agreed that their treatment was racially motivated.

SWARTHMORE BOROUGH POLICE CHIEF THOMAS
CRAIG LOOKS ON AS STUDENTS MARCH IN
PROTEST AFTER AN INCIDENT THAT SOME CALLED
"RACIALIZED."

Members of the Swarthmore African-American Student Society (SASS) complained to the administration of "procedural abuse" by the police—including "frisking, harassment, and demeaning treatment" and entering without probable cause.

On the morning of April 13, President Alfred H. Bloom and Vice President for College and Community Relations and Executive Assistant to the President Maurice Eldridge '61 met with the borough's mayor and chief of police. "The College is investigating the matter and working with the police and independently to understand what took place," Bloom said afterward.

"We're deeply concerned that our students feel they're being singled out in terms of race," Eldridge said. "It's contrary to the principles of the College."

After the march that afternoon, the crowd convened near Parrish steps for a "speak-out." The mood was quiet and somber. "This is not a confrontation or an accusation but instead an opportunity for the College community to hear our testimonies," announced Brandyn White '03, a member of SASS and organizer of the rally.

African-American students spoke of encounters with borough police officers they suspected of being racially prejudiced, often while driving near campus.

Rodney Morris '01 closed the rally on an emotional note, after adding his own recollections of harassment, including being called "nigger" and "coon" while walking to the Ville three years ago. "Crying at the injustice of the world is not enough," he said. "This speak-out is a continuation of a struggle that's been going on long before today. At Swarthmore, we know how to change the world—but we need to put our faces behind it."

Discussions followed at the Black Cultural Center (BCC) to explore "ways in which we can keep such incidents as those shared during the speak-out from occurring in the future," says Timothy Sams, assistant dean and director of the BCC.

On April 19, SASS members met with the mayor, police chief, Eldridge, Sams, Dean Bob Gross '62, and Associate Dean for Student Life Tedd Goundie. SASS requested a meeting with borough police to discuss the official police report filed on April 8 and "what the police department perceives to be a healthy relationship between Swarthmore borough police and students." They also asked that police receive annual sensitivity training.

On May 1, a suspect in the assault was arrested in Philadelphia, then arraigned at Media District Court with bail set at \$10,000. The investigation is ongoing.

At press time, SASS students were still waiting to hear from borough police regarding their requests. "The students didn't ask for anything unreasonable," Sams says. "There may also be ongoing meetings, whenever students have encounters with the police, to talk about ways to ameliorate the problem. Students are looking for a continuous relationship rather than waiting for disasters."

—Cathleen McCarthy

Hungerford named provost

Constance Cain Hungerford, Mari S.
Michener Professor of Art History, will become provost in the fall, taking over from Jennie Keith, who served two terms. Keith will be returning to her teaching duties as Centennial Professor of Anthropology. "As I've begun to learn more about the details of this position, I've come even more to admire what Jennie has accomplished as provost and how she has gone about her work," says Hungerford.

Hungerford received an M.A. and Ph.D. from the University of California at Berkeley. She specializes in 19th-century French painting and, in 1999, published the biography *Ernest Meissonier: Master in His Genre*. She taught a seminar on Modern Art and courses on Picasso, Nineteenth-Century European Art, and Twentieth-Century Western Art.

Hungerford has been responsible for the College's art collection for many years. She also prepared the self-study

Safety awareness intensifies

During the weekend of Feb. 24, a series of unrelated incidents left the College shaken. Several vehicles had their tires slashed in the parking lot outside the Lamb-Miller Field House, a student was arrested for disorderly conduct, and another student reported a sexual assault. All cases remain open at the Swarthmore Borough Police Department at press time.

"The assault, along with a mugging last semester, came as a stark reminder that we cannot afford complacency around the issues of safety and security," says Dean Bob Gross '62. "The College does not exist in a bubble." Subsequent meetings of administration and students resulted in a plan to heighten safety awareness and increase safety measures on campus.

The Student Council Safety Committee will work with the College's Public Safety officers in identifying areas in which to add lighting this summer. Campus directories and phones will be installed in several locations. Near the railroad tracks, where the



ART HISTORIAN—AND NEW
PROVOST—CONNIE HUNGERFORD

portion of the long-range plan that the College Planning Committee presented to the Board of Managers in May 1999, part of the Middle States accreditation process.

"I look forward to getting to know more of the faculty well and to representing their concerns within the senior administration," she says.

mugging took place, Public Safety will install surveillance cameras and increase patrols.

The administration also plans to review the student-staffed Garnet Patrol shuttle and escort service, possibly adding staff positions—with the goal of extending the hours that safety escorts are available. "We also recognize that we need to do a better job of educating students about the need to take reasonable precautions," Gross says.

Administrators are also examining how alcohol use may have effected the February incidents. "We are concerned about the rowdiness and vandalism that seem to have increased recently, always as a result of alcohol abuse," Gross says. "Students report that a decrease in the number of public parties has resulted in more abusive drinking in dorm rooms. This is a perennial problem on college campuses, the result of the presence of so many 'adult but underage' drinkers.

"Most students at Swarthmore are concerned about what they perceive as a shift in the social climate. We need to work with Student Council and other groups to build the kind of campus culture we all want."

—Cathleen McCarthy

Introducing mixed-gender rooms



oed rooms will be introduced on a limited basis starting this fall.

After discussions with administrators, the Housing Committee endorsed the proposal made by Timothy Stewart-Winter '01 and members of Swarthmore Queer Union last December.

In his proposal, Stewart-Winter argued that "mandatory same-gender rooming is heterosexist, in that it fails to account for the comfort of gay, lesbian, and bisexual students. The basis for the ban on mixedgender rooming was the assumption that this would prevent sexual tension or relations between co-habitants."

However, many homosexual students, he wrote, "are less comfortable living with same-gender roommates than they would be with roommates of the other gender because of factors like attraction and homophobia that complicate the usual issues of compatibility."

The option to choose an opposite-sex roommate will be offered in 50 spots—about 4 percent of student housing—in the Lodges and two sections of Worth that

do not house freshmen. Both Lodges and Worth contain hall units that house four to six students.

"The experiment will be re-evaluated next year to see if it is indeed meeting the needs of our students, especially the queer students. At that time, it could be ended, enlarged, or remain the same," says Myrt Westphal, assistant dean of the College and director of residential life.

There is no guarantee that students who choose this option will receive it because the distribution of rooms will continue to be done through a lottery. West-

phal does not expect many couples to request coed rooms. "At Swarthmore, there is a student culture that strongly suggests that you not live with a romantic partner," Westphal explains.

"Most people, I think, are doing it because they would feel more comfortable," Matthew Miller '04 told *The Phoenix* before the lottery. He was hoping to live with female friends next year but failed to land one of the allotted spaces. Because juniors and seniors have the option of single rooms, and freshmen are not allowed the coed option, it's an issue that mainly affects rising sophomores like Miller.

Alex Brennan '04 was also hoping to room with female pals but did not draw a lucky number. "There were too many sophomores who wanted coed housing," he said.

Danielle Keifert '04, on the other hand, got her wish. Next year, she will share a hall unit in the Lodges with her "four best friends," one of whom happens to be male.

—Cathleen McCarthy

Newly tenured

The following faculty members have recently been promoted to the rank of associate professor with tenure: Aurora Camacho de Schmidt, Spanish; Nathaniel Deutsch, Religion; Ted Fernald, Linguistics; Steven Hopkins, Religion; and Paul Rablen, Chemistry.

6.4 x 10 dollars won

One member of the Swarthmore faculty has found a new way to apply her scholarship. Andrea Stout, assistant professor of physics, appeared in April on the popular quiz show Who Wants to Be a Millionaire? She left with \$64,000 when neither she nor her last "lifeline," former Mathematics Professor Chris Towles, knew that the late rapper Tupac Shakur had published posthumous poetry.

Hilde Cohn dies

A bout 30 friends and
family gathered at
the Friends Meetinghouse in April
to honor Hilde
Cohn, professor
emeritus of German, who died in
her sleep in Haverford, Pa., on March 13
at the age of 92. Several
of Cohn's former students and colleagues
from the College attended.

After writing essays for Jewish youth organizations and other publications, Cohn emigrated to the United States in 1937, joining a network of German-Jewish scholars who enriched American higher education during that period. Cohn's father perished at Buchenwald the year after she left.

Cohn taught at Bryn Mawr College for 10 years, serving as head resident of the school's German House for many years. In 1948, she joined Swarthmore's German Department—which later became the German section of the Department of Modern Languages and Literatures—and retired in 1975. Along with German-language courses, Cohn taught courses and seminars in German literature, ranging from Romanticism to 20th-century novels, poetry, and drama.

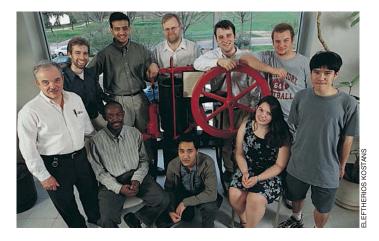
Going off the grid

A team of students recently filed a provisional patent application for their design of an off-the-grid home-heating system to be used during short-term power outages. This student project is the first to lead to a promising patent application since Joseph Higgins '91 and Associate Professor of Engineering E. Carr Everbach received a patent for a sudden infant death syndrome crib monitor in 1998, which they share with Kevin Parker at the University of Rochester.

The home-heating system team is the third to work on the project initiated by Fred Orthlieb, professor of engineering, but the first to include nonengineers. Along with the team's other faculty adviser, Professor of Engineering Erik Cheever '82, and led by Honors engineering and mathematics major Tushar Parlikar '01, the students received a big boost in February from a grant of almost \$18,000 from the National Collegiate Inventors and Innovators Alliance.

"By the end of the semester, we hope to have a working prototype that marketing people can show off at trade shows," Parlikar says. Engineering and physics majors designed the system, then economics and psychology majors worked together to market it.

The team plans to file the claims section of the patent application in July and hopes the patent will be issued next



THE DESIGN AND MARKETING TEAM OF A GROUNDBREAKING HEATING SYSTEM (CLOCKWISE FROM LEFT): PROFESSOR OF ENGINEERING FRED ORTHLIEB, ARI HAUSER '01, TUSHAR PARLIKAR '01, PROFESSOR OF ENGINEERING ERIK CHEEVER, MICHAEL STANLEY '01, TIM LANG '04, TAN MAU WU '02, APRIL TERRELL OF BRYN MAWR COLLEGE, PUKAR MALLAR '01, AND NII ADDY '01.

summer. "Then we will contact some players in the homeheating industry," Parlikar says, "such as boiler and zone valve manufacturers, to license out our patent on a nonexclusive hasis."

—Alisa Giardinelli

Nobel physicist attracts attention

When you throw liquid nitrogen around, people get excited," Nobel Prize—winning physicist William Phillips said with a chuckle. A dozen physics majors shared the laugh over lunch in Sharples during his recent visit.

Phillips was speaking from experience. Moments earlier, he had wheeled into the DuPont Science Building the liquid nitrogen and other props he would use during his evening lecture "Almost Absolute Zero," an updated version of the 1997 Nobel lecture he gave in Stockholm. Known for cooling and trapping atoms with laser light, Phillips also gave a physics and astronomy colloquium, "Optics With Matter Waves," that afternoon.

Professor of Physics Frank Moscatelli has spent the last two summers working in Phillips' lab at the National Institute of Standards and Technology in Maryland, where Phillips is a fellow. As this year's president of Swarthmore's Sigma Xi chapter, he invited Phillips to campus.



NOBEL PRIZE WINNER WILLIAM PHILLIPS

He seemed very interested in what the students at Swarthmore did," says Amy Reighard '01, an Honors physics major who answered Phillips' questions about her thesis over lunch. "He was not only obviously very smart but personable and friendly—the kind of person you hope wins a Nobel Prize."

Class of 2005 admitted

This year, 889 students were admitted to the College, slightly more than 25 percent of the 3,530 who applied. The group is expected to yield about 376 first-year students.

Of those who come from high schools that report class rank, 56 percent of admitted students are in the top 2 percent of their high school class, and 91 percent are in the top decile. Fifty-seven percent come from public schools, 31 percent from private schools, 4 percent from parochial schools, and 8 percent from schools overseas.

Admitted students come from 6 continents, 42 nations, and 45 U.S. states as well as the District of Columbia, Puerto Rico, and the Virgin Islands.

More admitted students declared an "undecided" major than any other. Next, in order, are English, engineering, biology, political science, economics, and history. Forty-three percent identify themselves as American students of color—19 percent as Asian Americans, 10 percent as African Americans, and 13 percent as Latino/a.

Farewell to Blackburn, Bradley

A well-rounded career

Centennial Professor of English Literature Thomas Blackburn retired in January after a distinguished 40 years at Swarthmore, including six years as dean of the College.

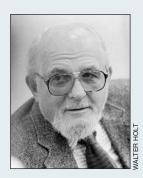
In addition to his seminars on Shake-speare and Milton—a subject on which he has been widely published—Black-burn leaves a wide range of contributions behind. As a former college athlete, he was actively involved in recruiting and working with student athletes. During his first four years at Swarthmore, he helped coach the football team and, over the years, served as faculty adviser for football, lacrosse, and wrestling teams.

In the spring of 2000, he was a member of the Athletics Review Committee and a steadfast opponent of radical reductions in the College's intercollegiate athletics program. "Working with students in other areas—whether it's athletics or drama—helps you understand what's going on with them academically. It's one of the traditional ideals of the liberal arts college: to understand the whole persona of a student, not just the intellectual aspect," Blackburn says.

As dean of the College from 1975 to 1981, Blackburn reorganized the Dean's Office and helped revamp the mental health services offered by the Health Center. He was also an early computer enthusiast, teaching introductory computer courses to faculty and staff.

In 1985, he established the Writing Associates Program, based on one set up at Brown University by Tori Haring-Smith '74, in which students are trained to tutor other students in writing. For 15 years, Blackburn directed and refined the program. Surveys consistently reveal the program's value to faculty and students, and alumni report that the program helps in everything from theses to tactfully fixing up their bosses' writing. "Our aim was never better papers but better writing," Blackburn says.

Swarthmore students are "the kind of students who challenge, satisfy, and reward those who work with them in classroom and seminar," he said in his baccalaureate address last year. "To my mind, the great soliloguies by



CENTENNIAL PROFESSOR
OF ENGLISH LITERATURE
THOMAS BLACKBURN

Shakespeare, like Hamlet's 'To be or not to be' ... remind us that we must inevitably make choices in a universe where the consequences of those choices are always hidden in the future....

"I'm grateful that I was chosen to go to Oxford," continued the former Rhodes Scholar, "and [grateful] to meet there my best choice ever, Ann who became my wife... Only in that context does my choice to teach at Swarthmore come second.... I'm glad I have the choice now to retire from regular teaching—or at least, I think I'm glad because the ramifications of that choice and the choices that will follow all lie in the obscurity of the future."

—Cathleen McCarthy

A legacy of activism

Professor of Russian since 1962 and former Chair of the Department of Modern Languages and Literatures Thompson Bradley retires this year, leaving behind a legacy of activism that will last long after his jaunty signature beret, scarf, and goatee are no longer a familiar sight on campus.

Bradley is a Marxist, a Socialist, and a political activist with deep ties to the former Soviet Union. Students recall, in evaluations, lively debates in the professor's office—and departing, more often than not, with one of his books under their arms.

"He's deeply involved with the students," wrote a sophomore after taking his course The Russian Novel. "He constantly links Russian literature with Russian politics. I liked this because it taught me about Russian history as well as the literature."

Bradley sees himself as part of a school of political academics who came of age in the turmoil of the 1960s. "I think there are fewer and fewer people in academia today who think of their lives as having to do with a practice outside of academia. I can't imagine only doing activism or only teaching. To me, they seem as indivisible as literature and history," he says. Fortunately, he adds, "the College has always had a commitment to social change."

Before coming to Swarthmore in 1962, Bradley spent a year in Moskow, as 1 of 35 American scholars sent there

as part of a cultural exchange. Working in the Lenin Library and the Gorky Institute of World Literature, he witnessed the downgrading of Stalinism. He also befriended members of the Soviet dissident movement. Last



PROFESSOR OF RUSSIAN THOMPSON BRADLEY

year, Bradley invited one of them, the legendary Elena Bonner, to speak at the College.

When Bradley began teaching at Swarthmore 39 years ago, he turned his focus to local activism and was instrumental in building community outreach to Chester, Pa. Next year, he will teach journal writing to inmates at the Philadelphia Industrial Correctional Center.

"I was one of the luckiest people alive to have taught at Swarthmore," he says. "One thing this college encourages and inspires is intellectual seriousness which fits in well with social activism."

—Cathleen McCarthy

"BRAVE AND WILLING," KITAO RETIRES

In a scene redolent of Bergman's Wild Strawberries and Kurosawa's Madadayo, nearly 100 of William R. Kenan, Jr., Professor of Art History T. Kaori Kitao's students and colleagues from five decades gathered in February to celebrate her impending retirement.

The range of speakers and topics hinted at the breadth of Professor Kitao's own wide-ranging interests she taught art history, architecture, and film studies—and the deep impact on her pupils. Symposium topics ranged from colonial architecture to Steven Spielberg, the Stonewall riots to Ellis Island, and the design of Kohlberg Hall to the importance of coffee in undergraduate education and wound through the Zen-like lesson of Kaori's famous lecture in introductory art history that began simply: "Rock. Garden. Rock Garden."

Not surprisingly, many of Kitao's former students ended up in art- and architecture-related fields. But there were also writers, business people, choreographers, and Web designers who came to honor Kitao's career and praise her influence.

"I wanted to follow in her footsteps. I asked her for career advice after finishing a degree when the market for teaching jobs was thin," recounted Kevin Murphy '82, an art history professor at the City University of New York. "She told me, 'Better to do something useful in preservation than to teach somewhere really lousy."

"She taught me the value of trying the impossible," recalled architect Margaret Helfand '69, who designed Kohlberg Hall and is co-designing the College's new science center. "Her singular way of looking at things upside down and sideways is fundamental to my work."

"She was extremely encouraging to me in pursuing a career in screenwriting and filmmaking when I was an undergrad, even though I majored in English," said Yongsoo Park '94, a New York—based filmmaker and author of the recently published novel *Boy Genius*. "Well after I graduated, she came to New York to screen the reels of my film one by one, giving me detailed feedback that made it possible to finish."

David Cateforis '86, a professor of art history at the University of Kansas, recalled Professor Kitao's skill in classroom analysis: "She always had three things to say in a critique. The first isolated the problem, the second provided a succinct commentary with a clarity



"I HAVE A THING ABOUT THE CIRCUS," SAYS T. KAORI KITAO OF HER FAVORITE PAINTING IN THE LIST GALLERY, "CIRCUS," BY JOHN STUART CURRY, SEEN IN THE BACKGROUND OF THIS COLLAGE OF PROFESSOR KITAO'S MANY INTERESTS. "ONE OF THE THINGS I ALWAYS WANTED TO DO WAS BECOME A TRAPEZE PERFORMER. I LIKE THE FUSION OF GAUDY EXCITEMENT AND THE VERY SAD, MELANCHOLIC NOTE UNDERNEATH THE GLITTER."

that [produced] sudden insight, and the third provided a twist and a new dimension to the whole problem— and usually made you laugh as well. I've only recently begun to really appreciate, in refining my own teaching, the utter uniqueness of her teaching style in simultaneously making things understandable and making the student think."

Fred Wasserman '78, director of curatorial administration at The Jewish Museum in New York City, also spoke, as did Paul Jaskot '85, organizer of the symposium and a professor at DePaul University in Chicago.

At the reception, I discovered that many of Kitao's former students, like me, diligently preserve notes and papers from her classes. My notebooks have running lists of Kitaoisms in the marginalia. I even treasure her criticisms of my work. "You need to be more specific," Kaori commented on one of my papers. Several pages later, when verbosity had overtaken me, she wrote: "See comment, page 2. I take it back." On a similarly longwinded paper on Rembrandt, she crossed out the artist's name on my title page and wrote "Ramblant."

Professor Kitao has been notable throughout her career in expanding both her own horizons and those of

the College. Arriving at Swarthmore in 1966 as a respected Renaissance scholar and the author of the definitive work on St. Peter's Square in Rome, she also pioneered courses in local architecture, film, and industrial and commercial design.

"She's brave and willing to take on new things," said Justin Hall '98, the host of *Web Workshop* on ZDTV, who, in a reversal of roles, was Kitao's teacher for a class in html. "Just look at her Web page [at www.swarthmore.edu/Humanities/art/Faculty/kaori/tkitao.htm]. It's technically accomplished, but even more, it's fairly unique in that it's deeply personal, surprising, and constantly updated."

