







Sentence by sentence

Acclaimed novelist Lee shares meticulous writing approach in classroom

JENNIFER GREENSTEIN ALTMANN

rinceton Professor Chang-rae Lee — regarded as one of the most talented novelists of his generation — painstakingly composes every sentence of his works, revising each one 10 or 20 times, not moving on until he is satisfied.

In the opening chapter of his acclaimed new novel, "The Surrendered," about the lives of three people shaped dramatically by the Korean War, Lee's evocative prose vividly renders one of the main characters, an orphan named June:

"She cast a stoney front to the world but in her sleep's throes it was for the moment vanquished and she was once again the child she had been on the eve of the war, a too-tall, soft-spoken girl of eleven who was content to play with much younger children, who was still too shy to look the village boys in the eyes, who wanted nothing more than to sit in her father's lap and hum along with his records while he drew on his corncob pipe, the smoke hanging fatly and sweetly about them."

As director of the Program in Creative Writing in the University's Lewis Center for the Arts, Lee brings this meticulous nature to the classroom, where he impresses upon Princeton students the importance of scrutinizing each word on the page.

"My approach to teaching writing is to teach reading — how to read a text and how to read one's own text, from the point of view of an artist," Lee said. "To really try to take apart what happens, sentence by sentence by sentence, you just need to read very carefully, and with a different kind of hat on."

Since publishing his first novel, "Native Speaker," in 1995 at the age of 29, Lee has been heralded for his poignant, engrossing fiction, which has explored themes of alienation and identity through the prism of Korean Americans and other immigrants to America. His novels — the others are "A Gesture Life" and "Aloft" - have won numerous prizes including the Hemingway Foundation/PEN Award, the American Book Award, the Anisfield-Wolf Literary Award, the Gustavus Myers Outstanding Book Award and the New Atlantic Independent Booksellers Association Book Award for Fiction.

His latest work, "The Surrendered," has garnered praise from literary critics for its gorgeous prose and for its careful examination of its characters' troubled psyches. The New York Times called the book "the most ambitious and compelling novel of his already impressive career."

Lee wanted to write a novel that wasn't so much about the Korean War as about "what war does to its participants and witnesses and those who are just caught up in it," he said. "I never conceived of the book as a Korean War novel, or even a war novel. I was interested in tracing the effects of bloodshed and violence across time in very singular characters."

In the shadow of Iraq and Afghanistan

Lee began work on "The Surrendered," published in March by Riverhead Books, more than a decade ago. The riveting first chapter describes June riding

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Finding women's voices in supernatural fiction

JENNIFER GREENSTEIN ALTMANN

enior Emily Silk's thesis sprung from a 19th-century short story that is a staple of high school and college English courses. Her project ended up taking an out-of-this-world

The short story, "The Yellow Wallpaper" by Charlotte Perkins Gilman, addresses a theme that intrigued Silk the intersection of medicine and gender in 19th-century America, and the way male doctors treated women diagnosed with so-called "hysteria." But Silk, who is an English major, was reluctant to make Gilman's story the focal point of her thesis. "It had been analyzed to death," she said.

Instead, Silk dug into 19th- and 20th-century American literature and found other women writers who were exploring the same themes, but in an unusual genre: supernatu-

"They were writing ghost stories, using the genre to write about things they weren't able to talk about in realist genres, such as sexuality, marriage problems, domestic abuse and dissatisfaction with traditional women's roles," as well as their treatment by male doctors, Silk said. "The most exciting part is that many of these stories, despite their high quality, have been largely overlooked in the critical literature on supernatural fiction."

The short stories refute or subvert the way that male doctors

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For her senior thesis, Emily Silk studied ghost stories by 19th-century women writers that had been largely overlooked in literary criticism. Silk found that authors used the supernatural to address subjects they couldn't write about in realist genres, such as dissatisfaction with traditional women's roles and women's treatment by male doctors.



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International student and scholar services enhanced

RUTH STEVENS

niversity offices that interact with Princeton's international students and scholars are undergoing a major restructuring



this year that is intended to provide improved and more comprehensive services.