On her Web page, Kitao writes: "Art history in my view is a misnomer. What I profess is study of art, and though the historical context of works of art is by no means irrelevant, the focus of my interest is their genesis in the creative minds as revealed in the works themselves rather than the social circumstances surrounding them."

"In the beginning, there were things," Kitao commented during the symposium proceedings. "Words and images are a reminder of things, but, even if you have 500 pages, they never replace the immediacy and experience of the object.... I like things more."

Asked about her plans for retirement, Kitao observed: "The whole point of the exercise is to have no plans."

-Matthew Wall '87

Future lawyers score big

Attorney: Describe the conditions on the mountain that night. Witness: It was snowing, sleeting, hailing. Temperatures were subzero. Winds were 70 mph. I couldn't stand up without falling over. Terrible.

Attorney: What did you do?

Witness: We did the only thing we could do. We clung to each other to wait it out. The next morning, P.J. was unconscious. I couldn't find a pulse. I tried to carry him, but I was too weak. So I returned to Camp 4 alone.

Attorney: What happened upon your arrival?

Witness: I told everyone about the storm. By then, P.J. had been up there on the mountain, exposed, for well over a day. We had to face the reality that he was gone.

No, this is not a scene from Law & Order—it's a round in the National Championship Mock Trial Tournament held in St. Paul, Minn., in April. Swarthmore team captain Dennis Cheng '01 is acting as defense attorney, questioning Payal Shah '03, who plays the guide of an ill-fated expedition up Mount Everest. Cheng and Shah—who won a "best witness" award at regional competitions—are part of an eight-member team. This trip is only Swarthmore's second to the national championship—and they're about to place second out of 393 teams.

Team captain Cheng, a double major in political science and economics, co-founded the group last year with friend BoHee Yoon '01, a double major in political science and women studies. In their first year, the team placed 10th and won Best New School, and Cheng won the prestigious Spirit of the American Mock Trial Association Award.

This year's competition involves the fictitious case of *Gilbertson v. Everest Experience*, based on events from the book *Into Thin Air: A Personal Account of the Mount Everest Disaster* by Jon Krakauer, which chronicles the horrors of a 1996 climb that cost 12 lives. Each team has been instructed to read the book for background and build their case from legal documents and witness affidavits sent before the competition. Real lawyers and judges serve as the mock judges who decide the cases—and the competition winners.

Today, in the courtroom, the family of the fictitious "P.J. Gilbertson," who supposedly died while climbing Everest, has brought a civil suit against the guide who led the expedition. Like all student lawyers in the competition, Cheng is making up his lines as he goes, and, as in a real court trial, he is frequently interrupted by objections from competing lawyers and by the judge.

In the next round, Yoon steps up to cross-examine a student from another school who plays yet another guide from the expedition. In her gray suit, Yoon fires questions like a seasoned pro. "In fact, you would—and have—entrusted the

defendant with your life," she says. "Isn't that correct?" "Yes, I have," he responds.

"No further questions, your Honor," Yoon says curtly and spins around, ponytail flying, to return to her team.

After each team has played out the trial four times—the plaintiff's side twice and the defense side twice—winners are announced, and Swarthmore's team goes off to dinner elated.

"It's about 50 percent rehearsed performance and 50 percent improvisation," Cheng explains later. "The case is written so that there's no clear winner, and both sides have a strong case, but it's slightly slanted toward the defense each time because of the burden of proof. The strength of our team is definitely in the presentation and our witnesses—and also teamwork. It's very apparent when you watch us that we worked as a team."

Six of the eight members of Swarthmore's team were involved in Mock Trial competitions during high school, and



SWARTHMORE'S MOCK TRIAL TEAM (LEFT TO RIGHT): DENNIS CHENG '01, BOHEE YOON '01, EDEN WALES '03, AND DEANNA WILSON '04 PLAYED ATTORNEYS. PAYAL SHAH '03, CHARLES SMALL '03, GABE TAJEU '03, AND ELIZABETH GOLDSMITH '01 WERE WITNESSES.

none had professional coaching, as did many of the teams they competed against. Cheng estimates that about 90 percent of the teams at Nationals showed up with professional attorneys—some with as many as four or five coaches. Cheng says the team did get some helpful advice from Philadelphia attorneys Jonathan Cass '88 and wife Jacquelyn Caridad.

Many on the team hope to argue real cases some day. Cheng plans to attend law school after earning a master's in international relations from the London School of Economics. Yoon and Eden Wales '03, who won a "best attorney" award at the regional competition, have applied to law schools. "Some of us started thinking about becoming lawyers because of Mock Trial," Cheng says.

—Cathleen McCarthy

Comic books at McCabe Library?

tudents looking for a respite from their studies at McCabe Library can now leaf through a comic book, thanks to two students and an alumnus who donated 350 comic books to the library this semester. The collection captures the breadth of contemporary comic-book subculture—from "A. Bizarro" to the "The Uncanny X-Men"— and is available in the current periodicals/newspaper lounge.

About two-thirds of the collection comes from Greg Erskine '01, the rest from Ben Myers '01, David Newman '76 (father of Sarah Newman '04), and Erskine's friend Jeremy Westphal. Erskine began collecting comic books in high school, graduating from superheroes to independents, including autobiographical and historical comics. "There is a lot of male-power fantasy in the attraction to superheroes," Erskine admits, about a genre that hasn't changed much over the decades. "It's still big muscle-bound men hitting each other." These days, they're also

using lasers.

Such male fantasy abounds in the McCabe collection but so do "deconstructed" superheroes—parodies like Batman with a paunch—as well as self-contained stories like *Ghost World*, "about a couple of teenage girls after high school trying to decide whether to go to college," Erskin says. "These are less soap opera and more novel" than their forerunners.

The library has agreed to con-

tribute \$400 annually to building
the collection, which Erskine
will help organize, including
graphic art novels and comic
compilations. "Historically,
comic-book authors have been
mostly white males," Erskine says.
"We're trying to get more by women
authors and other minorities."

Meanwhile, Erskine is working part time in the McCabe coffee lounge/reading room, where he enjoys watching students reading his comics. "It's sort of an oasis in the middle of McCabe," he says.

—Cathleen McCarthy

A TASTE OF THE COMIC ENTERTAINMENT
NOW AVAILABLE IN McCABE LIBRARY

A DYKE TO WATCH OUT FOR

A lison Bechdel, award-winning creator of the syndicated comic strip "Dykes to Watch Out For," combined social commentary with sophisticated humor during her March visit to campus. It's a balance that has made her strip a lesbian cultural institution.

Bearing more than a slight resemblance to her signature character, Mo, Bechdel spoke to a standing-room—only crowd in the Scheuer Room for the College Libraries' annual political cartoonist lecture. In conjunction, McCabe Library featured original drawings, memorabilia, and books in a monthlong exhibit of her work.

When she started her strip in 1983, Bechdel said it was considered quite radical. "Unfortunately, just drawing pictures of lesbians doesn't cut the mustard anymore," she said, provoking the laughter that frequently erupted in the audience.

Unlike editorial cartoonists, Bechdel said her strip is like a soap opera in which politics are integrated as they are in real people's



ALISON BECHDEL'S SELF-PORTRAITS BEAR AN UNCANNY RESEMBLANCE TO HER COMIC PROTAGONIST, MO. (SEE TABLE OF CONTENTS.)

lives. Using slides of her strip, she illustrated how, over the years, her characters have dealt with issues such as AIDS; children; bisexuality; aging; and, most recently, the conservatism of the gay rights movement.

Bechdel also couldn't resist highlighting the timelessness of some of her work. A character in one panel, pictured in bed, says to another, "I'm not getting up until the Electoral College is abolished, and George Bush is impeached." Bechdel got one of her biggest laughs when noting that she wrote that line 12 years ago.

What's next for the diverse group that populates her strip? They will most likely address the issues Bechdel is facing herself. "I play with the concept of assimilation with Mo, Clarice, and Toni," she said. "Universality is tricky. The more support you get, the less marginal you become."

Don't get her wrong. "I don't wish for the old days of being oppressed," she added. "But there is a tension from being an outsider and being a citizen. I want both."

—Alisa Giardinelli

arly this semester, the College adopted a revised policy on student cheating, produced by a faculty committee. Provost Jennie Keith and the Committee on Faculty Procedures (COFP) appointed the six faculty-member Committee on Academic Dishonesty in December 1999 to clarify cases of academic misconduct and reconsider ways to adjudicate them.

"but it's not an automatic consequence." For example, stealing someone else's paper from their computer—something that happened recently—will result in suspension, he says, "but sloppy note taking or failure to properly cite a reference may not."

Appeals are no longer decided by the president. Now, a student must present a case for an appeal to the president and the

provost. If they decide there are sufficient grounds, a

Taking a stand against cheating

The group met throughout the academic year, first with the provost and deans, and finally with Tedd Goundie, associate dean for student life. Last fall, they presented a preliminary draft of their proposal to the provost, COFP, and faculty and department chairs. The revised policy was passed by the faculty in February.

"Some faculty members were wary of bringing students up on charges of academic misconduct because they feared the students would be automatically suspended for the semester," says Robert Weinberg, associate professor of history, who took over as chair of the committee last fall. "But if students are cheating on homework and quizzes, and faculty members handle it themselves without reporting it, the students may do it again in someone else's class," he says.

The appeals process was altered, and "we clarified what should be examined," Weinberg says. Before, if a suspicion of cheating was reported, the College Judiciary Committee (CJC)—consisting of two faculty members, two students, and one administrator—met to discuss whether the evidence merited a hearing. Now only faculty members of the CJC make this decision. If they decide on a hearing, the dean of the College convenes the entire CJC to meet with the accused student and decide the outcome.

The CJC also has a more detailed set of guidelines and procedures to follow. "The point is to take into account the extenuating circumstances and issues of intentionality. In other words, did the student mean to deceive the professor?" Weinberg says. "We underscored that the committee needs to look at the whole case and all the factors and make a recommendation based on that.

"Suspension does happen," he adds,

new faculty/student committee is appointed to review the case.

After examining cases of dishonesty in recent years, Weinberg says, it became clear to the group that the expanded use of computers in academia has facilitated cheating. "Students don't have to leave their dorm rooms to find material on the Web and download it," he says.

The Web has made it easier to plagiarize—and made plagiarism easier to detect. Weinberg says the College is considering subscribing to a Web service that scans the Internet for duplications in student papers and other text.

"Certainly, computers and the Internet have made it easier and more tempting to cheat," Goundie agrees. In one recent case, a student lifted, from the Internet, part of a lecture given at the University of California at Davis, then failed to properly attribute the source in his paper.

Goundie says the number of reported cases of cheating has increased this academic year. Six were reported last fall. The norm, he says, is two to four cases per year. "I don't know if more faculty members are bringing cases before the committee or more students are cheating—or just not cheating as well as they used to," Goundie says. At press time, one case had been reported for the spring semester. Most cheating occurs at the end of the semester, he says, "when the pressure starts to increase."

A few academic departments have produced their own policies on academic misconduct. "It's time for the College to make a statement that we take academic integrity seriously and to make our policy clear to students," Weinberg says. "We want every faculty member to bring these cases forward."

—Cathleen McCarthy

Women's tennis tops Conference

he women's tennis team captured the Centennial Conference (CC) Championship with a perfect 10–0 record. Anjani Reddy '04 led the Garnet with a 19–1 record this spring, was 33–2 overall on the year, and captured the CC Singles Championship. The Garnet ranked as high as 22nd in Division III during the year, and Reddy was ranked third in the Atlantic South Region.

The **men's tennis** team made the National Collegiate Athletic Association (NCAA) Division III Tournament for the 23rd consecutive year, with an 8–5 record. Pete Schilla '01 scored 10–3 in Division III, earning All-American honors.

The women's lacrosse team scored 10–5 overall and 5–4 in conference play. Katie Tarr '02, Kristen English '01, and Jenn Hart '03 all earned first-team All-CC honors. Tarr led the Centennial in scoring with 63 goals, and Kristen English '01 made the CC first-team squad for the third season.

Mark Dingfield '01 led the **men's** lacrosse team in scoring this season with 41 points, bringing his career total to 179 points, including 121 goals and 58 assists. He is third on the Garnet career goal list and fourth in points.

At the CC women's **track and field** championships, the Garnet placed fourth. Imo Akpan '02 captured gold in the long jump and the 400-meter dash and silver in the 200-meter dash. Joko Agunloye '01 won the 5,000-meter run and placed second in the 3,000-meter run, qualifying for the NCAA Championships.

At the CC men's track-and-field championships, the Garnet placed ninth with 38 points. Marc Jeuland '01 earned gold in the 10,000-meter run and qualified for the NCAA Championships.

Catcher Josh Lindsey '01 earned second-team All-CC **baseball** honors with a career-best .370 on the season and finished his career with 95 hits.

Heather Marandola '01 and Gretchen Heitz '04 earned second team All-CC **softball** honors.

In club sports, the **women's Ultimate Frisbee** team defeated Bucknell to win the state championship.

—Mark Duzenski

Versatile athlete moves on

t the end of this year's women's basketball season, each player received a red-covered "season summary"—a booklet containing more season statistics, awards, and articles than any Garnet women's basketball team has ever seen.

You can find Heather Marandola on almost every page.

A three-sport athlete, Marandola never missed a game in her Swarthmore career. She has started every soccer and basketball game, and except for one game in Florida in 1999 when she was late returning from the Emergency Room, she has started all of her softball games as well. She has played almost every position in all three sports. In total, Marandola has played 283 games while pursuing an engineering degree.

This year's record-breaking basketball season began four years ago. Marandola was head coach Adrienne Shibles' first recruit in the coach's second season at Swarthmore. The student scored 321 points that season and was well on her way to be a 1,000-point scorer but switched to the back court on Shibles' request. Though the position involved less point-scoring glory, Heather became the backbone of the team. This season, she lead the Garnet to 22 wins, a College record, as well as the team's first Centennial Conference Championship crown, their first trip to the NCAA Division III tournament, and seven other school records.

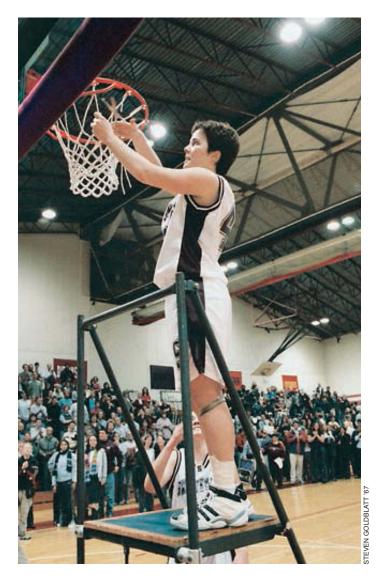
Shibles credits the program's rise to the pinnacle of the Centennial Conference to Marandola, who currently holds nine career records for Swarthmore, including most career games played (101), second-most career assists (298), and a spot at number six on the career points list (928). Shibles has said repeatedly that if it weren't for the fellow Maine native and defense lover, the record-breaking 2000–01 season wouldn't have happened.

But what the season summary doesn't capture is the spirit of Marandola—her inspirational qualities as a leader in Swarthmore's female athletic community. "She's an incredible leader and has an amazing work ethic," says Shibles. "She's just a well-rounded person who has managed to do it all at Swarthmore. I respect her for that."

Marandola's fellow soccer, basketball, and softball players have recognized her talents as a leader and motivator by electing her captain of all three teams her senior year and of the basketball and softball teams her junior year.

But what matters most to the senior are not the records, the sta-

| Spring 2001 Intercollegiate Sport | Overall Record | Centennial Conference |
|--------------------------------------|-------------------|--------------------------|
| Baseball | 5–20 | 4–14 |
| Golf | 4–2 | 7th |
| Men's lacrosse | 3–10 | 0–6 |
| Women's lacrosse | 10-5 | 5-4 |
| Softball | 5-20 | 5-11 |
| Men's track and field | 2–1 | 9th |
| Women's track and field | 3–0 | 4th |
| Men's tennis | 8–5 | _ |
| Women's tennis | 12–3 | 10-0 |



HEATHER MARANDOLA PERFORMS THE TRADITIONAL VICTORY CEREMONY BY REMOVING THE NET AFTER SWARTHMORE'S FIRST-EVER CENTENNIAL CONFERENCE WOMEN'S BASKETBALL CHAMPIONSHIP IN MARCH.

tistics, or the awards—but the game. "Sports are fun!" she says, in her typical tongue-in-cheek manner. On a more serious note, she adds, "I'm one of those people who plays not for the successes but because I love to play."

Like most engineering majors, Marandola "lived" in Hicks Hall. This spring, her final electrical engineering project was a bicycle computer built from scratch. She will be working for an engineering firm in Camden, N.J., and hopes to help Shibles when she can next season.

It was a bittersweet moment for many in the Swarthmore community when Marandola took the field for the last time on April 24 for a double-header against Haverford. Her versatility, dedication, and love of the game will be missed. But most important, Heather Marandola will be missed for being Heather. It's difficult to imagine Swarthmore women's sports without her.

-Kate Nelson-Lee '03

No More Cookbook Labs

In science teaching today, asking the questions is as important as knowing the answers.

By Alisa Giardinelli Photographs by Jim Graham

hat have we spent so far?" The question is the third item on the agenda at the meeting of the Home Heating System E-Team, and Tushar Parlikar '01 is running the show.
"We've already spent some money—\$1,000 so far on valves, motors, and gears."

"We also got larger screws for putting the box together," adds fellow engineering major Ari Houser '01. "As soon as I make some nice drawings, we can start building."

Although the group of seven students and two faculty advisers has met in a Hicks Hall conference room regularly since September, this meeting in February was more than a usual progress-report session. It was also the team's first meeting since they were awarded an \$18,000 grant for their project (see page 7).

"Work, please work!" Across the quad, in a DuPont Science Building chemistry lab, Vanessa Knoedler '01 is cheering on a reaction in progress. Behind a fume hood sits a small, tightly capped flask in a hot-oil bath. Not visible in the flask's solvent are the two molecules she hopes will react. It will be several hours before she knows if they have.

During the last three semesters, Knoedler, a chemistry and French double major, has made about 30 new molecules, most of which she has used to produce even more innovative chemical combinations. "There's one more I need, and it's being a



"IN THE OLD DAYS," SAYS PROFESSOR OF MATHEMATICS EUGENE KLOTZ (ABOVE), "STUDENTS WERE
MUCH MORE RECEPTACLES. YOU POURED IT IN—
AND AT SWARTHMORE WE CRAMMED IN AS MUCH
AS WE COULD—AND LEFT IT TO THEM TO DIGEST."
KLOTZ IS WORKING WITH FIRST-YEAR STUDENTS
(FROM LEFT TO RIGHT) DANIEL CHAMBERLAIN,
RACHEL KAUFMAN, AND KATHRYN MCCAFFREY.

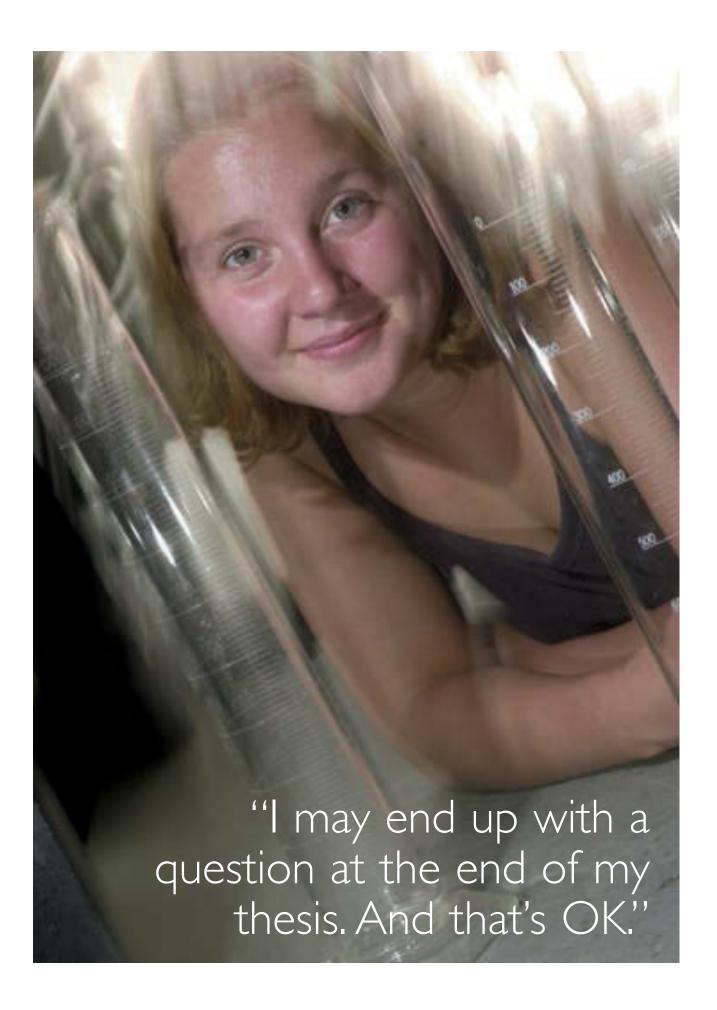
DURING THE LAST THREE SEMESTERS, CHEMISTRY
MAJOR VANESSA KNOEDLER '01 (RIGHT) RESEARCHED WAYS TO PRODUCE NEW MOLECULES.

jerk about getting made," she says. "It would be nice to have this last one, but I may end up with a question at the end of my thesis. And that's OK."

In addition to forming the basis of her senior thesis, Knoedler's research will likely lead to a journal article on which she will be listed as a co-author. "I'm very excited," she says. "I can't wait to do a database search and find something with my name on it."

Barely a decade ago, these scenes would have been almost unheard of, even in a top undergraduate science program like Swarthmore's. The opportunity for undergraduates to conduct their own research, let alone obtain funding and publish it, would have been extremely rare, especially at a small college. At Swarthmore and many other top liberal arts colleges, the opposite is now true.

These changes are not lost on current faculty, such as Associate Professor and Chair of Chemistry Robert Paley. "Forty years ago, when this building was built," he says, in his DuPont office, "there was no consideration that research would become a teaching tool. Faculty had labs [just] to tinker on their own stuff." Those days are long gone. "Now, there's more of a push for students to learn the process of investigation and to generate their own experiments," says Associate Professor of Biology Sara





Hiebert '79. "Give them the tools, a few techniques, and off they go."

"In the last 15 years, the emphasis on undergraduate research really took off, not just here but at all the good schools," Paley says. "So we added a research wing in the 1980s, and now we've outgrown it."

Paley, a 2000 recipient of a Henry Dreyfus Teacher-Scholar Award to support undergraduate research, says such work is the best vehicle for teaching and learning. "Students will know the positives, such as success when an idea works," Paley says. "And," he adds with a chuckle, "they'll know what the frustration level is and if they like it or not."

"When doing research, students can hit brick walls," admits Associate Professor of Physics Carl Grossman, who addressed this issue last fall at "Swarthmore Tomorrow," a faculty and alumni program on the future of science. "Someone asked me if that happens in class. Well, yeah, it happens every week, and the students don't know how to deal. So MARY ANN KLASSEN (*RIGHT*), LECTURER IN PHYSICS AND ASTRONOMY, LOOKS AT SUN SPOTS WITH ROSS MESSING '04 (*LEFT*) AND JIM MAIOLO '04 (*AT THE TELESCOPE*).

what do you do? Just like in the real world, you troubleshoot."

But beyond troubleshooting, Grossman wants students to learn about real-world physics research. "So we use a combination of modern research techniques and classic experiments," he says. "It's not solely physics for physics' sake."

The balance pays off, but it's not easy. "Requiring research theses for majors [10 to 12 a year, half of whom stand for Honors] has been a challenge," he admits. "I usually have two or three students working with me each summer, and I'm as busy as I am the rest of the year. It's a lot more work than we thought, but we all agree it's a very valuable experience."

Perhaps even more valuable is that stu-

dent-faculty collaboration often leads to published articles. Paley—also on the faculty panel at "Swarthmore Tomorrow"—recalls an exchange from the discussion. "One alum asked if you can really publish with student research," Paley says. "I gave a list of quality journals that student work has appeared in, such as the *Journal of the American Chemical Society* and *Organic Letters*. The alum was impressed. It's good stuff, and it gets published."

"We don't have the quantity of a big research university," Grossman adds, "but in quality, we have comparable stuff. In physics, very little thesis work is not published."

This focus on undergraduate research is not the only notable characteristic of today's best science education. Thanks to curriculum changes and a commitment to making course material more engaging, the actual tools and methods used to teach science are also drastically different from those

of years past. Labs are more interactive. There are more group and class projects. Even computers have changed from early, cumbersome programs to user-friendly applications. And the traditional lecture format? It's almost as much of a relic as punch cards and setting coordinates by hand.

Professor of Computer Science and Mathematics Charles Keleman illustrates this point with a favorite maxim about the role of professors today. "You may have heard this—'switching from the sage on the stage to the guide on the side.' There's a nice ring to it," he says.

"We're not standing and pontificating," Keleman explains. "We're setting tasks. We're going around being coaches, cheering students on when they get stuck."

In his introductory computer science courses, for example, Keleman is more likely to have students work individually on a problem than take notes from his "minilectures." And sometimes, he does not even give those. "Faculty members don't want to show off," he says. "We want students to do stuff. My greatest goal is to help students progress to the point where they don't need me for the course material."

In the last few years, Sara Hiebert has



BOB PALEY, ASSOCIATE PROFESSOR AND CHAIR OF CHEMISTRY, WORKS IN THE EXISTING DUPONT SCIENCE BUILDING INSTRUMENT ROOM. THE COLLEGE'S NEW 160,000-SQUARE-FOOT SCIENCE CENTER—HALF OF WHICH WILL BE NEW CONSTRUCTION—IS SCHEDULED TO OPEN IN 2004.

also reduced the amount of time she spends lecturing. "One way to teach is to lecture the same old way and give an exam that requires students to apply what they've learned to novel context questions," she says. "And students freak because it's really hard. Another way is part lecture, then stick in a problem-based learning exercise for small groups in which they practice solving novel context questions."

Hiebert says such assignments, although replacing part of what she would have done in lecture, are important because they allow students to get immediate feedback from each other and from her. "It's amazing," she says. "Students who go through my class that way have a totally different standard for themselves about what it means to understand the material."

Professor of Mathematics and Statistics Eugene Klotz uses similar methods in his classes. "In the old days, we wouldn't take class time to have people work together," he says. "Students were much more receptacles. You poured it in—and at Swarthmore we crammed in as much as we could—and left it to them to digest. Now, I try to have them work in pairs. It facilitates understanding."

Still, such changes do not mean the material is any easier. "No pain, no gain is still true," Hiebert says. "Some students find novel context questions really difficult and have trouble understanding the questions or the words. But published studies show that if students don't struggle with the questions, all the benefits disappear."

"Active engagement is the catch phrase," agrees Mary Ann Klassen, a lecturer in physics and astronomy. "Fewer than 10 percent learn best with a passive lecture format. It's easy to fall back and think, 'if my lecture is crystal clear, they'll understand, and light-bulbs will go on.' But it's just not true."

"When I saw those data, I got sick to my stomach," Hiebert says. "I thought 'oh no—everything I thought about what it takes to be a good teacher is wrong."

But effective teaching, although critical, is only part of the equation. This became clear to Lynne Molter '79, associate professor of engineering, after office hours with students who were thinking of transferring from the department. "You can tell they're distressed and upset, so I try to find the problem," she says. "If it's course related, I ask, 'How did you study? Did you read the

Breaking New Ground for Science at Swarthmore

arlier this month, Swarthmore further demonstrated its commitment to providing students with a top science education by breaking ground for a new science center. This major renovation and expansion of the College's science facilities is the result of an extensive, long-range planning process, completed in 1999, that identified dramatic improvements to the science facilities on campus as the College's most pressing institutional need.

Major improvements include more laboratory space for students and faculty members, flexible workstations, state-of-the-art lecture halls, and labs designed for better computer access.

"People still don't use computers in classrooms as much as they'd like to," says Eugene Klotz, professor of mathematics and statistics. "I'd like a computer hooked up to a projector, set up and ready to go, so when a student has a question and you want to show something on the spur of the moment, you can do so."

Safety is also a major component of the center's design, which includes much-needed improvements to laboratory air quality and ventilation. "Forty years ago, the idea that students should not be exposed to vapors wasn't on the map, which affected the design of fume hoods," says Robert Paley, associate professor and chair of chemistry. "You can't teach chemistry without handling chemicals, so our job is to protect students and design experiments that minimize the amount of chemicals they handle."

The new science center, the first building on campus whose planning and design includes consideration of the project's environmental implications, will also allow the growing computer science department to move from its current home in the Sproul Observatory. Additional features, such as a new freshman biology lab in the Martin Building and a new commons adjacent to Cornell Science Library, are also planned. Completion, at a total cost of \$74 million including endowment for operations and maintenance, is scheduled for April 2004.

—A.G.

book? How many times?' One student said eight—I almost fell off my chair! It was like a bolt of lightning."

That bolt prompted Molter to look for answers to questions she had not seriously considered before. "Do students discover new ways to learn as they mature?" she asks. "Or do people have rather different ways of learning? Some students march in and easily sail through, while others spin their wheels, work hard, and make little progress. I want to prevent people from thinking engineering is too hard."

After informally asking her students about their study practices, Molter hopes a proposal she recently submitted to the National Science Foundation will allow her to further examine the issue. With fellow

Professor of Engineering Erik Cheever '82 and Professor of Education Ann Renninger, Molter plans to study how prospective engineering majors learn their course material. "Students have to be responsible for figuring out what works for them, but we hope to

SARA HIEBERT, ASSOCIATE PROFESSOR OF BIOLOGY (RIGHT), RACES LIZARDS WITH SENIOR BIOLOGY MAJORS CLARISSA NOBILE (LEFT) AND HILARY CLAY (CENTER), BOTH OF WHOM HAVE WORKED ON INDEPENDENT RESEARCH PROJECTS IN HIEBERT'S LAB. "ONE OF MY MAIN GOALS IS TO GET STUDENTS TO JUST WATCH ANIMALS DO THINGS," SAYS THE ANIMAL PHYSIOLOGIST.

provide models," she says. "What works for them? There is no one answer."

There is also no one tool or piece of equipment that works in all situations, so students have access to a wide range. For instance, Carl Grossman conducts a physics lab in which he uses ultrafast lasers to study and measure laser pulses of roughly 20 femtoseconds [roughly a thousand billion times faster than a millisecond] in duration. Other projects involve a low-temperature refrigeration system he says is routinely used in graduate programs. "We're trying to bring big university access and depth of experience to Swarthmore," Grossman says.

In astronomy, students can use two 8-inch-diameter reflecting telescopes whose computer controls allow them to find an object by simply entering its name into the control pad. "It's almost too easy to get excited about all the cool stuff," Mary Ann Klassen says. "The first time students in the introductory astro lab look through a telescope and see Saturn—it's a 'wow' experience. We're hoping with more telescopes and outdoor labs, students will get a good understanding for what astronomy is all about."

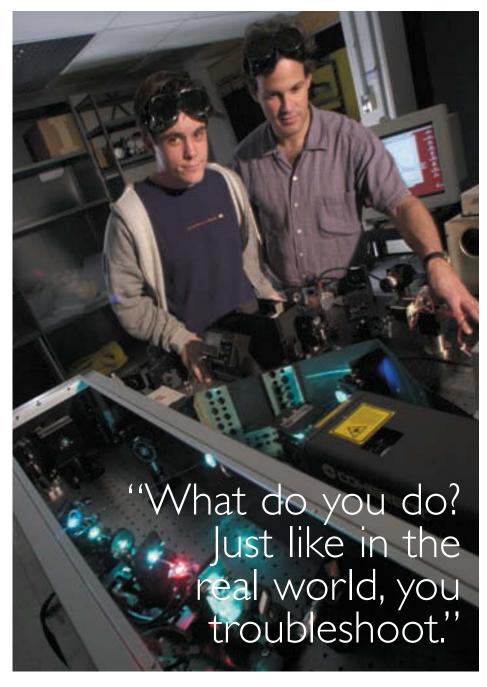
And when the weather is uncooperative, students use computer simulations. "We can re-create famous observations in astronomy, such as those made by Edwin Hubble [who showed the universe was expanding]," Klassen says. "Normally, it would take several hours to make an observation of a single galaxy. Now they can simulate in an evening one of the great discoveries of modern astronomy."

hanges in computers and computer science have also had a demonstrable effect. "What we teach now to freshmen, we were teaching to first-level graduate students in 1966," Charles Keleman says. "I [was a teaching assistant] in classes like that. Back then, there were no interactive labs."

Of course, computers are used in all sciences. In chemistry, for example, it is possible to make molecular models on the computer screen. "You can move them, rotate them," Robert Paley says. "You can do calculations to find the angles between segments of DNA or the distance between atoms in an enzyme."

Eugene Klotz, a self-described "old coot"





who predates the use of computers at Swarthmore, lauds their use in his math classes. By carefully juggling materials in his office, he demonstrates why. "Before, I would have drawn a curve on the board and held a meter stick to the curve to show how the slope changes, while also trying to make a drawing at the same time," he says. "Now, we can spend 5 minutes using Graphing Calculator, a subtle, inexpensive program students can easily get a copy of, to show the same thing. That's way cool, I think."

Klotz also notes that technological advancements have changed the ways sta-

CARL GROSSMAN (*RIGHT*), ASSOCIATE PROFESSOR OF PHYSICS, AND PATRICK CONNOLLY '01 HAVE WORKED TOGETHER ON AN ADVANCED LAB IN ULTRAFAST LASERS AND ON RESEARCH IN ULTRAFAST OPTICAL PHYSICS. "WE'RE TRYING TO BRING BIG-UNIVERSITY ACCESS AND DEPTH OF EXPERIENCE TO SWARTHMORE," SAYS GROSSMAN.

ples of his field can be taught. In the early 1990s, he recalls hearing that an entire calculus final exam could be done on a computer. Less than 10 years later, the same work can be done with a calculator. "Why bust your butt teaching somebody something they can do with a few buttons?" he asks. "What you want to do is teach the ideas behind the manipulations."

Although computers have opened up new ways of teaching old subjects, there are still some things best done without them, even in computer science courses. "For example, in an algorithms class, the assignments are basically the content of recent research papers," Keleman says. "In this situation, we're not in front of computers but reasoning about computational problems."

As an animal physiologist, Sara Hiebert prefers that students collect data by hand to learn that data are almost never as clean as they appear in textbooks. "One of my main goals is to get students to just watch animals do things," she says. "It's unpredictable. It's messy. I mean, we race lizards. Sometimes they race, sometimes they just stop. Sometimes they go up your arms and onto your head. And students are uneasy with that and sometimes complain that there is too much error, or that what we are doing is not scientific because so many things can go differently from what we had planned. But, in fact, everyone who has raced lizards has experienced the same problems and published those studies."

In biology, computers still serve many needs. "I love the server, where I can put up class data and share them easily," Hiebert says. "I love computers collecting data for me if I need it done every 10 minutes for weeks. But if students leave understanding exactly where the data came from and what to do with them once they're collected, we'll have done the very best thing that we can."

So although high-profile advancements have dramatically changed how science is taught, it should come as no surprise that old-fashioned innovation and hard work remains the driving force of science education. "I don't think anyone at this college would say science is learning how to use machines," Hiebert says. "It's how to generate ideas and design experiments. If you want to be on the frontiers of science, that's what you need to do, and that's what we're all after here."

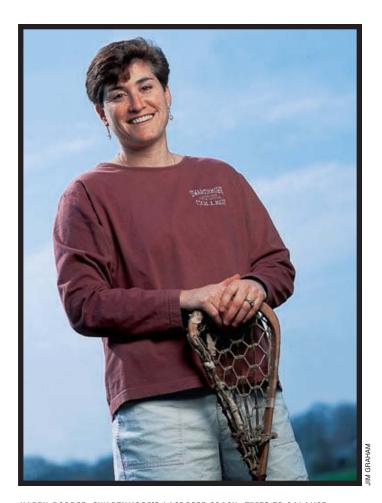
SPORTS FOR

was an elite athlete. I participated in a variety of sports in my life but reached the pinnacle as a lacrosse player. As a member of various lacrosse teams, I was a high school state champion, a collegiate national champion, and a world champion. I don't usually like to talk about my accomplishments, but I need to make a very important point: Reaching the highest level in my field has little to do with why I want to coach women's sports at Swarthmore College.

If the level of an athlete's achievement is predictive of a person's future career, like many of my former teammates, I should be coaching at a Division I lacrosse powerhouse. But here I am at a small, elite liberal arts college, and people often ask me why. My answer leads directly to my philosophy of sport, which, in turn, dictates how I coach—and recruit—Swarthmore scholar-athletes. These days, there's a lot of discussion about athletic recruiting at the College. After this explanation, I hope you will gain a better understanding of how I "recruit" the scholar-athlete.

Let's start with a simple but important fact: No athlete likes to lose, whether it's lunchtime tennis, pick-up basketball, recreation softball, intramural soccer, or intercollegiate athletics. It's also a fact, however, that every time there is a contest, there will be a winner and a loser. I've come to the conclusion that because I was on so many successful teams, where winning was often taken for granted, I learned to notice other aspects of sport. Don't get me wrong—winning was fun, and I enjoyed it, but there was a lot more to it. I also started to see that "success," as it is often defined in sport, can have its negative aspects.

As a junior education major at the University of Delaware, I got the opportunity to coach at a local private school and was immediately hooked. I learned then that I wanted to coach, but to be able to coach and make a living, I also needed to teach; I had not yet made the connection that they were one and the same. So I became a high school math teacher, and, for six years, I taught math all day



KAREN BORBEE, SWARTHMORE'S LACROSSE COACH, TRIES TO BALANCE
ACADEMIC AND ATHLETIC TALENTS WHEN RECRUITING FOR THE COLLEGE.
SHE SAYS THAT "SWARTHMORE SELLS ITSELF TO STUDENTS WHO ARE LOOKING
FOR THIS KIND OF EXPERIENCE."

and coached sports after school. I enjoyed teaching math, but it was in the coaching that I felt I was truly making a difference. I could see the educational role that sport was playing in these students' lives

While I was coaching high school field hockey and lacrosse, I was also a member of the U.S. National Team playing world-cup

GHT REAS

Play for fun, demand your best, and be satisfied no matter what the outcome.

By Karen Emas Borbee

lacrosse. I realized then that there were many similarities between my experiences at the world-cup level and my student-athletes' experiences in high school. The only difference was our skill. The intangibles, as I call them, were the same. In fact, whatever the skill, the educational value of sport is indisputable—the life lessons that can be learned from team play—and that was what interested me (see box on p. 23).

As my philosophy of sport evolved, I knew that coaching was the type of educating I wanted to pursue. The lessons that could be taught through sport are so powerful, and although sport wasn't the only avenue to teach these intangibles, it was what I knew best.

I was lucky. First at Haverford College and for the past 11 years at Swarthmore, I found a quality academic, liberal arts, Division III experience. Once again, I was hooked.

When I first came to Swarthmore, I was hired as the head women's basketball and soccer coach. With little experience coaching either sport, I had to put my basic I LEARNED TO NOTICE philosophy to an immediate test. I thought that no matter what sport I coached, I could still educate. This was never so clear as during that first basketball season, when my team lost 24 straight games—more than half of them by more than 40 points, and a handful by 60 to 70 points. Not one player or coach quit that season. As I watched the amazing growth of those students, I grew too. Everyone kept working, and we were able to win the final game of the season, against a team that had beaten us by 30 points earlier that same year. You might have thought we had won the national championship that night.

My job that season was to teach those students how to have fun; how to deal with their limitations yet still reach their potential; how to lean on each other yet support each other; and how to

appreciate their diversity and what makes them special, even though it meant they might not be the better basketball team. I know that when those women—now grown, 10 years later—have tough times, they look back and use what they learned that season to find the positive aspects of any challenging situation.

"NO ATHLETE LIKES TO LOSE ... [BUT] BECAUSE I WAS ON SO MANY SUCCESSFUL TEAMS, WHERE WINNING WAS OFTEN TAKEN FOR GRANTED,

OTHER ASPECTS OF SPORT."

My ever-evolving philosophy was further put to the test during my first field hockey season six years later. This time, it wasn't losing that was the issue but winning. When I became the head field-hockey coach, I inherited a very successful team. But for many players, winning was the only reason for playing. One woman said to me during a one-onone meeting, "If we

don't win, then it's not fun, and there's no reason to play." My challenge that season was to teach the group that numbers of wins are not the measuring stick—that they could have fun, reap all the benefits from participation in sports, and still be successful. We struggled at times, both on and off the field, but, in the end, although our winning percentage was lower, our accomplishments as a group were greater.