The reorganization has several components, including:

• The Davis International Center, which previously

Davies

reported to Dean of Undergraduate Students Kathleen Deignan, began reporting to Diana Davies at the beginning of the spring semester. Davies, associate provost for international initiatives since 2008, has been promoted to vice provost for international initiatives, effective Feb. 1.

- Paula Chow, director of the Davis International Center for nearly 36 years, will retire on June 30. The new director's responsibilities have been modified and updated to reflect current needs, and a national search is under way. The process will involve representative international students, faculty and leaders of the Friends of the Davis International Center.
- The staff of the Office of Visa Services will move from the Office of the General Counsel to the Davis International Center on July 1.
- The assistant dean who serves as the international undergraduate student adviser will move from the Office of the Dean of Undergraduate Students (ODUS) to the Davis

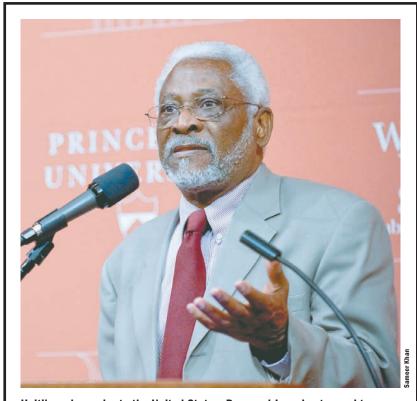
International Center, and her responsibilities will be expanded to include social and educational programming for all international students, also effective July 1. Her other duties not related to international students will be redistributed among ODUS staff.

• All of these offices will move under one roof at 36 University Place in the fall.

"By creating a more centralized structure for international student and scholar services, we're striving to avoid duplication of services for some constituencies, address the need for more services for other groups, ease communication between service units and academic departments, and ensure the highest level of effectiveness among all service units by clarifying the functions and goals of each unit and applying a comprehensive, strategic approach," Davies said.

The plan is the continuation of work begun in October 2007 by President Tilghman and Provost Christopher Eisgruber when they proposed initiatives that map out an international vision for the University. One result was the hiring

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Haiti's ambassador to the United States, Raymond Joseph, stressed to a group gathered at Princeton the need to construct a "new Haiti" following January's devastating earthquake — with a focus on decentralization and foreign investment. For more on Joseph's April 6 lecture, read the full story at <www.princeton.edu/main/news> or view the archived video at <www.princeton.edu/webmedia>.

Spotlight



Name: Robin Izzo.

Position: Associate director for laboratory safety in the Office of Environmental Health and Safety. Assisting researchers in promoting laboratory safety and environmental stewardship. Helping faculty members comply with federal, state and local regulations relating to scientific research. Reviewing laboratory designs in new and renovated buildings for safety and environmental sustainability. Managing the Princeton Telephone and E-mail Notification System, an emergency communication system on campus.

Quote: "I've worked here for 18 years, and there's always a new challenge. The campus community is so vibrant and diverse. Interaction with young people is something you don't get in many other fields."

Other interests: Directing and choreographing musicals for the drama club at the St. Ann School in Lawrenceville. Cake decorating. Hiking.

To suggest a colleague as a future "Spotlight," e-mail <bulletin@princeton.edu>.

Harmony School, ULNS and U-NOW openings available

s part of the University's continuing efforts to provide assistance to faculty, staff and graduate students with preschool children, the Harmony School now is offering University families a 20 percent tuition discount for its child care and summer camp programs. Openings are available.

In addition, the University League Nursery School (ULNS), which also offers discounted tuition for University families, is accepting applications for 3- and 4-year-olds for its summer camp, as well as remaining openings in its 2010-11 academic year program. University NOW Day Nursery (U-NOW) also has openings for its "Just for the Summer Program" for children ages 3 1/2 to 5.

The Harmony School, located in the Princeton Forrestal Village, operates a full-day child care center for children from 6 weeks to 5 years old, including a full-day kindergarten. Part-day, partial-week, drop-in, and before- and after-school programs also are available. The Harmony School also offers a summer camp for children ages 3 to 9 from

July 6 through Sept. 2. The school is open weekdays from 7 a.m. to 7 p.m.