My philosophy of sport is very simple: Play to have fun, demand your best, but be satisfied with your best no matter what the out"I DON'T LOOK FOR THE
ATHLETE WHO IS REALLY
SMART; INSTEAD, I LOOK
FOR THE SCHOLAR WHO
WANTS TO PLAY SPORTS."

come. Sport is a minimodel of life: What you learn on the field, you take with you as you live your life.

Swarthmore students amaze me. They play the game for the right reasons, they have their priorities straight, and they study hard and play hard. It is my job to help them understand that, unlike in the classroom, they may not always be the best athletes, but they can still always give their best.

So I knew why I wanted to be here. I wanted to propagate the benefits of participation in sport, and I knew there were young women out there who would want to reap those benefits without losing their focus on academics. I knew I could help these students to learn all the intangibles and help foster their multiple talents, both athletic and intellectual.

All this leads me to the question of how I recruit scholarathetes to study and play at Swarthmore College. I look for the special young woman who seeks—in addition to the best education in the world—the benefits of participation in sport. I don't look for the athlete who is really smart; instead, I look for the scholar who wants to play sports. This young woman is not simply a scholar or an athlete—she can be both and, at Swarthmore, still more than that.

When I can find a young woman who is a scholar, who wants a Swarthmore academic experience and is a strong lacrosse player, it's a good day. If I can't, then I look for a young woman who is first a scholar, wants a Swarthmore experience, and loves to play lacrosse. Then it's up to me to teach her the game as well as I can and as well as she is able to learn it. But most important, it's up to me to help her reap all the benefits that she can receive through participation in sport.

Each year, I start with 150 to 200 interested candidates. After I do research, make phone calls, write letters, attend tournaments, and review videotapes, that number is quickly reduced to about 50.



BORBEE, A LACROSSE STANDOUT AT THE UNIVERSITY OF DELAWARE, WAS ALSO A MEMBER OF THE WORLD CHAMPIONSHIP U.S. NATIONAL TEAM.
"SWARTHMORE STUDENTS AMAZE ME," SHE SAYS. "THEY HAVE THEIR PRIORITIES STRAIGHT, AND THEY STUDY HARD AND PLAY HARD."

More research is done on those 50; there are more phone calls, letters, visits, videos, and feedback on them—and maybe 25 to 30 actually apply. The Admissions Office accepts approximately 6 to 8, and I hope (with every one of my appendages crossed) that 4 or 5 enroll. Women's lacrosse is played with 12 players on the field at one time, and 24 are needed to scrimmage in practice. So if we have a couple of bad recruiting years, we are in trouble.

How do I find these young women? In fact, a good portion find me first. Others are recommended by high school coaches or contacts. They know the student and recommend that she explore Swarthmore. Rarely is a student recommended to the College because she is a top athlete but rather because she is a top student, a scholar who loves to play a sport and doesn't want to give up participating.

I believe that every student-athlete who is interested in coming

LIFE LESSONS FROM SPORT

DEVELOPING FITNESS AND WELLNESS

MANAGING TIME

PRIORITIZING

SETTING GOALS

WORKING TO ACHIEVE THOSE GOALS

STRENGTHENING SELF-CONFIDENCE

WORKING WITH PEOPLE YOU MAY OR MAY NOT LIKE

LEARNING INCLUSION AND ACCEPTANCE

PUTTING PERSONAL

ACHIEVEMENTS ASIDE FOR

TEAM ACHIEVEMENTS

DEALING WITH DISAPPOINTMENT
OR LOSING

DEALING WITH SUCCESS OR WINNING

ENCOURAGING SPORTSMANSHIP

DEALING WITH FEAR OR ADVERSITY

EMPHASIZING PERSONAL AND TEAM ACCOUNTABILITY

to Swarthmore College is academically engaged. Why else would anyone want to come? It certainly wouldn't be for athletics alone. There are many top-quality academic institutions that put far more emphasis on sports and others that are less academically challenging but still offer a great education and participation in sports.

My greatest recruiting challenge lies in the competition— Amherst, Williams, Yale, Princeton, and Harvard. Not bad choices. So why Swarthmore? That's my challenge. When a recruit tells me that Swarthmore is one of five or six schools she is interested in, I invite her to visit. I introduce her to the other students on the team and to their roommates and hall mates. I have her attend some classes and meet some faculty members. Swarthmore sells itself to students who are looking for this kind of experience. Almost always, she leaves with Swarthmore either as one of her top choices, or the College is off her list completely. And that's how I like it: Recruits arrive gray and leave black or white.

I'm here because I believe my philosophy of sport and Swarthmore College are a good fit. I spend so much time recruiting in order to ensure the future of my program. If I don't bring in enough recruits for a few years, I will have done a disservice to the students who are already in my program. Still, I walk a fine line. I don't look for the really smart athlete who may be looking for something other than what we offer. I tell them what we've got and hope it's what they want. If I look for talent, and yet it's not the right fit, I have done a disservice to the recruit and to the students in my program. The challenge is in establishing a balance between athletic talent and academic pursuits to make the right fit—both for the young woman and for the College. **

Associate Professor of Physical Education Karen Borbee played college lacrosse at the University of Delaware. This essay is adapted from a talk she gave to her fellow members of the faculty in February.

Acts of God Acts of Nature Acts of Man

force-five hurricane makes midnight landfall on the Central American coast; screaming wind, surging tides, and sliding mud kill 10,000. The earth shakes violently, and an Indian city crashes down in dust and death. A long-dormant volcano erupts for the first time in 300 years, forcing thousands to flee. A tornado carves up a Midwestern town, tossing trailers like tenpins. Floodwaters breach the levees of the Mississippi. Wildfires scorch the California hills.

These events have always been part of the human experience, bringing unbidden death and damage from sky, ocean, and earth. Until the last century, most people viewed such extremes as aberrations from the normal order, momentary suspensions of the natural law, or acts of a capricious God. But to the modern mind, such extremes are natural geophysical hazards over which humankind has little or no control.

In this context, the intellectual divorce between man and nature seems almost complete. Even the term *natural* has come to exclude human influence; we separate geophysical events from industrial accidents, terrorism, wars, and other disasters clearly of human origin. And though we may be able to ameliorate such human failings, conventional wisdom says that the natural order will continue unswayed by human intervention. No army can stop a hurricane. But can humans control the resulting death and destruction?

Natural disasters may not be so natural after all. Scientists and policy makers are beginning to understand the profound effect of human activity on the outcome of extreme natural events. The human factor is huge, and the stakes are high: We can either accept a future in which hurricanes, earthquakes, eruptions, and other extreme events become acute challenges to human existence, or we can reduce the impact of these inevitable natural events by raising our awareness and adjusting our

behavior.

We are not victims of natural disasters but codependents.

By William Hooke '64

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

A TORNADO TOUCHES DOWN NEAR DIMMIT, TEXAS, ON JUNE 2, 1995.

Losses from natural disasters vary sharply each year, but trends over the past few decades are disturbing. On average, disasters kill tens of thousands, injure hundreds of thousands, and leave comparable numbers homeless annually. Individual events—a tropical storm in Bangladesh or an earthquake in China—may claim more than 100,000 lives, and these figures are rising at least as fast as population growth.

Similarly, economic losses to disasters are doubling or tripling each decade. They now amount to many tens of billions of dollars each year, although the international experience varies. U.S. losses add up annually to less than 1 percent of the Gross Domestic Product (GDP), even during the 1992–96 period, when the costs averaged \$1 billion per week. By contrast, Chinese losses are more like 4 to 6 percent of GDP in bad years. For the least developed countries, a single disaster can result in losses 50 percent or more of GDP, as did Hurricane Mitch in 1998, erasing decades of foreign investment and destabilizing society throughout Central America.

The outlook is correspondingly bleak. Estimates suggest that a category-five hurricane making landfall on New Orleans or New York would inflict damages approaching \$100 billion. A repeat of worst-case Los Angeles or San Francisco earthquakes would exceed \$250 billion. A Tokyo earthquake comparable to the 1923 event could cost well over a trillion dollars. Of course, impacts go beyond the economic. Loss of life could be in the tens of thousands in several of these instances, and experts predict that grave environmental damage and ecosystem loss would also accompany such disasters.



Thunderstorms, though less extreme, are an important atmospheric driver. Some 2,000 thunderstorms are under way worldwide at any given time. In the tropics, their aggregated updrafts force the major global atmospheric circulation patterns. Their lightning is an important global source of trace atmospheric constituents such as oxides of nitrogen.

The solid earth also works through extremes. What appears to be continental drift from the perspective of geologic time presents itself as volcanism and earthquakes from our human viewpoint.

If extremes are a hallmark of geophysical, oceanic, and atmospheric processes, then disasters are symptoms of human decisions and behavior.

All of this prompts questions. What causes so-called natural disasters? Are mounting losses the result of increasing numbers or severity of extreme events? Must losses inevitably increase? If not, what steps can and should we take to minimize them?

For most of my career—33 years as a scientist at the National Oceanic and Atmospheric Administration and now as a senior policy fellow at the American Meteorological Society—I have worked with others to seek answers to these and related issues. Collaborating with organizations ranging from the Commerce Department to the American Red Cross, the World Bank, academia, and the insurance industry, we have sought to understand the nature of disasters and to seek measures and policies that would reduce their number and impact. Here are some conclusions emerging from this work:

The earth does its business through extremes. Such extremes are not interruptions of natural processes but rather their culmination—part of the planet's natural order.

Hurricanes provide a significant fraction of annual rainfall in some areas. In the summer of 1999, Hurricane Floyd turned an East Coast drought into a wetter-than-average year.

Concentrated around the Pacific's "Rim of Fire" and along other plate-tectonic boundaries, earthquakes are the physical manifestation of the earth's dynamic crust.

Ecosystems do their business in the same extreme manner. Think for a moment about the way we talk about population explosion and population collapse. We speak of disease outbreaks. Many prey species give birth at the same time of year and survive in large numbers because predators are unable to "staff up." (Seventeen-year locusts are an extreme form of this behavior.) In fact, many ecosystems depend on such natural extremes as drought, flood, heat, or cold for their survival. Seeds in desert soil await the arrival of sufficient rainfall to support an entire life cycle—only then will they germinate. At the opposite extreme, pyrophytic flora use wild-fire to foster their spread and growth.

Without doubt, natural extremes can be reasonably expected. Particular events that are unlikely during any given instant are inevitable over time. Most events can actually be predicted on some time horizon, but even where deterministic prediction proves elusive—as for earthquakes—information about fault zones and their seismic activity is rapidly accumulating. We know roughly when—and more precisely where—they are likely to occur.

Disasters reflect social decisions. If extremes are a hallmark of geophysical, oceanic, and atmospheric processes, then disasters are symptoms of human decisions and behavior. (We define a disaster as disruption of entire communities that persists after the hazard has come and gone and exceeds the communities' ability to recover unaided.)

Consider a simple example: The meteorological definition of a hurricane is a tropical storm with wind speeds of at least 75 miles per hour. Yet the most intense hurricanes develop surface wind speeds twice that—around 150 miles per hour. Because wind force varies as the square of wind speed, the most powerful storms are theoretically four times more destructive than their weaker counterparts, yet the damage they inflict is more than 200 times greater. Why? In part, because we have written building codes that require structures such as mobile homes to stay intact only at wind speeds below 75 miles per hour. Other residential construction may typically stay intact at wind speeds up to 120 miles per hour, but few buildings are designed to tolerate the severest storms.

A HONDURAN MAN (*LEFT*) STRUGGLES TO ESCAPE AS FLOODWATERS FROM HURRICANE MITCH ENGULF HIS HOME. THE MASSIVE STORM IN 1998 (*BELOW*), WHICH HAD WINDS OF 180 MPH, ERASED DECADES OF ECONOMIC PROGRESS IN CENTRAL AMERICA.

That may well be appropriate. The cost of designing and building structures to withstand higher winds rises rapidly, and even if we design for these wind speeds, we can't make ourselves entirely safe. The winds in the most intense tornadoes, such as the one that hit Moore, Oklahoma, on May 3, 1999, approach speeds up to 300 mph and produce forces four times greater than a worst-case hurricane. Engineers know buildings that survive have simple rooflines—the ideal shape would look something like a pillbox. In fact, most houses built in Florida in the 1940s, when hurricane frequencies were higher than those in the years since, look just like this. But today's aesthetic runs to complex rooflines, gables, large overhangs and eaves, inviting destruction by wind. In addition, the desire everywhere for beachfront homes means vulnerability to storm surge in a hurricane. If you can hear the surf daily from your deck, you can expect it to wash over you when the extreme event occurs.

Our vulnerability is not simply the result of engineering. Individual psychology, aesthetic preferences, group decision making, social frameworks, and culture all play a role. The National Flood Insurance Program, though well intended and functional in a number of respects, has also led to repetitive loss by financing rebuilding in flood plains. State regulation of property and casualty



insurance is often driven by political considerations instead of actuarial data, and zoning decisions at the local level are frequently influenced by campaign donations from land developers. Communities resist the efforts of the Forest Service and other federal agencies to reduce woodland fuels by means of controlled burns. All of these factors play a role in shaping our vulnerability to hazards

their normal work and focus instead on finding potable water.

The profile of disasters has been altered markedly by the emergence of megacities. Worldwide, cities of more than 10 million population are growing in number, tripling over the last two decades, and are expected to double over the next 20 years. These cities have grown up as international job shops, competing for work in the global economy. To bid for work, they must keep costs down, and to

We operate on the assumption that civilization's advance has made nature irrelevant, yet more than ever we are at its mercy.

Some of these social and economic forces are global. Ten thousand Central Americans lost their lives during Hurricane Mitch. Many had been displaced from their original homes to make room for coffee and banana plantations that serve export markets. They moved to the unstable hillsides and were killed by landslides, or to floodplains, where they were engulfed by floodwaters.

Even starvation has human causes. Though we often hear the words "drought" and "famine" in the same breath, famine is far more often the result of political and social disruption—including war—than the simple failure of crops because of natural events.

Disasters are mutating as a result of social and technological change. When a tornado rips through a small town of 1,000 homes in the Midwest, flattening 10 houses, there's pain, anguish, and suffering. But the town's activities can be said to be about 1 percent impacted. The same percentage of destruction, however, can have a far greater impact on a large city. In the 1989 Loma Prieta earthquake, 99 percent of San Francisco Bay—area roadways came through unscathed, or at least usable. Damage was limited to about 80 half-mile sections out of more than 4,000 miles of road. But the transportation system of the Bay area wasn't 99 percent functional—it almost came to a standstill. The Bay Bridge was knocked out. Ferry traffic tripled. Traffic on bridges north and south of the city doubled. The commute time doubled or tripled.

The root problem is a rise in population plus urbanization, which has been made possible by the development of the networks of electricity, gas, water, sewage, transportation, and communications needed to support urban life. Our dependence on this infrastructure has steadily increased our vulnerability to natural hazards, especially to single-point failures of entire systems. In turn, this has changed the profile of economic loss, shifting it from property damage alone to widespread economic disruption.

Consider another example: During the 1993 Midwest floods, high water in Des Moines, Iowa, was at first confined to the immediate neighborhood of the riverbanks. Only a few businesses located adjacent to the waterfront were affected. Later in the summer, however, as the flooding progressed, the Des Moines River surmounted the sandbags and levees protecting the city's water treatment plant. At that point, all 250,000 citizens had to suspend

keep costs down, they rely on fragile infrastructure. Furthermore, most of these cities have been built on hazardous sites such as floodplains and fault zones.



Complicating this mutation are other—more technological—advances. The 1998 ice storm in the Northeast, which paralyzed much of New England for as long as a month, numbered thousands of dairy cattle among its casualties. Downed power lines required that cows be milked by hand, but the cows were too numerous and the laborers too few. Many cows developed mastitis, reducing their productivity and, in some cases, leading to their death. With the development of regional power grids and satellite-based telecommunications, even space weather—electromagnetic storms caused by solar activity—has emerged as a hazard of formidable proportions.

Today's heavy reliance on transportation also affects the disaster profile. If you have ever been terrified by the weather, chances are it wasn't at home but rather in your car. You were driving along some Interstate, minding your own business, and suddenly the storm on the distant horizon was upon you. Rain was pelting the car. Wet roads reduced your control of the vehicle. You lost your usual cues as sheets of rain overwhelmed the windshield wipers, and because the noise was deafening, you couldn't hear well. You were in trouble if you kept moving, and you were in trouble if you stopped. About



1,000 people die at home each year in the United States because of weather extremes. But 6,000 lives are lost each year in automobile accidents in which weather was the cause or a contributing factor.

Disasters aggravate preexisting social inequities. Research is very clear on this: Those already disenfranchised—the poor or disabled, ethnic minorities, infants and the aged, and women—are more at risk from natural hazards. For instance, nearly all of the 500 fatalities in the Chicago heat wave of 1995 were elderly poor, and roughly 40 percent of tornado fatalities are persons who live in mobile homes.

There are political consequences to this. People recognize their vulnerability and blame their leaders in the aftermath of disasters. In January 1967, Chicago experienced a 2-foot snowstorm. Mayor Richard Daley was unable to clear the streets and restore order for days, and his career was threatened. A few years later, Mayor Jane Byrne, not as popular as Daley, was toppled by a similar failure to cope with a snowstorm. The inability of the Nicaraguan government to respond adequately to the Managua earthquake of 1972 spurred the efforts of Sandinista guerillas to oust dictator Anastasio Somoza. It is also thought that the failure of the Bush administration to respond quickly following Hurricane Andrew contributed to his election loss in 1992.

ONE OF THE TORNADOES THAT SWEPT ACROSS CENTRAL OKLAHOMA IN MAY 1999 (*LEFT*) WAS MORE THAN A HALF-MILE WIDE. THE ENTIRE TOWN OF MOORE, WHERE RESIDENT MITZI ROLAND SURVEYED THE DAMAGE (*ABOVE*), WAS DESTROYED. THE STORMS KILLED MORE THAN 40 PEOPLE IN OKLAHOMA.

rom the perspective presented here,* it's possible to see so-called natural disasters, epidemics and plagues, ecosystem collapse, industrial accidents, terrorist acts, so-called complex emergencies, and even war on a single continuum. The bottom line: We are not victims of natural extremes but rather codependents. There's more:

Human beings can dish it out as well as take it. Society can cause extreme events as well as endure them. In the simplest and broadest terms, our new vulnerability is a result of our recent success in increasing our population, our resource consumption per capita, and our technology. In so doing, we have set the stage for a potential constellation of extreme events that could threaten human society.

By achieving these gains in a very short period compared with the time scales for significant climate change, with the normal

*Disasters by Design (Joseph Henry Press, 1999), edited by Dennis Mileti, with contributions from more than 100 authors, summarizes decades of research on the social causes of disaster.



The liberal arts: An all-weather education

Because the effects of extreme natural events are so closely woven into our geophysical, ecological, economic, and social systems," says Bill Hooke

'64, "to unravel them—and to do something that makes the world more resilient—can't be done piecemeal. It takes a holistic approach, and that's what I learned at Swarthmore."

Hooke was an Honors physics major, then received a Ph.D. in geophysical sciences at the University of Chicago in 1967. He worked first as a researcher, then as a research manager for the National Oceanic and Atmospheric Administration (NOAA), studying the geophysical nature of extremes for 20 years. For the next 13 years, he served as deputy chief scientist at NOAA and as senior science adviser to the secretary of commerce, chairing the Interagency Subcommittee on Natural Disaster Reduction. He is now a senior policy fellow at the American Meteorological Society.

"My undergraduate education taught me that you can never think about something deeply enough," he says. "Too many people gain a superficial understanding of a problem, then apply a superficial fix. I learned to look a little deeper, then look a little deeper again."

This year, Hooke is a Sigma Xi Distinguished Lecturer, one of about 30 leading-edge scientists nationwide who are chosen for this honor by the 75,000-member research society. Among the lectures he gives is a history of the National Weather Service titled "America's First Weatherman: How Cleveland Abbe Founded an E-business 130 Years Ago and Addicted a Nation to the Daily Forecast."

He says there's one other thing he learned at Swarthmore: "How to deal with people who are smarter than I am."

recurrence interval between extreme events, and the emergence of unintended consequences of our success, we can, therefore, expect a future in which:

- Climate variation from whatever cause will produce negative impacts because we have tuned our species' success to the temporary conditions prevailing in the recent past.
- Pollution and related stresses on ecosystems and the environment will ricochet through the earth system in response to our increasing numbers and newfound affluence.
- Extreme events will sorely test our social resilience.