For more information, contact Joanne Trautman, director and general manager, at 799-4411 or <info@ harmonyschools.com>, or visit <www. harmonyschools.com>.

The ULNS summer camp runs from June 21 through Aug. 13. The school also has a limited number of openings for its 2 1/2-, 3- and 4-year-old programs beginning in the fall. Located at 171 Broadmead, the school offers two-, three- and five-day morning programs on a cooperative basis for children ages 2 1/2 through 4, as well as extended and full-day noncooperative care for children ages 3 and 4.

Founded in 1949, ULNS is accredited by the National Association for the Education of Young Children (NAEYC). It is open weekdays from 8:30 a.m. to 6 p.m. For more information on the summer and academic-year programs, visit <www.ulns.org> or call 258-9777.

The U-NOW "Just for the Summer Program," also located at 171 Broadmead, offers participants a variety of outdoor and indoor activities, including creative art projects and special programs focusing on nature and movement. Sessions are available from July 6-30 and Aug. 2-27 at a cost of \$1,440 per session.

U-NOW is open from 8 a.m. to 6 p.m. In operation since 1970, U-NOW is accredited by NAEYC. For more information, call 258-9600 or visit <www.princeton.edu/~unow>. ♥

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Deadline

In general, the copy deadline for each issue is the Friday 10 days in advance of the Monday cover date. The deadline for the next issue, which covers May 3-23, is Friday, April 23. A complete publication schedule can be found at <www.princeton.edu/bulletin>. Call 258-3601 with questions.

To submit events for consideration for "Nassau notes," go to <www.princeton.edu/main/news/share/submitevents>.

Admission is offered to 8.18 percent of applicants

CASS CLIATT

n the most selective admission process in the University's history, Princeton has offered admission to 2,148, or 8.18 percent, of the record 26,247 applicants for the class of 2014. This compares to an admission rate of 9.79 percent at this time last year, and 9.25 percent the previous year.

The number of applicants for the incoming freshman class was the largest the University has seen by a significant margin, representing a 19.5 percent increase over the 21,963 candidates who applied for the class of 2013.

"This exceptionally large pool of applicants was matched by the outstanding quality of the students," said Dean of Admission Janet Rapelye. "We were impressed with the superb intellect, talent and character the candidates presented. We had to make some extremely difficult decisions."

The continued strength of Princeton's financial aid program may be an incentive as students consider the University's offer of admission, Rapelye said, in light of the challenging economic circumstances facing families across the country.

"We're mindful that many families are still struggling, even with the recent signs of economic recovery," she said. "The fact that we can help support families and students in their aspirations for higher education with

our financial aid program is something we value at the highest levels."

The University expects that more than 60 percent of the class enrolling in the fall will receive need-based financial aid. The average grant is projected to exceed \$36,000. Princeton has a "no-loan" policy through which financial need is met with grants instead of loans, allowing all students who qualify for financial aid to graduate debt free. Through the University's need-blind admission process, students are not at a disadvantage if they apply for financial aid.

Increases in average financial aid awards since 1998 — the year the University launched a first wave of groundbreaking financial aid initiatives have continued to outpace increases in tuition. In 1998, the average student aid grant covered 65 percent of the tuition charge. For next year's entering class, the projected average aid grant is expected to cover more than 98 percent of the tuition charge. The scholarship budget for the next fiscal year is projected to rise from this year's \$103 million to \$112 million, an increase of nearly 9 percent.

Admitted students have an opportunity to review a brief description of their financial aid awards, in addition to learning their admission decision from the Office of Admission, through an online notification system that began April 1. Letters informing applicants of decisions also were mailed

The University plans for the second year to enroll its new "steady state" class in the range of 1,300 students - 1,308 are expected to enroll in the fall - as part of the final stage of a gradual expansion of the class that began in 2005. An 11 percent overall increase in the number of undergraduates that began that fall will result in a student body of 5,200 by the 2012-13 academic year.

Among this year's applicants: more than 9,820 had a cumulative 4.0 grade point average; about 13,650 had a combined score of 2100 or higher on the three sections of the SAT; and they come from 8,393 high schools in 146 countries, including the United States. Alumni volunteers had personal contact with 99.8 percent of applicants.

Beyond the 2,148 offered admission, an additional 1,451 students were offered positions on the wait list, though only half of those students are expected to choose to stay on the wait list, as in past years.

"We were privileged to read the applications from these talented young men and women," Rapelye said, adding that the University recognizes that many wait-listed students will choose other alternatives, but several hundred are expected to remain on the wait list.

Students who ultimately are offered a position in the class in May or June will receive the same financial aid considerations as students offered admission in April.

The students receiving outright offers of admission for the class of 2014 come from all 50 states and Washington, D.C., with the largest number of

students admitted from California, followed in order by New Jersey, New York, Massachusetts and Texas. International students make up 10.3 percent of the admitted students, and they are citizens of 64 countries, including Bangladesh, Brazil, Bulgaria, Chile, China, Costa Rica, France, Greece, Guatemala, Iceland, India, Israel, Jamaica, Kenya, Morocco, Myanmar, Norway, Senegal, Turkey, Uganda, Vietnam and Zambia.

The students admitted to the class of 2014 are evenly balanced: 50 percent men and 50 percent women. Admitted students self-identified among the following racial and ethnic groups: 9.4 percent as African American; 21.5 percent as Asian American; 10 percent as Hispanic or Latino; less than 1 percent as Native American; and 4.4 percent identified themselves as belonging to two or more races. Almost 19 percent of the admitted students stated plans to pursue a bachelor of science in engineering, up from 17 percent last year.

"The expansion of the freshman class has allowed us to offer this splendid education to more students," Rapelye said.

For the second year in a row, a small portion of the entering class, 20 students, will defer their enrollment as part of Princeton's Bridge Year Program. The service abroad program was endorsed by a president's committee in the summer of 2008 and launched last spring with the selection of 20 entering freshmen for the pilot group. For the class of 2014, 20 admitted students again will spend nine months abroad participating in community service projects beginning this fall. ♥

By the numbers

Computers are everywhere on Princeton's campus today, but decades ago, a computer was a rare - and massive piece of equipment to encounter. The University was an early proponent of computing, with its professors using computers as early as the 1930s.

• Princeton mathematicians John von Neumann, Alan Turing and Oswald Veblen helped bring the first computers to the University in the 1930s. The world's third computer was built at the nearby Institute for Advanced Study during this period. The machine was used for academic purposes, weather prediction, studies in evolution, the analysis of stellar transitions and even the modeling of traffic on freeways. With separate units for input and output, an arithmetic organ (a bulky machine with vacuum tubes that completed math problems), memory and a processor, the machine became the architectural parent of present-day computers. In the late 1950s, the computer — dubbed "the Maniac" as an abbreviated form of Mathematical and Numeric Integrator and Calculator was transferred to the University.

• Renowned Princeton statistician John Tukey acquired a digital IBM machine, formerly used to do top-secret analysis of military weapons, in 1952. The early equipment was massive and slow, requiring a great deal of cooling to handle the heat loads. In 1959 the University installed an IBM 650 at a house on Nassau Street, with the mainframe on the back porch. The most frequent users were individuals in the School of Engineering and the Statistical Techniques Research Group in the Office of Population Research. Data and instructions were stored in the form of magnetized spots on the surface of a drum four inches in diameter and 16 inches long, which rotated 12,500 times a minute.

• With the University's computer requirements burgeoning, the first Computer Center was created in 1961 in the new Engineering Quadrangle. An IBM 7090 with 197KB of memory was installed. The machine was the workhorse for many undergraduate projects and graduate theses, primarily

in the sciences and engineering. It had more than 50,000 transistors and performed 229,000 additions per second.

• The University began construction of the Computer Center building at 87 Prospect Ave. during the 1960s. There, an IBM 360/91, the University's primary source of computing, completed more than 1,000 jobs per day. A survey run by the Computer Center in 1972 found that about 6 percent of undergraduate courses involved either required or optional use of a computer.

• From 1985 to 1999, Princeton greatly expanded its computing staff and built a world-class telecommunications infrastructure that, by 1990, connected every building and office at the University. Today, the Office of Information Technology comprises six departments most of which are located in new offices at 701 Carnegie Center — that manage the University's academic and administrative technology needs.