The so-called global climate change issue is part of this scenario but with one significant caveat: The way this issue is often discussed, we are invited to see the problem as confined to carbon dioxide ($\rm CO_2$) emissions. We're encouraged to think that if we only reduce $\rm CO_2$ emissions sufficiently, we will be able to restore climate conditions to some preexisting state. But that's not the option we enjoy.

Instead, we face a future whose challenges will not be chronic and diffuse but acute and episodic. The earth's systems will continue to do their business through extreme events, and our future will be an unending series of local and regional crises—one atop the other—exhibiting a complex interplay between environmental conditions and extremes, ecosystem adjustments, and social actions.

These are already happening, and increasingly they allow no time for society to regroup and adjust. Earthquakes affect Taiwan's supply of computer chips, disrupting the information economy. Drought in the Pacific Northwest interacts with deregulation to aggravate California's energy shortage. AIDS, ethnic conflict, drought and famine, flood, threats to the food supply, water shortages, electrical power shortages.... Has anybody read the Old Testament lately? Can anything be done?

Absolutely. Thanks to the same advances in wealth, scientific understanding, and technology that have created some of the problems in the first place, the world in general—and the United States in particular—has quite a few options. Here and abroad, a large community of scientists, engineers, emergency managers, and others are breaking down the problems into their component parts and tackling each of them. Considerable progress is being made in engineering practice, improved land use, and better warning systems. The financial community is also taking action to reduce risk. Lending is becoming increasingly contingent on reduction of risk; casualty and property insurers can reduce some of their exposure through reinsurance but still more through newer instruments



such as catastrophe bonds. The Federal Emergency Management Agency is increasingly emphasizing pre-event mitigation in all its decisions. In business schools across the country, future executives are studying risk management. Yet we also need important policy changes. Four things would help:

Focus on responsibility at every level. Individuals who want the freedom to live in the surf zone along North Carolina's Outer Banks should also have the "freedom" to self-insure their losses rather than rely on a government bailout. Corporate leaders should be more aware that disasters are not acts of God but predictable events that should be part of the business plan—especially in vulnerable locations. According to news reports, the recent Seattle earthquake disrupted the business of Microsoft, Boeing, and Starbucks for a week. Government, too, must factor the inevitable



into its plans and policies.

Focus on building social resilience. We operate on the assumption that civilization's advance has made nature irrelevant, yet more than ever we are at its mercy. Nowadays, that dependence is threaded through our modern culture in ways quite different from a century ago. Social resilience would take on many faces, such as building redundancy into critical infrastructures to avoid single-point failures such as the recent effect of drought in the Pacific Northwest on California's energy crisis. As redundancy decreases, small, unanticipated climate and weather variability—which never mattered before—becomes increasingly important.

Keep score. Right now, we can only give order-of-magnitude estimates of the costs of disasters to the American economy. We know, for example, that during the mid-1990s, disasters cost the United States about \$1 billion per week, but we don't have uniform accounting from place to place and hazard to hazard. Americans traditionally do well at activities in which they keep score. Figures on economic growth, inflation, and unemployment are used to carefully steer fiscal policy. Let's keep score of our losses to hazards and watch the improvement.

Learn from mistakes. Consider the difference between our approach to aviation safety and to natural hazards. Losses resulting

VOLUNTEER PAM CHRISTIAN LIES EXHAUSTED ON A SANDBAG DIKE IN WEST DES MOINES (*ABOVE*) DURING THE MISSISSIPPI VALLEY FLOODING OF JULY 1993. A QUARTER MILLION RESIDENTS WERE WITHOUT TAP WATER FOR TWO WEEKS, AFTER THE FLOOD ENGULFED THE CITY'S WATER TREATMENT PLANT.

from natural hazards are mounting, but we tend to blame only God or population growth. Yet in aviation, fatalities are decreasing even as the number of passenger miles goes up. Why? Because after every accident, the National Transportation Safety Board swarms over the crash site asking, "How did this happen?"—then works to prevent even a single recurrance. By contrast, after we lose a household to a flood, we say, "We're going to rebuild just as before."

Finally, we need to go deeper than policy—into our consciousness. We need to put aside outdated and erroneous notions of God and nature and man's inability to control his destiny. There are great benefits to be found in individual and social awareness that extreme events are the Earth at work, that disasters are a social construct that mutates in response to social change, and that each individual or institution must shoulder responsibility for disaster prevention. If these simple concepts are allowed to inform our actions, we will provide for public safety and immeasurably advance the prospects of the human race. 96



Homelands Around The Globe

ome: Some of us immediately refer to our birthplace; oth-

ers just think of wherever our loved ones live. No matter where we travel or spend time, our bellies instinctively signal when

we are "at home"—with people and our environment. Here, we feel understood and at peace, resting our eyes on familiar faces, family photographs, and mementos that trace our heritage.

For many of us, particularly college students, the comfort of home is often far away. If you are 1 of the 170 international students at Swarthmore, your family, friends, and favorite foods are even further away. This group—11 percent of the total student body—includes those with nonimmigrant visas, permanent residents, and dual citizens hailing from 58 countries. According to Gloria Evans, the foreign student adviser who answers many immigration questions, about half of these are foreign students

SWARTHMORE CURR FROM 58 FOREIGN OF INCLUDING THE SIX

To help ease their adjustment to cam-

tries.

International students adjust to another culture.

By Andrea Hammer
Photographs by George Widman

pus, Evans offers a special orientation for first-year international students. Before the general freshmen orientation this year, the new international students will arrive on Aug. 25 for a welcoming party and meeting with members of the administration. As part

of all-day sessions on Aug. 26 and 27, they will also receive assistance with tasks such as getting a Social Security number, setting up bank accounts, and shopping. The group will then be invited to continue meeting weekly for dinner in Sharples Dining Hall, where "there is lots of bonding," Evans said. She also works closely with the International Club in planning orientation as well as ongoing activities to help ward off homesickness. "These students are extremely appreciative of receiving help with employment or English problems," she said of the 25-year service at the College.

The following six international students, who have received this support at Swarthmore, describe some of the adaptations involved—and internal strength developed—as they adjusted to life here in the United States.

SWARTHMORE CURRENTLY ENROLLS STUDENTS
FROM 58 FOREIGN COUNTRIES. THESE STUDENTS—
INCLUDING THE SIX PROFILED IN THIS ARTICLE—
CONTRIBUTE TO THE DIVERSE CULTURAL MIX AT
THE COLLEGE.

Olga Rostapshova '02 Puschino, Russia

Languages: English and Russian

Studies: Engineering and economics double major with public policy and environmental studies concentrations

Activities: Information Technology Services public-area computer consultant, economics and engineering teaching assistant, environmental economics research assistant, *The Phoenix* circulation manager, varsity badminton, Forum for Free Press Committee, Ballroom and Swing Club, and Russian Club

Plans: Attend graduate school in economics or engineering; possibly law school

ecause her father was invited in 1991 to work for the National Institutes of Health, Rostapshova attended high school in Maryland rather than in her small hometown near Moscow. She wanted to attend a small liberal arts college and thought that Swarthmore was the strongest one with an engineering program. "When I visited, I fell in love with the campus and found the atmosphere here very friendly and the students really diverse," she said.

Rostapshova has actually found communication easier with people raised in a different culture. "In some ways, cultural differences encourage understanding of other cultures," she said.

Academically, Rostapshova, both a citizen of Russia and a U.S. permanent resident, has enjoyed more flexibility at Swarthmore regarding the content of papers. "The style of writing is very different here, including the lengthy lab reports for the sciences and engineering, which was a little hard to get used to," she said.

Joining the Russian Club during her freshman year and finding other international people helped Rostapshova adjust to Swarthmore. "Until I came to college, my family was on visas, and we didn't receive our green cards until about that time. So that is when it began to set in for me that we were staying here permanently and not going back to Russia soon. Before that, we thought we would leave," she said.

Rostapshova still misses her family and the close-knit community of Puschino, which she left at age 11. "I also really miss the extensive wilderness of my country and going skiing or mushroom gathering in the woods," she said.

Rostapshova tries to go back to Russia every summer. "It is frequently very strange, especially because the country is undergoing much transition and seems different every time I visit," she said. "The hardest realization for me has been that I now have an accent in Russian as well as in English. So every time I go

ALIZATION

"The hardest realization for me has been that I now have an accent in Russian as well as in English. So every time I go back to my home country, everyone asks me where I am from."

back to my home country, everyone asks me where I am from. Yet this happens in the United States as well. I almost have a feeling that I don't really belong anywhere."

Even though she still identifies Russia as her home country, Rostapshova doesn't really think of a specific place as home. "I think that it depends on the context of the word for me," she said. "I usually reply United States when I am in Russia and Russia when I am in the United States. Funny, isn't it?" she asked.

After finishing her education in the States, Rostapshova wants to take a different set of perspectives and expertise back to Russia. "I think it is a shame that many well-educated people are leaving the country," she said. "Thus, the country continues to deteriorate and that encourages more

"MOST PEOPLE ACTUALLY THINK I AM RUSSIAN IMMEDIATELY BECAUSE OF MY BLONDE BRAIDS AND I GUESS MY GENERAL LOOKS," SAID OLGA ROSTAPSHOVA, VISITING GURSUF ON THE BLACK SEA. ROSTAPSHOVA WAS BORN AND RAISED IN THE UKRAINE, SPENT A YEAR NEAR MOSCOW, AND IS NOW A RUSSIAN CITIZEN AND A U.S. PERMANENT RESIDENT.

people to leave. I really want to go back and somehow help the Russian community get back on its feet, and I need to have more experience before I can accomplish this," said Rostapshova, who recently won the Morris Udall Foundation's award for Scholarship and Excellence in National Environmental Policy.

ANI SILWAL '03 KATHMANDU, NEPAL

Languages: English, Nepali, Spanish, Norwegian, and Hindi

Studies: Honors economics major and public policy minor

Activities: Admissions tour guide, WSRN talk show host, computer lab consultant, and International Club member

Plans: Will probably work for a couple of years before attending graduate school in the United States

uring his last two years of high school. Silwal attended the United World Colleges in Norway on a scholarship. When many of his friends came to the United States for further studies, he learned about U.S. academic institutions. "I wanted to go to an equally diverse place as my high school, a small school that was academically rigorous and provided financial support for international students," he said. "Swarthmore clearly stood out!"

"LIVING AWAY FROM HOME HAS MADE ME QUESTION ALMOST EVERYTHING I KNOW AND BELIEVE IN."

One of the primary adjustments that Silwal faced involved an abundance of choices. "I was overwhelmed by my first shopping trip to Target," he said. "I had wanted to buy a comforter, but there were 40 different kinds of comforters there! I wanted to get some washing liquid, but it came in so many sizes, shapes, colors, and forms that I just couldn't decide which one to get. Sometimes I still feel like there is a tyranny of choices here."

At first, Silwal also found it difficult to start conversations with American students because they had not watched the same movies or television shows or done similar activities in high school. But once classes began and campus events started, he discovered common interests with others.

"The International Club has definitely made things a lot easier. The three-day international orientation that we had before the normal orientation helped me to get used to the College and climate," he said. "Gloria Evans is very warm and supportive. She has been of tremendous help in adjusting to things here."

to return this summer, doing an independent research project on the impact of microcredit on Nepal, with the aid of a grant from the College. He is sometimes frustrated by the lengthy separation from his family and friends at home. "Not being able to keep in touch with vour near and dear ones is always difficult. Even though I've been trying to keep in touch with people via

MSN chat, and occasional phone calls, nothing can equal each other's presence," Silwal said.

e-mails, Internet phone,

He also misses Nepali food, such as rice with chicken curry, which he can only make with friends on breaks because of extensive preparation time. "Not being able to communicate in the language I'm most comfortable with, not being able to read the newspapers I always read, not seeing the people I always saw, not seeing the mountains I saw every day was a bit discomforting and disorienting at the beginning," he said. "But, as they say, time is the big healer; you gradually get used to things. And now I'm already preparing myself to get shocked with things once I return home!"

Swarthmore has changed Silwal fundamentally. "Living away from home has made me question almost everything I know and believe in. As a result, I have begun to appreciate some things such as the value of nuclear families and the slower pace of life and to question other traditions

Silwal has not been home since he came to Swarthmore two years ago. But he plans and attitudes that I always took for granted," he said. "I have had a chance to see and talk to people from so many backgrounds and learn many new things. All this has made me enthusiastic and excited about all the opportunities in life."

Silwal wants to complete his education before deciding where to settle. "It would be naive of me to say that I want to return to my country to 'serve her' right after I graduate," he said. "But no matter what my decision will be, Nepal will always be in my mind and my heart."

"HAVING STAYED AWAY FROM HOME FOR FOUR YEARS, I FEEL LIKE MY SENSE OF BELONGING HAS BEGUN TO CHANGE FROM THE PLACE I LIVE IN TO THE PEOPLE I ASSOCIATE WITH. PLACES CHANGE. WE MOVE ALL THE TIME, BUT FRIENDSHIPS REMAIN FOREVER," SAID ANI SILWAL, WHO FEELS MOST AT HOME ON CAMPUS IN HIS DORM ROOM.

Marina Boevska '03 Sofia, Bulgaria

Languages: English, Bulgarian, German, and Russian

Studies: Honors political science major, Honors economics minor, and German Studies concentration

Activities: Debate, treasurer of a CIVIC group, International Club, and Alumni Office intern

Plans: Work for the political and economic improvement of Bulgaria

"IT WAS STRANGE FOR ME

TO ORDER PIZZA AT 11 P.M.

AND THEN INVITE EVERYBODY

FROM THE HALL TO SHARE

IT WITH US AND WATCH

The Simpsons."

making new friends on campus, including some of the staff she works with, helped her feel comfortable at Swarthmore.

Returning home every winter and summer break, Boevska was concerned that life in Bulgaria would feel very different after so much time away. "But I have these feelings for only the first few days," she said. "Every time it just seems that there is a lot of news to catch up with. I need to take a few long walks around my city, see my friends, and then it all seems like I have never left home."

As a result of her experiences at Swarthmore, Boevska now thinks of herself as a more educated person who is increasingly capable of making important decisions, such as how to prioritize her life. She has also allowed herself new experiences, which "I guess you can call acquiring

> open-mindedness," she said.



Some of her greatest adjustments at Swarthmore involved

> learning slang expressions and living with someone from a completely different culture. "For example, it seemed strange to order pizza at 11 p.m. and then invite everybody from the hall to share it with us and watch The Simpsons," which would never happen in Bulgaria, she said.

Boevska particularly misses Bulgarian food, including white cheese, yogurt, shopska salad, her grandmother's pastries, and her mother's almost everyday cooking. "Maybe I am biased, but there vegetables and fruits taste much more natural," she said. Boevska also misses going out with friends later in the evening, walking around the city, and going to cafés. But

MARINA BOEVSKA (ABOVE, LEFT) MISSES HER FAMILY IN BULGARIA (LEFT). BUT LEARNING ABOUT SWARTHMORE FROM POLINA KEHAYOVA (ABOVE, RIGHT) AND MAKING NEW FRIENDS ON CAMPUS HELPED HER FEEL COMFORTABLE AT SWARTHMORE.



"At Swarthmore, I started identifying myself as an Eastern European or just a European; every time I was away from my country before, I was just a Bulgarian. Here, I see that people always associated me with what is common for the region that I come from, not really for the country that I come from," she said. "People also often mistakenly think of Bulgaria as part of the former Soviet Union."

Boevska still identifies "home" as Sofia, Bulgaria—a feeling that has never changed for her. "Of course, sometimes when I am on a trip to New York or another nearby city, I refer to Swarthmore as home, but it is not really the place that I belong to," she said.

Planning to possibly attend graduate school in the States, Boevska is clear that she does not want to stay here permanently. "I believe that cultural differences can be overcome," she said. "However, they do present important barriers that often hinder the communication between two people from different cultures."

Polina Kehayova '01 Sofia, Bulgaria

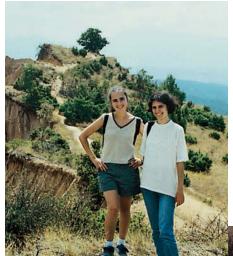
Languages: English, German, and Russian Studies: Biochemistry and economics double major

Activities: Voice lessons (Garrigues Scholarship) and chorus; Admissions Office ambassador for Eastern Europe; writing associate; lab teaching assistant and grader for organic chemistry, microbiology, microeconomics, and physics; clerical positions in Cornell Library, Mullan Tennis Center, and Admissions Office

Plans: Attend Harvard Graduate School

ecause Kehayova has always loved traveling, she wanted to study abroad for several reasons. "I think that immersing yourself in a foreign culture is one of the most eye- and mind-opening experiences," she said. Thinking about her future, Kehayova also considered the decline in the level of graduate schools as a result of the economic crisis in Bulgaria.

After arriving at Swarthmore, her great-



"I miss my mom's meals,
my grandma's tomatoes,
and very simple things
that you never realize
you value until you
lose them."

est challenge involved slang phrases, such as "kick ass," that offered no clues to the literal meaning. Conversations about *Buffy the Vampire Slayer* also mystified Kehayova. "Well, to be honest, I still don't know anything about the shows," she said, "but I don't care when I get lost in the TV conversations."

Kehayova remembered freshman year as a busy one—an antidote to homesickness. She glided through the transition to the States because of the "great company and wonderful friends" she found on her freshman hall in the Mary Lyon Building. Nonetheless, she misses her family and get-togethers with neighbors and friends in Bulgaria.

"Also, I miss my mom's meals, my grandma's tomatoes, and very simple things that you never realize you value until you lose them," she said. Kehayova usually returns home about once a year. "Well, it always takes me a while to get used to the atmosphere as well as simply to catch up with what's happening in people's lives," she said.

Despite her time in the States, Kehayova does not think her personal identity has changed. But because she has been entirely responsible for herself—including financially—Kehayova feels more mature and wiser. "I think I am still the same—or am I just fooling myself?" she asked.

The senior, who said that others often



ALTHOUGH POLINA KEHAYOVA HAS MADE MANY FRIENDS ON CAMPUS, SHE STILL MISSES TALKING WITH HER SISTER, AS THEY DID IN THE SOUTHERN TOWN OF MELNIK, BULGARIA (ABOVE, LEFT), AND SEEING HER DOG, ARGUS.

mistakenly identify Bulgaria as Bolivia in South America, has two definitions for home now. "Usually it means our little apartment in the outskirts of Sofia, Bulgaria. But if I am talking about the United States, I mean Swat," she said.

Kehayova currently plans to stay in the States because of her interest in science and the opportunities to advance in the field of biochemistry. Her many friends here also make that option appealing.

"I definitely think people from different cultures can connect super well on a basic level. After all, some of my best friends are here, and they are American. Of course, we have differences, but people from two parts of the United States also do," she said.

NII ANTIAYE ADDY '01 ACCRA, GHANA

Languages: English, Pidgin English, Fante, Ga, Twi, and French

Studies: Economics major

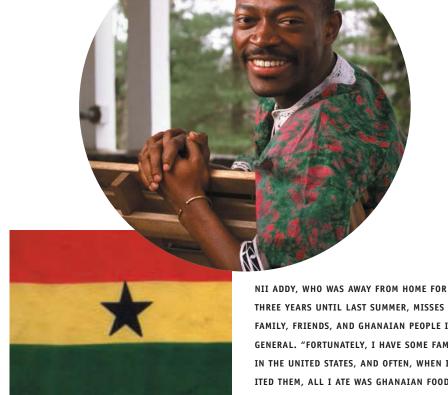
Activities: Site manager of swarthmore.dailyjolt.com, co-director of WSRN, computer consultant, Swarthmore Mentoring Program volunteer, Swarthmore Foundation Board of Directors student member, International Club treasurer, National Society of Black Engineers vice president, Swarthmore African Students Association secretary, and Engineering Department research assistant

Plans: Work for some years and pursue graduate studies in the States

Curtis Bok Scholar, UPS Minority Scholar, 1999 Michael Keene Award recipient, and Sigma Xi Honor Society member, Addy read about Swarthmore from a college guide after deciding to apply in the United States. "I was greatly influenced in my decisions by speaking to Joseph Armah '98, Sylvia Kwakye '98, and Patrick Awuah '89 about their own experiences at Swarthmore. Joseph and Sylvia were in their junior year, and they addressed an info session to applicants while they were in Ghana for the holidays."