Source: Jon Edwards, Office of Information Technology

More news on the Web

Visit the News at Princeton Web page at <www.princeton.edu/main/news> for other recent stories, including the following:

- Deirdre Moloney, who created and leads the fellowship advising program at George Mason University, has been appointed the director of fellowship advising at Princeton. Her appointment is effective July 1. Reporting to Senior Associate Dean of the College Nancy Kanach, Moloney is filling a new position in the Office of International Programs. Moloney has primary responsibility for overseeing and coordinating the advising for all major postgraduate fellowships and scholarships, as well as various undergraduate
- A new technique developed by Princeton engineers for producing electricity-conducting plastics could dramatically lower the cost of manufacturing solar panels. By overcoming technical hurdles to producing plastics that are translucent, malleable and able to conduct electricity, the researchers - led by Yueh-Lin Loo, an associate professor of chemical engineering — have opened the door to broader use of the materials in a wide range of electrical devices.
- A new technique for revealing images of hidden objects may one day allow pilots to peer through fog and doctors to see more precisely into the human body without surgery. Developed by Princeton engineers, the method relies on the surprising ability to clarify an image using rays of light that would typically make the
- The cartoonist Henry Martin, a 1948 graduate of Princeton, has donated nearly 700 original drawings along with some of his humor books to the Princeton University Library. Martin worked as a cartoonist and illustrator for more than 50 years, publishing in The New Yorker, Punch, Ladies' Home Journal, The Saturday Evening Post, the Princeton Alumni Weekly and many other magazines.

image unrecognizable, such as those scattered by clouds, human tissue or murky water.



Loo

The Board of Trustees has approved the promotions of 13 faculty members. The faculty members and their departments, by the academic rank to

Board approves 13 promotions

which they are being promoted, are: *Professor* — Rubén Gallo, Spanish and Portuguese languages and cultures, effective Feb. 1, 2010.

Associate professor (with continuing tenure) — Alexandre d'Aspremont, operations research and financial engineering, effective July 1, 2010; **Cristiano Galbiati**, physics, effective July 1, 2010; Asif Ghazanfar, psychology and the Princeton Neuroscience Institute, effective July 1, 2010; Amaney Jamal, politics, effective July 1, 2010;

Yibin Kang, molecular biology, effective Feb. 1, 2010; Simone Marchesi, French and Italian, effective July 1, 2010; Markus Prior, politics and public affairs, effective July 1, 2010; Susan Wheeler, creative writing in the Lewis Center for the Arts, effective July 1, 2010.

Assistant professor — Rupert Frank, mathematics, for a three-year term beginning July 2, 2010; Michael Hochman, mathematics, for a three-year term beginning July 2, 2010; Sergey Norin, mathematics, for a three-year term beginning July 2, 2010; Keren Yarhi-Milo, politics and international affairs, for a 3 1/2-year term effective Feb. 1, 2010. ♥



Lecture: "Practicing Fiction" Allegra Goodman, author 4:30 p.m. April 20 McCormick Hall, Room 101

NASSAUnotes

Communiversity celebration planned

The Communiversity celebration, which annually brings the town and University together for a day of performances, food, games and more, is planned for noon to 5 p.m., Saturday, April 24.

Scheduled to take place rain or shine on Nassau and Witherspoon streets and the campus, the event is sponsored by students at the University and the Arts Council of Princeton. Merchants, nonprofit organizations, musicians, performing and visual artists, food vendors and many University student organizations and performing groups will turn the area into a colorful fairground with events for students and families alike.

The Princeton University Band will kick off the festivities as it marches up Witherspoon Street beginning at

11:45 a.m. Campus Communiversity activities will feature: performance groups including the TapCats, Raks Odalisque,

Triple 8, Ballet Folklorico and the Princeton Tango Club; stu-

Noon to 5 p.m. April 24 Nassau and Witherspoon streets

dent organization booths with food, demonstrations and activities; sports clinics put on by University athletes on the Firestone Library green; and performances by the University's a cappella groups in the East Pyne arch.