Armah also lived up the street from Addy in Accra, and Addy had attended the same high school as Awuah's younger brother, Sam Awuah '94. "The biggest coincidence was finding out that I was not to be the first member of the extended Addy family to come to Swarthmore. In conversations with other family members, my dad found out that his distant cousin, Tralance Addy, had graduated from Swarthmore in 1969."

Since Addy's sophomore year, two other students with the same Ghanaian first name as his have attended the College. "I have had to explain to several people that 'Nii' is a very common name in Accra, the capital city of Ghana. I explained that very often people don't just go by the name 'Nii' but rather by that first name and their second name," he said. "In that case, I would be 'Nii Antiaye' (pronounced Nee-An-tiye). Because most people could not pro-



"HAVING ATTENDED AN ALL-BOYS BOARDING SCHOOL IN GHANA FOR SEVEN YEARS. YOU CAN BET I FOUND SWARTHMORE TO BE VERY DIFFERENT. BUT THE BIGGER ADJUSTMENTS HAD TO BE MADE CULTURALLY."

THREE YEARS UNTIL LAST SUMMER, MISSES HIS FAMILY, FRIENDS, AND GHANAIAN PEOPLE IN GENERAL, "FORTUNATELY, I HAVE SOME FAMILY IN THE UNITED STATES, AND OFTEN, WHEN I VIS-ITED THEM, ALL I ATE WAS GHANAIAN FOOD," HE SAID. ADDY LATER DISCOVERED STORES IN WEST PHILADELPHIA TO BUY HIS FAVORITE FOODS SUCH AS PLANTAINS AND WEST AFRICAN YAMS.

nounce my second name right, I was used to being known as just 'Nii.' Coincidentally, Nii Addy '02 and I are from the same Addy family—our dads are cousins—and Nii Addo '02 and I attended the same elementary school in Ghana."

Once at Swarthmore, Addy, who was not used to "having an accent," also had to explain the context of his words and expressions. "For example, back in Ghana, whenever somebody got hurt, we said, 'sorry'—even when it was not our fault. People found it strange when I said sorry for things I was not responsible for," he

Addy made some good friends from the International Club and the African Club. who made life easier because of shared experiences—and, sometimes, frustrations. "I found the Black Cultural Center to be an amazing resource to me as I was adjusting. It can be confusing for a black student

from a predominantly black population to adjust to Swarthmore; within the black community, I learned so much about the similarities and differences between people of the African diaspora," he said. "The upperclassmen I met were also very helpful in the adjustment process as they shared their experiences."

The challenges that Addy has faced have ultimately strengthened his religious and personal beliefs. "As an active member of the International Club, I have continued to discover similarities that exist between so many of the diverse experiences that we have brought to Swarthmore," he said.

The College has also broadened him academically. When he arrived on campus, Addy was comfortable in only the natural sciences. But after taking some economics classes, involving extensive reading and writing, he had a better grasp of the economic issues affecting Ghana. "One of my favorite moments at home was when I got to meet and discuss some issues with a leading Ghanaian economist and politician, Kwame Pianim," he said.

For Addy, home is still Ghana. "When I visited last summer, I realized just how much home meant to me. I felt totally comfortable as soon as I got back to Ghana."

> GÜNES BENDER '02 ISTANBUL, TURKEY

Languages: English and Turkish Studies: Honors biology major

Activities: WSRN, flamenco and modern dance, library assistant, and Annual Giving Office intern

Plans: Attend graduate school in molecular biology

ormer president of the Alumni Association Elenor Reid '67, Bender's college adviser in Istanbul, encouraged him to apply to Swarthmore. Believing that "there is a basic level of understanding and human warmth that is enough to cross boundaries of culture and language," he

"My true home will ALWAYS BE THE PLACE WHERE

MY MOTHER LANGUAGE

IS SPOKEN: TURKEY.

BUT SWARTHMORE

MADE ME MORE CONFIDENT

OF MYSELF AS A PERSON

AND RESTORED MY CULTURAL

AND NATIONAL IDENTITY

AND PRIDE."

decided to study at Swarthmore.

"I have been exposed to a kind of diversity that would not have been possible or acceptable in a Turkish university. For instance, racial diversity or different sexual orientations are things I would not have been exposed to in Turkey," he said.

At the College, Bender faced mostly linguistic rather than academic or social challenges. "It has taken at least two years to feel fully comfortable with English," he said, referring to "unexpected glitches in spoken and written English."

Bender has also experienced academic differences at the College. "In Turkey, social sciences and arts are taught with a more Eurocentric or Turkocentric perspective. At

Swarthmore, there is a more global selection of studies in arts and humanities," he said.

As someone used to living in a lively and loud city, Bender has found the suburbs a bit too tranquil. He also misses Turkish music, the language, and his family, although he talks with his parents as frequently as possible. Bender goes home at least once every year and finds most of his relationships unchanged except when people have died in the inter-

"My true home will always be the place where my mother language is spoken: Turkey," he said. But "Swarthmore made me more confident of myself as a person and restored my cultural and national identity and pride. It also taught me to be more sensitive to a lot of issues that I would not have confronted in Turkey," where he hopes to work after attending graduate school. 🤏

ON CAMPUS, GÜNES BENDER FEELS MOST AT HOME IN THE ROSE GARDEN, WHICH HE ENJOYS BECAUSE "IT IS SO PRETTY!"

Connections

SWARTHMORE GATHERINGS NEAR YOU

UPCOMING EVENTS

Philadelphia: Supper Club le Swarthmore is gaining momentum! The group meets once a month, always at a different restaurant, to enjoy tasty cuisine and good conversation. Everyone is welcome. Check the Alumni Events Web site for each month's details, or contact Connection Chairs Bruce Gould '54 at brucegould54@hotmail.com or (215) 563-4811 or Jim Moskowitz '88 at jimmosk@yahoo.com or (610) 604-0669. Sign up for the Philadelphia Connection listserv to be informed electronically.

Pittsburgh: Connection Chair Melissa Kelley '80 arranged for tickets to the Pirates/ Phillies game in June at the brand-new PNC Park—quite a feat because the entire season at this two-tiered, 38,000-seat stadium is completely sold out. If you are interested in attending, contact Melissa at mkhaver@-aol.com or (412) 321-4932.

Swarthmore: A Swarthmore Alumnae Women's Tennis Match is scheduled for Saturday, Oct. 6. Save this date for the first-ever Women's Tennis Team alumnae match. If you have questions or want to sign up, contact Rani Shankar '98 at rani_shankar@yahoo.com or (617) 628-5075.

The Alumni Association wants to hear from you!

Please contact President Richard Truitt '66, Swarthmore College Alumni Association, 500 College Avenue, Swarthmore PA 19081-1390 or alumni@swarthmore.edu.

Candidates for Alumni Council:

Candidates for Alumni Manager:

Suggested speaker for Alumni Weekend Collection and other campus events:

Your name/class year:



MEMBERS OF THE PHILADELPHIA BOOK CLUB (TOP) CLOSED THE ACADEMIC YEAR ON MAY 23 WITH A TALK BY PROFESSOR OF ENGLISH LITERATURE PETER SCHMIDT (RIGHT). UNDER SCHMIDT'S GUIDANCE, THE GROUP HAD READ NOVELS WITH THE THEME "BORDER CROSSINGS." THERE ARE ALSO SWARTHMORE BOOK CLUBS IN WASHINGTON, D.C., AND BOSTON.

RECENT EVENTS

Boston: Saccos Bowl Haven, a '50s-style bowling alley featuring candlepin bowling, was the site of a Boston Connection Event in February. Connection Chair Leah Gotcsik '97 and Ahna Dewan '96 arranged this nostalgic event for alums and their families.

Chicago: For Connection members who could not get to campus for Alumni Weekend, Marilee Roberg '73 arranged for a Swarthmore experience in Chicago instead. The Connection attended the City Lit's production of *Jeeves and the Mating Season*, based on a novel by P.G. Wodehouse. After the performance, there was a question-and-answer session with the cast, followed by dinner at a local restaurant.

London: Lucy Rickman Baruch '42 arranged for Swatties to hear Serena Canin '88 play in the Brentano String Quartet at Wigmore Hall. The group enjoyed an informal gettogether before the concert.

New York: Jazz guitarist Lou Garrett '97 debuted his new quintet "Into the Fall" and new compositions at one of New York's premiere creative jazz venues The Jazz/Cabaret Room at The Cornelia Street Café. Thanks to Sanda Balaban '94, Connection chair, for making this event happen.

The New York Connection got some

exercise and raised money for a worthy cause by participating in the AIDS WALK 2001 in May. Connection Co-Chair Debbie Branker Harrod '89 led the Swarthmore team in this worthy event.

North Carolina: In April, Connection Chair George Telford '84 arranged for a Wildflower Hike in Eno River State Park with Durham naturalist Milo Pyne. Pete Campbell '62 summed up the event: "Thanks so much for a wonderful Eno naturalist tour reminiscent of Swarthmore springs wandering the woods of Crum Creek—but without the anxiety of pending exams to diminish our ability to enjoy every moment."

Philadelphia: Co-chairs Bruce Gould '54 and Jim Moskowitz '88 sponsored several events to keep the winter doldrums away from Connection members. In February, U.S. Representative Rush Holt (D-N.J.) presented "A Swarthmore Perspective on Congress." Former Swarthmore Physics Professor Rush Holt was elected to the House of Representatives in 1998. Last year, he was re-elected from his largely Republican district in the second-closest major race in the nation! (And the first was....)

In March, the Connection enjoyed an evening of classical music featuring cellist Lynn Harrell at the Curtis Institute of Music. April showered the Philadelphia Connection with two exciting presentations by Swatties. Tom Sgouros '82 and Judy the Robot answered the age-old question: If you build a robot smart enough to do the dishes, will it also be smart enough to be bored?

The group also enjoyed the Pig Iron Theatre Co.'s newest original work, *Anodyne*. Pig Iron Theatre Co. is an international touring dance-clown-theater ensemble based in Philadelphia. The company's four artistic directors are Swarthmore alums—Solveig Holum '97, Daniel Rothenberg '95, Fernando van Reigersberg '94, and Quinn Bauriedel '94—as is managing director Lars Jan '00.

In May, Jim Moskowitz '88, who developed the Franklin Institute's new Sports Challenge exhibit, hosted an event for alums and their families at the exhibit. Jim shared his experiences of how the exhibit was created and helped everyone get the most out of their visit.

Philadelphia Recent Graduates: This fledgling group is off to a terrific start! In February, the group's first event was at the Philadelphia Museum of Art. In April, Sarah Keith '94 graciously hosted an event at her apartment in Philadelphia's Old City. Approximately 30 young alumni spent a few hours mixing and mingling. A number of them went on to two local clubs, where Graham Richmond '95 and Meghan Hayes '93 were performing. This event was the second in what will, it is hoped, become an occasional outing for recent graduates living in the Philadelphia area. For information, contact Ben Stern '96 at benjaminstern@hotmail.com, Geoff Cline '96 at geoffcline@alum.swarthmore.edu, or Kristen Lockwood



CENTENNIAL PROFESSOR
EMERITA OF CLASSICS
HELEN NORTH WAS
HONORED IN JANUARY
AT THE FIRST ANNUAL
HELEN NORTH CLASSICS
LECTURE.

Cline '96 at kcline@morgan-lewis.com.

Seattle: This Connection literally rocks. Connection Chair Deb Read '87 had to reschedule her wine-tasting event in February because of the earthquake that hit the Seattle area the day the event was scheduled. Don't worry, Seattle, there will be more events in the future!



MEMBERS OF THE PHILADELPHIA CONNECTION RECENTLY ENJOYED SEEING A SHOW OF PAINTINGS BY NATHAN FLORENCE '94 AT THE F.A.N. GALLERY. "MARIAN AND THE SHADOWS, CAIRO" (ABOVE) WAS ONE OF MANY NEW WORKS PRODUCED WHILE FLORENCE AND HIS WIFE WERE LIVING IN EUROPE LAST YEAR.

SAGES SEE WRIGHT STUFF

o-Supreme Sages Anne Matthews Rawson '50 and James Fligg '50 invited Garnet Sages on a two-day spring outing to explore two Western Pennsylvania homes designed by Frank Lloyd Wright: Fallingwater and Kentuck Knob. Phil Gilbert '48 made the arrangements to visit these homes, and the Sages are grateful for his efforts.

Forty-four Sages joined Director of Alumni Relations Lisa Lee '81 on this trip in April. Although they departed while a spring snow was flying, the weather cleared, and the Sages were able to enjoy the first few days of springtime in western Pennsylvania.

The group was delighted to be accompanied by Kaori Kitao, the William R. Kenan, Jr., Professor of Art History. Professor Kitao, who retired this spring, gave a talk during the trip on "Architecture and Art."

A BUSY WEEKEND FOR THE ALUMNI COUNCIL

The last weekend in March was a busy one at Swarthmore. Family Weekend, the Lax Lecture, and Alumni Council's spring meeting brought many alumni and visitors to campus. Clocks were moved forward one hour, and students ventured into the icy water of Crum Creek for the annual regatta held on April Fool's Day—coincidence?

The Alumni Council convened its spring meeting on Friday evening with a reception and dinner, followed by a presentation by Provost Jennie Keith and members of the Athletic Review Committee. The Saturday morning general session was composed mainly of reports.

President Alfred H. Bloom gave the Council an update on many issues affecting the College, followed by a lively question-and-answer session. After reports on the February Board of Managers meeting and recent activities in Alumni Relations, the Council members were delighted to hear of the success of this year's Extern Program from Cynthia Graae '62, national coordinator of the Extern Program.

Many thanks to those alumni who have sponsored an extern in their work-place or hosted an extern in their home.

Connection chairs reviewed their regional events for the year—it's amazing how many events took place all around the country.

The Council's three Working Groups (College Advisory and Support, Alumni Support, and Student Support) discussed specific issues and determined action plans for the coming months.

The Career Planning Office sponsored a Career Networking Dinner on Saturday. This dinner matches students with council members who shared their experiences in the workplace and is a wonderful opportunity for alumni-student interaction.

Steve Lin, the College's Web editor and Internet coordinator, showed a proposed new College Web site design and fielded questions from Council members regarding College Web services.

The meeting was adjourned by Elenor Reid '67, who served at her last spring meeting as Council president. On Alumni Weekend, she will hand over her duties to Rich Truitt '66, who will be Alumni Council president for the next two years. The College, and the Alumni Relations Office in particular, greatly appreciates all of Elenor's fine work on and thoughtful guidance of the Alumni Council.



A Bevy of Maid Marians?

Posing on Cunningham Field, these members of the Women's Archery Club seem reluctant to face the camera—on the lookout for incoming arrows, maybe? The wary (and barefoot) archers are (standing, left to right) Anne Matthews

Rawson '50, Ruth Pretzat Krusen '49, Joan LeVino Ross '49, and

Robin Cooley Krivanek '51; (kneeling, left to right) Winifred

Witcraft Guerchon '50, Betty Bassett Miller '48, and Nancy

McDaniel Miller '51. Photographers Karl Ihrig '51 and Woodlief

Thomas Jr. '51, along with Robin Krivanek and Nancy Miller, celebrated their 50th reunion this year.

A Wisconsin Gem

MARY LOU ROGERS MUNTS '45 IS A LIFELONG ACTIVIST.

Though my family escaped its worst ravages, the Depression formed my social conscience," says Mary Lou Rogers Munts '45. "I became a Roosevelt admirer in 1932, when I was 8." Almost 70 years later, she's still a Democrat, and her lifelong commitment to social justice has brought many accomplishments and honors.

Munts came to Swarthmore at a critical time in the College's—and the nation's—history. Two student groups started her on a path of public service: the Swarthmore Student Union (SSU) and the Committee on Race Relations, which convinced the Board of Managers to open the College to black students.

World War II gave Swarthmore women unusual opportunities, says Munts, and in 1942, she was selected to attend the International Student Service Leadership Training Institute at President Roosevelt's summer home on Campobello Island, Maine. Molly Yard '33 was a staff member at the institute and became a lifelong friend and mentor. After Campobello, Eleanor Roosevelt invited several of the students to her New York apartment, where Munts remembers spending the night in a "spacious nightgown" borrowed from the First Lady.

Munts' sophomore year was busy. Elected executive secretary of the SSU, she scored a coup when Mrs. Roosevelt accepted an invitation to speak on campus. In May 1943, she was elected president of the U.S. Student Assembly at its inaugural convention.

In the fall of 1944, Munts took a leave of absence from Swarthmore to run the student campaign for Vernon O'Rourke, the political science professor who was making a second run against the Delaware County Republican machine for a seat in Congress—this time in absentia. Though O'Rourke was serving on a destroyer in the Pacific, he lost only by a narrow margin.

After the election, Munts took a job in a tank factory instead of returning to college. After the war, she finished her undergraduate work at the University of Chicago, where she not only received a master's degree in economics but met her future husband. Ray Munts was then a graduate student in political science, later receiving a Ph.D. in eco-



MARY LOU ROGERS MUNTS CELEBRATES A LEGISLATIVE VICTORY IN 1984.

nomics from the University of Wisconsin—Madison (UWM).

After her marriage, Munts' activism continued along themes established at Swarthmore. In the 1950s, she threw herself into building a new Democratic Party in Wisconsin. The early 1960s found her in Bethesda, Md., where she and Esther Ridpath Delaplaine '44 led efforts to pass a groundbreaking public accommodations ordinance. The Munts family—by then with four children—returned to Madison in 1966, where Ray taught at the university's School of Social Work.

Battling her grief over the 1967 death of their son, Roger, Munts entered the UWM Law School in 1970. Again, she interrupted her studies to win a seat in the Wisconsin Assembly in 1972, 1 of 7 women in the 99-member body. Her consensus-building talents produced many legislative successes, including divorce reform, marital property reform, solid and hazardous waste legislation, and reform of antitrust and mental health laws. She earned her law degree in 1976, while a member of the Assembly.

Asked about her greatest legislative accomplishment, Munts points to marital property reform. She credits UWM Law School Professor June Miller Weisberger '51 as the "intellectual architect" of the bill that made Wisconsin the first—and thus far

only—state to change long-standing separate property laws to become a community property state. (Eight other states, largely those with French or Spanish colonial legal influence, have long had community property laws.) In 1984, after six terms in the Assembly, she retired to take a seat on Wisconsin's Public Service Commission, where she became a leader in energy conservation efforts, serving until 1991.

Ray's death in 1992 forced Munts to rebuild her life, assisted by her three children and seven grandchildren as well as her passions for gardening and travel. Polly, her lesbian daughter; Polly's partner; and their three adopted children of color have given Munts a special opportunity to make her civil rights advocacy personal.

In December 1999, hundreds crowded into a 75th birthday party for Munts. "Words like 'tireless' and 'incredibly effective' floated among the red and white balloons," reported the Wisconsin State Journal. The Madison Capital Times said, "Munts' faith in democracy demanded a commitment that was—and is—extremely rare." Jonathan Barry, a former county executive who served with Munts in the legislature, summed it up for everyone when he said at the party, "She's just a Wisconsin gem."

-Ralph Lee Smith '51

Rolling the Rock Up the Hill

WILLIAM FROHLICH '57 REFLECTS HIS VALUES IN THE BOOKS HE PUBLISHES.

What if Timothy McVeigh were not the sole perpetrator of the 1995 Oklahoma City bombing? Or if a window washer were responsible for the 1954 beating death of Marilyn Sheppard?

Both these contentions are discussed in books by Northeastern University Press (NEUP). We may never know the truth about either event because both the window washer and McVeigh are now dead. Yet, if the arguments presented offer different and significant viewpoints, then they have achieved something important, says Bill Frohlich '57, founder and director of NEUP. He sees book publishing as a gratifying way of investigating significant issues, of debating society's behavior, and of imparting values that were strengthened in him during his years as an Honors history major at Swarthmore.

Frohlich came to Northeastern University in 1976, after 16 years in commercial publishing, as head of the institution's Publishing Group, which provided printing and publishing services to the university. The idea of publishing scholarly books appealed to him, and, in 1977, the university approved his proposal to start a university press. The university was thriving financially, and its sympathetic president could afford to let him experiment. Nonetheless, Frohlich knew that the press could not grow on scholarly works alone, for they garner little media attention and rarely sell more than 600 copies per title. With a small press budget and limited appeal to scholars and other authors, the fledgling press needed a mix of books that advanced scholarship, sold into university courses, and attracted more general interest-not to mention that of book review editors.