The University's Chinese lion dancers will perform in front of the main stage on Nassau Street beginning at 2:15 p.m. The Davis International

Center will present a flag procession starting at 2:25 p.m. on the Nassau Street stage and ending on campus. International students will sponsor a "Global Village" featuring food, information booths, performances and artwork from around the world. The University Rotaract Club will exhibit a "shelter box" used to provide housing for world disaster relief efforts.

The event also will include: tours of the campus by the student-led Orange Key guide service; an organ concert at the University Chapel; children's crafts hosted by the Cotsen Children's Library and the Princeton University Art Museum; exhibitions of student work from the Lewis Center for the Arts; free bike repairs by the Cyclab; and visits from the University's tiger mascot and cheerleaders.

For more information on Communiversity weekend events that begin Friday, April 23, contact the Arts Council at 924-8777 or visit <www. artscouncilofprinceton.org>; for more information about Communiversity, also call the University's Office of Community and Regional Affairs at 258-5144. ♥

UPcoming

Lecture: "Perspectives on China's Transition"

Susan Thornton, U.S. State Department 4:30 p.m. April 21 Robertson Hall, Room 1

Symposium: "Architecture and Icon: A Symposium in Honor of **Slobodan Curcic**"

1 to 4:30 p.m. April 24 McCormick Hall, Room 101

Symposium: "Evolution, Ethics and Environment: Biological Perspectives on Achieving a **Sustainable Future**" 4 to 6 p.m. April 27

McCosh Hall, Room 50

Book talk: "Passing Strange: A Gilded Age Tale of Love and **Deception Across the Color Line**" Martha Sandweiss 4:30 p.m. April 28 Lewis Library, Room 138

For more, visit <www.princeton. edu/main/news/events>

Human genome project leader Lander to speak

Eric Lander, one of the principal leaders of the effort to discover the blueprint for the human genome, will speak on "Secrets of the Human Genome" at 8 p.m. Monday, April 19, in McCosh Hall, Room 50.

Lander, a 1978 Princeton graduate, is a geneticist, molecular biologist and mathematician. He directs the Broad Institute of the Massachusetts Institute of Technology and Harvard University.

In the 1980s, Lander joined with Professor David Botstein who currently directs Princeton's Lewis-Sigler Institute for Integrative Genomics and other col-



leagues to create the first practical plan to make and use a comprehensive genetic map of the human genome. Lander elucidated how to develop maps of complex, multi-gene diseases such as diabetes and heart disease.

In addition to performing large-scale genome sequencing, Lander and his Broad Institute colleagues have been a driving force in biomedical research.

Major studies include investigations into human genetic

8 p.m. April 19 McCosh Hall, Room 50

variation and its role in disease and treatment outcome, the molecular basis for human cancers and metabolic diseases, and the genetics and biology of infectious diseases.

Lander has received many honors for his work, including a MacArthur Foundation "genius grant." He currently is a co-chair of President Barack Obama's Council of Advisors on Science and Technology.

Lander's talk is designated as a Louis Clark Vanuxem Lecture sponsored by the University Public Lecture Series. ♥



ONLINE: More information library.princeton.edu/libraries/ cotsen/exhibitions2/Tigers/

celebration

of the Year of the Tiger on the

Chinese Zodiac, the Cotsen Children's Library has mounted an online exhibition of "Tigers in Picture Books." This collection pays tribute to Princeton's noble mascot in the many guises he has assumed in children's books from the Renaissance to the present day. Visitors to the Cotsen gallery may receive a complimentary copy of the library's publications, "Tigers" and "More Tigers," upon which the online exhibition was based. The tiger above appears in a 1963 work illustrated by Chinese artist Qinchu Guo.



A collection of European artwork donated

by art connoisseur and Transatlantic Review founder Joseph McCrindle is on view at the Princeton University Art Museum through June 13. Upon his death in 2008, McCrindle bequeathed to the museum both an important collection of European drawings and an endowment supporting student internships. The works include "Saint Jerome in His Study" (1528) by Joos van Cleve.