In the early years, university support and the ability of Frohlich and his staff to find promising niches in the market for high-quality books brought rapid growth. Annual sales rose in the first 10 years from \$9,000 to \$355,000. Drawing on the strengths of the university and its editors, the press developed lists in American history (especially regional titles), criminology, women's studies, and music. However, since that first glorious decade, budgetary crunches at colleges and universities reduced library sales from 1,000 to 300 copies per scholarly book.



DESPITE CONSTANT CHALLENGES, NORTHEASTERN UNIVERSITY PRESS FOUNDER WILLIAM FROHLICH '57 SAYS, "WHAT KEEPS ME GOING AT 65 IS THAT, EVEN THOUGH IT NEVER GETS ANY EASIER, I ENJOY IT."

By restricting its publishing to a few areas, NEUP has done well. Frohlich admits that growing is now a challenge. Still, he says, "If I look at the books we published many years ago, I can see a considerable difference, qualitatively as well as quantitatively. And I think what keeps me going at 65 is that, even though it never gets easier, I enjoy it."

Speaking of the press's success, Frohlich prefers emphasizing specific items. He mentions a popular African-American fiction reissue series. The press has a strong music list, and it also publishes widely in the area of criminology, enjoying a fine reputation for its books on capital punishment. A new book on terrorism, In Bad Company by Mark Hamm, is due in the fall; it suggests that McVeigh collaborated with the Aryan Republican Army, a small terrorist group that robbed banks in its quest to fund overthrowing the federal government. Mockery of Justice: The True Story of the Sam Sheppard Murder Case by Cynthia Cooper and Sam Reese Sheppard illustrates injustice in the Ohio legal system and offers a contribution to the quest for truth because it uncovered the identity of the real murderer.

A contract with Hollywood-based Fox Studios will mean the filming of *Final Confession* by Brian Wallace, an account of the exploits of eminently successful Boston thief Phil Cresta, now deceased. Rumor has it that Robert De Niro is interested in playing Cresta.

Despite current sales of roughly \$1.5 million, the press has yet to become profitable, not unusual for a publisher as small as NEUP. And, in any case, Frohlich wishes to focus on more than commercially successful books. He wants NEUP's lists to address significant issues like capital punishment and the corrupting nature of campaign finance. Often, in his search for fine books, he's discouraged by what he learns. "But," he says, "if you don't continue to roll the rock up the hill; if you don't continue to fight executing human beings, often innocent; if you don't try to show the injustice of our system—such as keeping two million people behind bars, many on minor drug offenses and most of them minorities—then you're not doing anything significant or at least trying to improve our society in some small way. So we try."

—Carol Brévart-Demm

Retirement or Renaissance?

LIFE AFTER 60

By Ruth Cooper Lamb '56

hy would anyone choose to live 3 miles from a paved road, 5 miles from a neighbor, 6 miles from phone and electric poles, and 11 winding miles from a store? Eleven years ago, when my husband, Sandy '55, and I retired to Wardsboro, an extinct farming settlement in northern New York state, we did so because of the death of a young AIDS activist. We chose to move to a newly inherited, slate-roofed 1860 farmhouse in a wild, isolated valley because he made us rethink what really mattered. We took early retirement, not to retreat from our busy lives in the Boston area but rather to pioneer in closer communion with nonhuman nature before we were too old for such an adventure.

Sandy is chief problem solver as we face the challenges of living without normal electricity, phone, furnace, and plumbing. When he pauses in his firewood splitting to inhale the view of nearby Catamount Mountain, he can hardly remember his life as a public health physician in Boston when the AIDS epidemic dictated his days. I have emerged from my past life as a nutritionist and council-on-aging director to become his right-hand woman and chief gardener. We take turns as cook (since Sandy has become an avid chef), and I experiment, creating crafts from valley flora and document our environment with camera and pen.

The complexity of simple living keeps us on our toes. The elephantine cookstove in the kitchen and the tiny living-room burner keep our four rooms warm in winter only as long as we feed them wood. For summer bathing, we use the outdoor sun shower—a

plastic bag of water that heats up in the sun all day. Hummingbirds keep us company in our shower tucked behind the house, until they leave, and cold weather sends us back inside to the squat, claw-footed tub in one corner of the white-walled kitchen. The sun shower then dangles from a nail in the ceiling ready to spray me as I relax in the tiny tub's mixture of steaming water from woodstove pots mixed to sauna temperature with cold tap water.

The complexity of simple living keeps us on our toes.

No doubt about it, our plumbing is peculiar. Sandy evolved from doctor to plumber in 1990, as he struggled to install a cold-water system emerging from a forest spring into a pipeless basement and connected the unwieldy black snakes to tub and kitchen sink. No pipes needed for the toilet; the outhouse suited us. Later, we shifted to dry-composting toilets that produce rich mulch for the flower gardens.

That first winter was a back-country adventure. We lived comfortably with propane refrigerator, auxiliary stove, and lights, while a gasoline generator infrequently ran the vacuum cleaner. We cross-country skied from the front door, tracked deer and coyotes, tried snow-shoeing, and delighted in boosting our powers of observation. Our eyes and brains seemed better in tune, as we forgot the past and future and really paid attention to the present. When the



road flooded, we stayed put. When the water pipes froze, we carried buckets of water from a nearby road spring, until the pipes thawed a month later.

The sole problem that really has frustrated us over the years is communicating with the outside world. We had purchased a cell phone for our truck and promptly entered into a lottery-like phone

system. When incoming calls triggered the truck horn, one of us rushed out, even on frigid nights, to catch the caller. We could communicate, but rain, fog, or leaves seemed to interfere. Switching to other telephone companies didn't help. This valley was too far away from cell towers and had too many intervening mountains. New technology has improved our phone, so now we make calls from inside our house. But even

so, on some days, making or receiving calls requires the craft of a magician.

By the time we both reached 60, it seemed the opportunities to stretch our minds and bodies were endless. Everywhere we looked, there was something new to learn and do. Tear down old plaster walls upstairs, insulate, and install new paneling and create rooms. Tap maple trees, turn a rusty barrel into a firebox, and boil down maple syrup. Investigate making electricity from the sun, erect solar panels, and wire the house with AC and DC power stored in golf-cart batteries. Spy on beaver, watch turtles laying eggs, survey migrating birds and those that stay as winter companions, and identify and use wild valley plants.

As the urgency of our projects receded, I found myself increasingly diverted from our valley focus. Before I knew it, I was off on a new adventure—this time into the past. After the death of my

aunt, Mary Back, I was drawn to learn more about her history. She and her husband, Joe, had pioneered in backcountry Wyoming in the 1930s, before they became well-known western artists. She wore many hats, including naturalist, artist, author, and theologian, and had been an important role model for me. Boxes of her saved letters clogged the living room, where I sat daily, reading, captured by her vibrant written voice. As her life unfolded before me, I knew that her stories and views about how all life fits together needed to be shared.

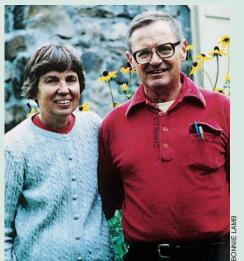
Her observations and deductions helped me make more sense of the tangled interrelationships of life and death that I observed in the valley. She wrote, for example: "The body of life is immortal. Its parts are constantly changing shape. They grow and change. They 'die', but that is only the word used for their changing into other shapes, within the one whole body of Life, which is immortal. In all its parts, it is constantly resurrected."

"Yes," I thought. "Deer turn into coyotes, frogs into snakes, mosquitoes into bats, and garden produce into me. And what will I become someday?"

Gradually, I put together a book, Mary's Way: A Memoir of the Life of Mary Cooper Back, based on the wonderful letters. I added my voice to Mary's to tie the pieces of her life together.

Although life in Wardsboro continued to teach us and sustain me as the book took shape, by 1998 (the year that I turned 65),

By the time we both reached 60, it seemed the opportunities to stretch our minds and bodies were endless.



we were ready for more stretching. When Ray Hopkins, Swarthmore's Richter Professor of Political Science, told us about his dream of an international service (retirement) community based either in Sri Lanka or Belize (formerly British Honduras), we joined an exploratory trip to Belize. As we visited agencies and toured this small country just south of Mexico, it became clear that volunteers willing to return annually for a month or so to assist with community needs would indeed be welcome. His idea has blossomed in Belize, where several of us have returned each year since then for a month. We become part of a settlement and share our life experiences or professions while enjoying the tropics. We live together in a rented house, experiment with cooking for ourselves, and work out functioning as a "family."

San Ignacio, a small city in the foothills of the Mayan Mountains near the Guatemalan border, is home. Its sights and sounds have become familiar: roosters crowing before dawn, chachalacas noisily greeting the sun, and parrots patrolling treetops. Saturday market stalls feature eggs, chickens, housewares, Amish homespun, Guatemalan crafts, and an amazing wealth of tropical fruits and vegetables. Well-baby clinics impress us with breast-feeding moms, infants screeching as vaccination needles puncture flesh, and toddlers dressed in cherished elegance smiling shyly. American school buses (retired like us) provide bus service across a country the size of Massachusetts with the population of Boston.

We have worked with public health clinics and staff, trying to help in small

ways, learning as we go what works and what doesn't. Volunteers are also sought for English-as-second-language classes and churchrun, state-supported schools. Other possibilities abound for retirees interested in bringing their skills to another country in an ongoing relationship. Each year, we return to Wardsboro at the end of our Belizean month enriched by new friendships and exposure to a culture that has much to teach us.

Now that we have passed that frontier year of 65, we look back on the past 11 years grateful that we took the plunge into retirement before we really had to. Each year seems to bring new aches or an upsurge of chronic ailments. So far, keeping as active as we can masks these health troubles. The words of that young AIDS activist keep pushing us to set priorities. "Once I knew I was dying, life became wonderful and rich. You, too, are dying, but you don't know when. Make sure you use your remaining days in ways that are truly important to you."

MARY BACK, RUTH COOPER LAMB'S AUNT, SKETCHING IN THE FIELD BY WIND RIVER NEAR DUBOIS, WYO., WHERE SHE LIVED HER ENTIRE MARRIED LIFE (LEFT). RUTH COLLECTING MAPLE SAP (ABOVE). RUTH AND GEORGE "SANDY" LAMB NEXT TO JOURNEY'S END IN 1991 (ABOVE, RIGHT).

One God or Many?

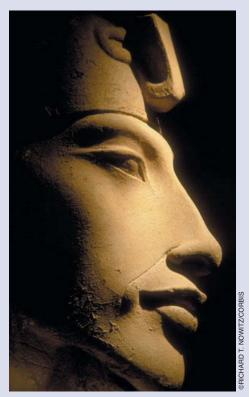
THE LINE BETWEEN MONOTHEISM AND POLYTHEISM ISN'T CLEAR

Barbara Nevling Porter '68 (ed.), One God or Many? Concepts of Divinity in the Ancient World, Casco Bay Assyriological Institute, 2000

n his book Moses and Monotheism, Sigmund Freud argued that the biblical figure of Moses was born an Egyptian. But if Moses were raised in the polytheistic culture of ancient Egypt, how could he have inaugurated the so-called monotheistic revolution for which the Hebrew Bible became so famous? The answer, according to the good doctor Freud, was that "the religion Moses gave to his Jewish people was yet his own, an Egyptian religion though not the Egyptian one." What Freud had in mind was this: In the period before Moses, Egypt had undergone its own theological revolution under the rule of the Pharaoh Akhenaten (or, as Freud called him, Ikhnaton). For a brief period before his changes were reversed by those who had previously been in power, Akhenaten radically transformed Egyptian religion: "He raised the Aton religion to the official religion and thereby the universal God became the Only God; all that was said of other gods became deceit and guile.... It is the first case in the history of mankind, and perhaps the purest, of a monotheistic religion."

Freud did not invent the claim that ancient Egyptian culture developed its own form of monotheism, nor did his book end discussion on this complicated and still controversial subject. Indeed, the past few decades have witnessed a growing interest in the relationship of polytheism and monotheism in the ancient world. As Barbara Nevling Porter's excellent new edited volume One God or Many? Concepts of Divinity in the Ancient World reveals, things are even more complex and fascinating than Freud ever imagined. Porter, a research associate at the Harvard Semitic Museum and the director of the Casco Bay Assyriological Institute, clearly and succintly spells out the book's main theoretical issues in its introduction. As she puts it, "The difference between the monotheistic and polytheistic conception of divinity as one or many rests to a large extent on the participants' definitions of deity."

In other words, the line between polytheism and monotheism is not nearly as clear or as rigid as many of us, including Freud, would assume. For example, the three great "monotheistic traditions," Judaism, Christianity, and Islam all posit the existence of beings such as angels; devils; and jinni, a class of spirits that, according to Muslims,



Did the idea of one god start with Akhenaten, the Egyptian pharaoh?

inhabit the earth, assume various forms, and exercise supernatural power. Although they are not considered gods within these religions, Porter points out that, "From the point of view of an outside observer, however, these beings bear a strong resemblance in their powers and functions to the minor gods of many polytheistic systems." Indeed, during the Middle Ages, Muslims and Jews sometimes accused Christians of being polytheists because of their belief in the Trinity.

Scholars of the ancient Near East have become increasingly interested in exploring the relationship between the "one and the many," to repeat a phrase employed by Porter in her own contribution to the volume, an illuminating essay on concepts of divinity in ancient Assyria, the northern Mesopotamian culture best known to nonspecialists for its role in exiling the 10 "lost tribes" of Israel in the eighth century B.C.E. But, until now, studies devoted to the question of polytheism and monotheism in the different cultures of the ancient Near East have not been brought together in a single volume. In One God or Many? Porter has succeeded in assembling an impressive group of scholars in the fields of Assyriology, biblical studies, classical studies, and Egyptology. Each has produced an essay that stands on its own and also participates in a broader cross-cultural discourse. One of the most helpful and illuminating features of the volume is a final section that provides an edited transcript of discussions that took place between the five scholars who contributed

Many readers will be surprised by some of the provocative conclusions reached in this volume. For example, in the lively debate recorded in the final section, Stephen Geller, a biblical scholar at the Jewish Theological Seminary, argues that "true monotheism is a philosophical doctrine and not available before medieval philosophy.... It is very difficult to get monotheism out of Israelite religion, let alone rabbinic religion." Whether or not you agree with the claims made by Geller and the other scholars in this volume, after reading its clearly written and accessible essays, you will never again, as Freud might have put it, look at a god as just a god.

> —Nathaniel Deutsch Associate Professor of Religion

Books

Emily Abel '64, Hearts of Wisdom: American Women Caring for Kin, 1850–1940, Harvard University Press, 2000. Drawing on public health records, white farm women's diaries, and antebellum slave narratives, the author examines caregiving in America.

Winifred Armstrong '51, The Paper Trail: Connecting Economic and Natural Systems, The

Sustainability Education Center of The American Forum for Global Education, 1998. This introduction to ecological economics focuses on understanding the earth's "household" and management.

John Brumbaugh '48, Criminal Law and Approaches to the Study of Law, third ed., Foundation Press, 2001. This casebook presents the elements of substantive criminal law and helps students enter the legal world.

Helene (Peet) Foley '64, Female Acts in Greek Tragedy, Princeton University Press, 2001. Using an anthropological approach and literary analysis, the author explores gender relations in ancient Greece.

Carol (Thompson) Hemingway '52, Oswald, an American Osprey, Kilimanjaro Co., 2001. The author describes osprey family life.

Leslie (Gillette) Jackson '42, Poet in Spain, Shank Painter Co., 2000. A painter with a longtime interest in the past and language of Spain, Jackson created poems and drawings that convey the Spanish land-scape.

Victor Jose '44, The Free Paper in

America: Struggle for Survival,
Graphic Press, 2000. The author,
who once owned a free weekly
paper in Richmond, Va., and has
defended the rights of owners of similar
publications around the United States,
covers the increase of paid-newspaper
monopolies, joint operating agreements
between otherwise competing paid

dailies, the growth of newspaper chains, competition for the advertiser's dollar, and other growing threats to free papers.

Annette Duchêne and Jacques Joussot-Dubien '49, Les effets biologiques des rayonnements non ionisants, Flammarion Médecine-Sciences, 2001. The main properties of nonionizing radiation and ultrasonic vibrations are described in relation to their biological effects and sanitary potential.

HEARTS
WISDOM

INCREMENTATION

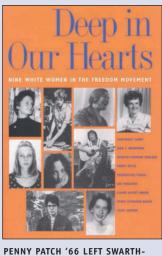
INCREASE

LINCOLUMN

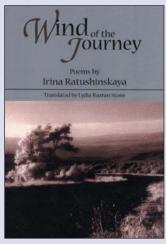
1850-1940

EMILY K. ABEL

EMILY ABEL '64 TEACHES PUBLIC HEALTH AND WOMEN'S STUDIES AT THE UNIVERSITY OF CALIFORNIALOS ANGELES.



PENNY PATCH '66 LEFT SWARTHMORE AFTER THREE SEMESTERS TO
JOIN THE CIVIL RIGHTS MOVEMENT
IN THE SOUTH.



LYDIA RAZRAN STONE '64 IS A FREELANCE TRANSLATOR BASED IN ALEXANDRIA, VA.

Steven Wöndu and Ann Lesch '66, Battle for Peace in Sudan: An Analysis of the Abuja Conferences, 1992–1993, University Press of America, 2000. This book is written for those interested in an in-depth understanding of the Sudanese conflict and the possible options for resolution.

Jeffrey Escoffier and Matthew Lore '88 (eds.), l'allegro, il penseroso ed il moderato: A Celebration, Marlowe & Company, 2001. Through photographs and essays, this book commemorates Mark Morris' evening-length dance, which premiered in Brussels, Belgium, in 1988.

Bradley Mittman '88, Nail the Boards! The Ultimate Internal Medicine Review for Board Exams, Frontrunners Board Review, 2001. This outlined review of internal medicine will aid health care professionals preparing for medical boards.

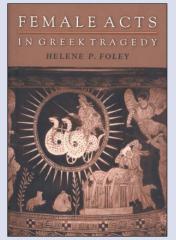
Penny Patch '66 et al., Deep in Our Hearts: Nine White Women in the Freedom Movement, The University of Georgia Press, 2000. These first-person accounts illuminate the lives of nine young women coming of age in the '60s.

Peter N. Stearns, **Peter Seixas**'69, and Sam Wineburg (eds.),
Knowing, Teaching, and Learning
History: National and International
Perspectives, New York University
Press, 2000. This book identifies
the current issues and problems
in history education.

Gonzalo Rojas, Velocities of the Possible, John Oliver Simon '64 (trans.), Red Dragonfly Press, 2000. Simon received a 2001 National Endowment of the Arts literature fellowship for translating 12 poems.

Carolyn Panzer Sobel '60, The Cognitive Sciences: An Interdisciplinary Approach, Mayfield Publishing Co., 2001. This text examines

the historical and contemporary issues and findings of the core cognitive science disciplines, including cognitive psychology, neuroscience, linguistics, philosophy, and artificial intelligence.



AUTHOR HELENS PEET FOLEY '64 IS
PROFESSOR OF CLASSICS AT
BARNARD COLLEGE.

Irina Ratushinskaya, *Wind of the Journey,* Lydia Razran Stone '64 (trans.), Cornerstone Press Chicago, 2000. Arrested for her writing and sentenced to a Soviet prison camp, Ratushinskaya continued to write poems.

Elizabeth Strom '80, Building the New Berlin: The Politics of Urban Development in Germany's Capital City, Lexingon Books, 2001. This work illustrates the relationship between architecture and politics in a dialogue about whom Berlin should serve.

Helen (Ogden) Willis '46, Night Window, Janet Stanley Mustin '45 (cover art), Scopcræft Press, 2000. These poems shed light on childhood and nature.

Stanton Wortham '85, *Narratives in Action:* A Strategy for Research and Analysis, Teachers College Press, 2001. This work offers a concrete approach to analyzing narrative discourse.

CDs/DVDs

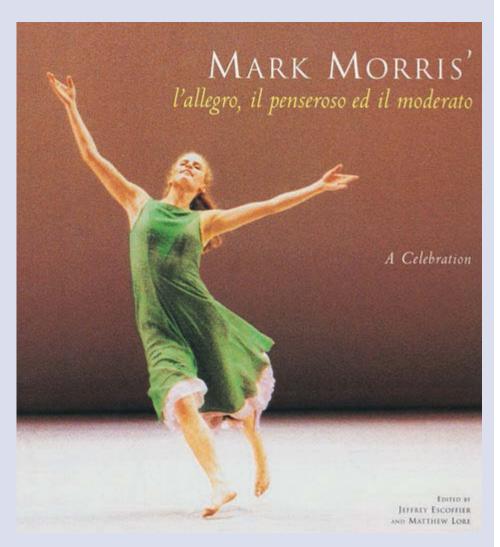
Carol Elkins '55, Starting From CAT, 2001. The "new anthem" in the March issue of the Bulletin (p. 38) inspired Elkins to write one of her own for a documentary film of her work teaching children in West Harlem to read. Her rendition in honor of learning, to the tune of "Simple Gifts," may be heard on this DVD, where she accompanies herself on concertina.

Jerome Goodman '55, Stockbridge Overtones and Selected Works, MMC Recorings, 2000. The Czech Radio Symphony Orchestra, the New York Chamber Symphony, and the Seattle Symphony Orchestra perform.

Naomi Sokoloff '75 and Monica Devens, Speak Hebrew, SMiles Productions, 2000. This interactive CD-ROM for modern spoken Hebrew teaches everyday conversation.

Film

Debbie Bennett '79, *The Connection*, Steve Yeager (director), 2001. Bennett is one of the stars of this independent film with a



MATTHEW LORE '88, WHO IS A SENIOR EDITOR AT AVALON PUBLISHING, CO-EDITED THIS COFFEETABLE-SIZED BOOK ABOUT THE FAMOUS MARK MORRIS DANCE, L'ALLEGRO, IL PENSEROSO ED IL MODERATO.

current dialogue about drugs, which was featured during a world premiere at the Maryland Film Festival in May.

Gail Lerner '92 and Colin Campbell, Seraglio, 2000. This 13-minute comedy, about an unhappy housewife who becomes an unlikely seductress, was nominated for an Oscar as Best Live-Action Short Film. It was winner of the Best Live-Action Short Film at the 2000 Deauville Festival.

Theater

Suli Holum '97 has a new play, The Lollipop Project, which opened recently at the Walnut Street Theater Studio 15 in Philadelphia.

ABOUT BOOKS & ARTS

This section of the *Bulletin* reviews books, compact disks, films, videos, Web sites, art shows, musical compositions, and public performances by Swarthmore alumni. Let us know of your latest public creative endeavor. Books, videos, and CDs will be donated to the College library after being reviewed or noted in these pages. Send your work to Books & Arts, *Swarthmore College Bulletin*, 500 College Avenue, Swarthmore PA 19081-1390, or e-mail bulletin-@swarthmore.edu.

An Affinity With Animals

THOMAS GOLDSMITH '75 WORKS ON BEHALF OF ZOOS, EDUCATIONAL FACILITIES, AND BREEDERS.

Sometimes it looks like Noah's ark in the waiting room," says Thomas
Goldsmith '75, a private-practice exotic animal veterinarian. Devoting more than 60 hours a week to the care of animals, including all the big cats, primates, and birds, Goldsmith says it's not unusual to see a 16-foot trailer pull up outside his Bird and Animal Hospital of Pinecrest, in south Miami, and unload a 650-pound male Bengal tiger with a tooth problem that he must diagnose from a distance. To anesthetize the animal and get a closer look could break its trust; so when sedation is necessary, it is usually delivered through a blow dart.

"Projectile medicating can be tricky," says Goldsmith, who is frequently called on by clients to use his blow-pipe skill. "You have to determine whether it's justified. You have to consider all the options in terms of the animal's psychology and physiology."

Goldsmith, who is also the chief veterinarian for Monkey Jungle, a Miami tourist attraction and primate center with more than 400 primates and the back-up veterinarian for Miami's Metro Zoo, stresses the importance of taking a holistic approach when caring for an exotic animal, whether it lives in a zoo or private residence. In addition to his veterinary degree from the University of Georgia, Goldsmith earned two degrees in animal behavior, and has done graduate study at the Yerkes Regional Primate Center in Atlanta. He has an encyclopedic knowledge of each animal's needs.

"If an animal doesn't have emotional and nutritional health, it can't ever have physical health," he says. "Far too often I encounter clients lacking the knowledge to properly care for their animal. In order for them to properly understand and appreciate the animal in their care, a large part of my time is spent educating my clients regarding the biology, psychology and ecological origins of their chosen pet."

Goldsmith, who shares his Coconut Grove, Fla., home with two cottontop tamarin monkeys and two Irish wolfhounds, has traveled most of Africa and South and Central America, working on behalf of zoos, governments, educational facilities, importers, breeders, and private business owners. But doing so can often be dangerous.

In 1985, during an eight-week assignment



THOMAS GOLDSMITH '75 EXAMINES A BLACK-AND-WHITE RUFFED LEMUR. HE SAYS WORKING WITH ANIMALS HAS ALWAYS BEEN HIS DESTINY.

in Cameroon, he was imprisoned twice: once for not having his passport while standing in front of his hotel, and on another day while in the bush, he was presumed to be a gun runner from Nigeria and held in a hut for three days.

On a third occasion during this trip, he was informed the army was looking for him. With the help of a British Petroleum (BP) engineer who was working in Cameroon, Goldsmith was whisked out of the country and put on a BP oil rig, from where he was shuttled by helicopter to safety in Gabon.

Goldsmith believes this incident was instigated by a vindictive man whose animal exporting business he reported as being unscrupulous.

"It's a risk you must be willing to take," says Goldsmith nonchalantly. "You can be nauseated and walk away from these commercial setups or swallow your pride and try to make a difference. I can't change the world, but I can change a tiny corner. Somebody's got to try to put these people out of business." Because of this incident and concerns for his safety, Goldsmith says, "it would not be wise for me to return to Cameroon."

Currently, Goldsmith is working on developing a sophisticated Internet conservation portal with the help of Neil Gershenfeld '81, of the MIT Media Lab. Jane Goodall, with her years of work with chimpanzees and dedication to environmental causes, is lending her name and support to the project.

"The site will be a ground leveler for all conservation sites. This portal will encompass many of the world's leading organizations as well as innumerable lower -profile efforts. People will also find volunteer and employment opportunities and information on ecotours that don't destroy the environment they bring tourists to. It will also be a highly secure site for charitable donations to all the organizations connected to the site," he says.

"There's great soul satisfaction in what I do. You want to save all the animals. But you get to the point where you stop celebrating the successes because you can't save them all. And that's hard. But it is what drives people in this type of medicine—the wanting to," says Goldsmith. "I've always felt an affinity with animals. They've always been my destiny."

—Audree Penner

LETTERS

Continued from page 3

However, I do greatly question their judgment and the process, which, by all accounts, took place largely behind closed doors. In America, when a group has its rights threatened or is about to lose something of value, we have a basic concept of fairness, involving notice and an opportunity to be heard. That was not the case here. Certainly by involving all interested parties, other viable, less draconian options could have been found.

Justice Oliver Wendell Holmes once said of the generation of leaders that came of age during the Civil War: "In our youth, our hearts were touched with fire." Football, in a lesser sense, provides similar tests to young men, and fires their hearts and imaginations. Hundreds of Swarthmore players have gone on to be leaders and contributors in their communities. It is easy to let a tradition and a program die. It takes real conviction and vision to preserve and sustain it.

Marc Peterson '78 Media, Pa.

GET A GRIP

On its face, the Board's decision to cap athletic recruiting (and thus drop football) is obviously correct. Swarthmore is and has always been about academics. Besides, this decision doesn't diminish, but rather guarantees, the continuation—and even enrichment—of a more broadly equitable (including for women) athletic program. Further, it is also obvious from Dulany Ogden Bennett's ['66] thoughtful letter ("Letters," March *Bulletin*) that the issue was dealt with in a serious and deeply responsible way by the Board, given the exigencies of timing.

So what is one to make of the not-so-mini-firestorm of controversy? The tone of several letters in the *Bulletin* is not only intemperate but genuinely bizarre. Take the twisted argument made by more than one alum that eliminating football somehow vitiates Swarthmore's commitment to "diversity." I know we were sometimes myopic in the '60s, but I missed the part where it explained how football players were an oppressed minority.

The overheated tone of these *cris de coeur* is striking: "Swarthmore's reputation as an

effete institution is not its strongest asset."
"[T]his college excludes and does not
esteem the physically robust." And then
there's the persistent undertone of wounded
defensiveness, as if maintaining an athletic
recruitment rate three times that of the University of Virginia were proof that Swarthmore treats student-athletes as "outcasts."

Get a grip. A rational decision was made to maintain appropriate balance. I, for one, was shocked to read that football was eating up 10 percent of the entering male student body. The Board's act was not an expression of cloistered intellectualism, nor was it precipitous. It was high time.

MIKE WING '70 Brooklyn, N.Y.

BIG FOOTBALL

I have read with a combination of embarrassment, pity, amazement, and amusement of the ongoing football skirmish. It's all over but the shouting, but when will the shouting be over?

I write with what I hope is undisguised impatience to comment on what the controversy really appears to be about. It is not about the ennobling discipline, dedication, and depth that come from participation in athletics. On the contrary, the football enterprise that Swarthmore has disengaged from has been toxic to all other athletic endeavors on most campuses.

Big football is good for big men. Big football is also good for little men who would like to be big men. It is good for proud parents of big men. It might even be good for their girlfriends. But big football is best for middle-aged folks who get off on injecting their own egos into a demolition contest among the young men on the field.

It is critically important to the vocal minority that big football be made to sound more like "big" than like "football." Otherwise, they are exposed as people advocating that dozens of spaces in incoming classes be reserved for large men willing to spend a lot of time running into each other, while women, smaller men, men culturally or temperamentally averse to running into other people, the physically challenged, foreigners, and geniuses in all categories compete for the remaining slots.

Many have considered supporting the football minority because they link football with being "well rounded," but football has

not been demonstrated to make anybody well rounded. Some sports broaden the minds of participants, but this is not a frequently observed effect of college football. Even if it could be shown to do that, it wouldn't matter. Plenty of colleges are out there looking for the well-rounded people. The well-rounded always have someplace to go, but the remarkably talented need someplace to go, too. Swarthmore has been dedicated to that unusual but vitally important mission, and the football fuss is an attempt to drag the College off that course.

Big football has an opportunity cost that no one who values Swarthmore's history since 1930 and its promise for the future can really condone. There are things that matter in the world, like biology and chemistry and economics and language and religion and history and physics. And there are things that do not matter, of which football is the first that comes to mind. If football had a fraction of the importance that the minority is now claiming, there would be endowed Professorships of Football at all the Ivy League universities. There would be a Nobel Prize for Football.

Because education means giving people the skills to separate the trivial from the important, Swarthmore cannot continue on its educational mission without bidding football a respectful but firm good-bye. I congratulate the president and the Board of Managers on having the courage to make a necessary but personally troublesome decision—one that does not change Swarthmore's historical trajectory but keeps it loyally on course.

PAMELA KYLE CROSSLEY '77 Norwich, Vt.

CORRECTIONS

Wilma Lewis '78, newly elected to the Board of Managers, was incorrectly identified as "an attorney in the U.S. Attorney's Office for the District of Columbia" ("Collection," March *Bulletin*). In fact, Lewis served as *the* U.S. Attorney for D.C. during the Clinton administration—one of the most important legal jobs in the nation.

In the same article, new Manager Salem Shuchman was identified with the wrong class. Shuchman is a Class of 1984 member.

In the Crum Woods illustration ("A Walk in the Woods," March *Bulletin*), Alligator Rock is identified incorrectly as Wissahickon schist; rather, it is a mafic gneiss, a metamorphic rock.

Nathan and the Narwhals

BOOGIE DOWN WITH THE '70S ROCK BAND.

By Tom Sahagian '74

What obscure rock band has played on the same stage as Bruce Springsteen and entertained college presidents, federal prosecutors, and drunken lounge lizards alike for the past 30 years?

The surprising answer: Swarthmore's own contribution to pop culture, the Narwhals. This Alumni Weekend, when the first chords of "Jumpin' Jack Flash" chainsawed their way into the collective cortex of the Class of 1976, the band marked its 30th anniversary—an occasion enough for a brief history of the rise, fall, and rise of these durable cetaceans.

Although the precise origins of the band are now hazy, the story began in the fall of 1970, when I joined roommates
Peter Jaquette '74 and Jim Gish '74 in
Wharton A-102 for some impromptu
recording sessions. In early 1971, Gish and I played three songs in a truncated talent
show in the Rathskellar in the Tarble Student Center. I'll never forget Linda Gibson
'73 complimenting me on my voice. I
couldn't believe anyone would actually
enjoy hearing me sing. It gave me the confidence to continue, for better or worse.

In October 1971, a group comprising Gish, Jim Kelly '74, Dan Gibbon '74, and me as the vocalist; David Baskin '74 on drums; and a name lost to history on bass played a dance at the Phi Sigma Kappa frat house. Mimeographed flyers billed the band as "Jim Gish, Jim Kelly, Tom Sahagian, and Friends." Gish remembers: "The audience was dancing so hard that you could see the floorboards bouncing up and down. That's when I knew we had something special—in many ways, the band was born that night."

In fact, the Narwhals name had been coined the previous spring, by Gish. While perusing a booklet on whaling from hardrock band Mountain's "Nantucket Sleighride," I asked him, "Have you ever heard of a narwhal?" In a moment of inscrutable inspiration, Gish responded, "No, but why don't we call ourselves Nathan and the Narwhals?"

In any event, Nathan and the Narwhals

made their stage debut at the Talent Show in the fall of 1972, with Bruce Bond '76 on bass and Ed Frost '73 on sax. Then-*Phoenix* critic (and now federal prosecutor) Jim Sheehan '74 noted that "no



one has ever accused Tom of having a good voice, but Lord knows it's loud enough." Critical acclaim in hand, the band went on to play a well-received Christmas gig in Sharples, among others. The transfer of Bond to Pomona and creative differences with the drummer resulted in a new rhythm section in the fall of 1973—Jed Hauck '75 on bass and Frank DeColvenaere '75 on drums (in classic rock-band fashion, Baskin learned he was no longer the drummer when he found the Narwhals playing in the Scott Amphitheater without him during orientation).

Along with the addition of Jaquette on keyboards, the band acquired an agent from nearby Media, who succeeded in landing us several glamorous dates, including the Officer's Club at the Philadelphia Naval Yard and the Rendezvous Bar in New Hope, Pa. "The Rendezvous was probably one of our strangest gigs," recalls Jaquette. "It was a long drive to the middle of nowhere and nearly impossible to find. The audience consisted largely of one drunk guy repeatedly yelling, 'Play "Wipeout"!"

Gibbon recalls another nightmare gig: "We had somehow snared a gig at a frat house at Franklin & Marshall. The room

was too small to accommodate both the band and the audience, so we had to set up in a small room across the hall. Most of the time, I couldn't actually see any of the people we were playing for. We might as well have been on the radio."

The band continued to play regularly at



the College, building a fan base (for lack of a better term) that would last for decades. Many of their innovations, like cross-dressing, writhing on the floor while performing, and playing heavy-metal

versions of "Santa Claus Is Coming to Town" and "Gilligan's Island," were imitated—without attribution—by others in years to come. But soon after Don Jackson '75 became the drummer in the spring of 1974, distractions such as Honors exams and graduation eventually harpooned the Narwhals.

In the early '80s, the Narwhals, re-energized by groups like the Clash, triumphantly resurfaced to play a series of highly successful New Year's parties in New York City and played more or less annually at a bewildering array of venues, including a dentist's backyard (the police stopped us before the first song was even completed) and the Christmas party of the U.S. Attor-

ney's Office in Philadelphia. Most recently, they played at the reunions of the classes of '69, '74, and '75. This past December, they successfully revived the New York City New Year's tradition, which they hope to perpetuate.

Despite the fact that at least 25 people have performed under the banner of the Narwhals during the past 30 years, the core lineup remained remarkably stable: Gish, Gibbon, and me, with Jackson the current and longest-tenured drummer. Gish, now in the throes of a Garboesque retreat from band activity, is said to be in Vermont working on a solo album tentatively titled "The Narwhals' Last Gig Was in 1999." Jaquette re-entered the picture in 1994 for the Class of '74's 20th reunion gig and then cemented his re-entry when he and his family moved to the Philadelphia area. He now lives in Seattle but still manages to make rehearsals: "We are looking into hav-

ing virtual rehearsals over the Internet, so I don't have to use up all my air miles," Jaquette says, only half in jest. Meanwhile, the band uses e-mail extensively to stay in touch, schedule rehearsals, and argue about the set list for the next gig.

Frost rejoined in 1999, after a 25-year hiatus from the band—and the saxophone. Steve Gray, manager of a helicopter company in West Chester, Pa., and an experienced bass player, has been with the band since 1999 as well. One constant from the beginning has been ace guitarist Jim Kelly. Not



OZ SWOPE

only does he sit in on most Narwhal gigs, but "Sri" Kelly also serves as the band's unofficial spiritual adviser. Jackson notes sardonically: "As anyone who has ever been in a band for more than 5 minutes will tell you, the hardest part is the interpersonal stuff, the politics. It's a miracle that we've stayed together as long as we have."

The Narwhals repertoire consists mainly of rock, blues, and R&B material from the '60s and '70s, but we occasionally venture into the waters of original material. Jackson, a tenured history professor at Lafayette College, plays with student bands on campus and writes songs; the Narwhals usually include one or two at each performance.

Jackson is not the only band member with outside

musical interests; Gibbon plays with two other bands in Philadelphia. I formed a band with other parents at my daughter's school and brought in Gibbon and Frost on their respective instruments when local parents were unavailable.

Why do these guys, all white-collar professionals pushing 50, still play together? With Jaquette in Seattle, Frost and me in the New York City area, Gish in Vermont, and the rest in metropolitan Philadelphia, the geographic barriers alone would be enough to daunt most people. Yet "it's the biggest kick I've ever had as a grown-up," says Frost, a former journalist turned private investigator. "Rejoining this band has changed my life." Jaquette, an economist with Weyerhaeuser, agrees: "It's a great bunch of guys, and playing music with

them is one of the most fun things I can think of." Gray, whose solid bass playing glues the band together, says, "I've played with a lot of bands and with scores of really great players over the past 30 years or so, and I have to say I've never enjoyed playing with any group more than this one."

Not that it's all smooth sailing. There's a certain amount of bickering, of course—you've got six guys who care about music and who are used to getting their way a good portion of the time. Conflict is



inevitable. Gibbon, now a partner at a small law firm and no stranger to conflict resolution, notes with amusement that, "For some reason, when we enter the rehearsal studio, we immediately regress to our teen personas and act as if we hadn't spent the last 30 years learning how to be adults."

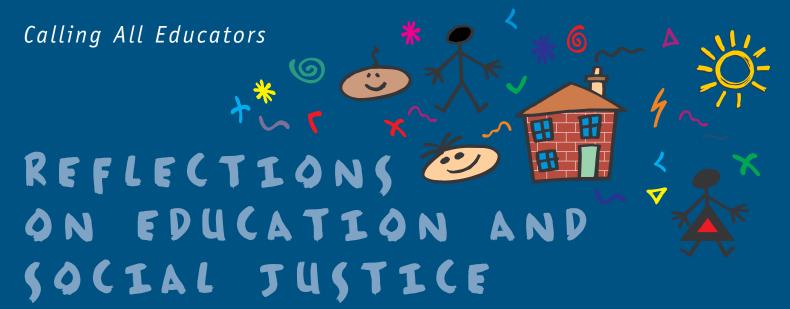
What was that about Springsteen? Well, it's true; Springsteen and the Narwhals both played in the Scott Amphitheater—about 9 months apart. And, as for the college president—Gibbon explains: "When we played for the classes of '69 and '74 in 1994, one of the most enthusiastic dancers in the crowd was Nancy Bekavac '69, who just happens to be the president of Scripps College. I'm sorry to say that we haven't been able to get Al Bloom to boogie down with us yet, but we're working on it."

All of that is fine, but how good are these guys, anyway? Observes Frost, "When we first started, we were pretty raw. But we had a lot of enthusiasm, and people responded to that. Now, people tell us that we actually sound pretty good. At the end of the night at the Class of '74's reunion, the crowd was chanting, 'More! More! More! More!' We must be doing something right."

Sahagian, a former journalist, is now with Power Concepts, a consulting engineering firm in New York.



CLOCKWISE (STARTING ABOVE, TOP): GIBBON IN NEW YORK CITY, NEW YEAR'S WEEKEND 2000. BOND PLAYING BASS IN 1972. JACKSON IN SHARPLES IN 1974 AND NEW YORK CITY IN 2000. FROST IN NEW YORK CITY IN 2000. THE BAND PILES AROUND THE PIANO IN 1973. FROST, GISH, AND BOND PLAYING IN SHARPLES IN 1972.



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