Journalists to discuss state of economy

Journalists Matthew Taibbi of Rolling Stone magazine and Gillian Tett of the Financial Times newspaper will discuss "The

Current State of the Economy' at 8 p.m. Wednesday,

8 p.m. April 28 McCosh Hall, Room 10

April 28, in McCosh Hall, Room 10. Taibbi is a contributing editor at

Rolling Stone. His reporting on the 2008 U.S. presidential campaign trail received the National Magazine Award for columns and commentary. He is the author of The New York Times bestseller "The Great Derangement."

Tett is the U.S. managing editor of the Financial Times. The author of the book "Fool's Gold," Tett has overseen coverage of the global financial markets for the Financial Times and was named journalist of the year at the British Press Awards in 2009.

The discussion is designated as a Stafford Little Lecture sponsored by the University Public Lecture Series.

April 19-May 2

Penn President Gutmann to discuss university leadership

Amy Gutmann, president of the University of Pennsylvania and former Princeton provost, will present a lecture titled "Leading Universities in the 21st Century: Chances and Challenges" at 4:30 p.m. Thursday, April 29, in McCosh Hall, Room 50.

The event is the James A. Moffett '29 Lecture in Ethics and marks the 20th anniversary of Princeton's University Center for Human Values. Gutmann was the center's founding director.

"It will be an honor to welcome Amy Gutmann back to the University to deliver the Moffett Lecture in Ethics and a pleasure to salute her role as founder of the University Center for Human Values," said Charles Beitz, the center's current director. "In the 20 years since its founding, the center has emerged as the country's leading interdisciplinary center for the study of human

values in public and private life. This would be hard to imagine without Amy's vision and energetic leadership."

Before assuming the presidency of the University of Pennsylvania in 2004, Gutmann served as Princeton's provost beginning in 2001 and a faculty member at the

University beginning in 1976. She is a prominent political philosopher, having written widely on democratic

theory, ethics in public policy, education and many other subjects. Among many other public service positions, she has

served since 2009 as chair of President Barack

4:30 p.m. April 29 McCosh Hall, Room 50

Obama's Presidential Commission for the Study of Bioethical Issues.

Established in 1990 through the support of Laurance S. Rockefeller, the University Center for Human Values fosters ongoing inquiry into important ethical issues in private and public life, and supports teaching, research and discussion of ethics and human values throughout the curriculum and across disciplines.

The Princeton University Orchestra,

under the direction of Michael Pratt, will close its season with concerts at 8 p.m. Friday and Saturday, April 23-24, in Richardson Auditorium, Alexander Hall. The orchestra will perform Gustav Mahler's monumental masterpiece, the Symphony No. 6 in A Minor (sometimes titled "The Tragic"). A portion of the proceeds will be sent to relief agencies working in Haiti. For tickets, visit <www.princeton.edu/utickets> or call 258-9220.



Fristfest events celebrate spring

Princeton students, faculty, staff and their families are invited to the Frist Campus Center to celebrate spring and the conclusion of the academic year at the annual Fristfest on Thursday, April 29, through Saturday, May 1.

Fristfest kicks off at 4 p.m. April 29 with an outdoor picnic and carnival on the Frist south lawn featuring live entertainment, games and giveaways. The New York City-based band Dende and Hahahaes, and two Princeton student groups, Funkmaster General and the Plagiarists, will perform.

Students with an active meal plan contract can swipe their TigerCard ID on the south lawn to receive food tickets for the picnic dinner. Non-meal

plan holders may use cash or Paw Points to purchase \$2

April 29-May 1 Frist Campus Center

food tickets in the Frist Food Gallery. Tickets may be purchased and are valid on April 29 only.

The celebration continues at noon April 30 with the "Iron Tiger Throw Down" culinary competition presented

by Dining Services in the Frist Food Gallery. Samples will be provided to audience members, who also will have an opportunity to vote for their favorite recipe.

A "Moonlight Movie" presentation of the horror-comedy film "Zombieland" will take place at 9 p.m. on the south lawn, with free refreshments.

Fristfest concludes May 1 with the Princeton University Wind Ensemble's "Concert Under the Stars" at 9 p.m. on the green in front of 1879 Hall. ♥

NONLINE: More information www.princeton.edu/frist

Science, engineering communication is focus of workshop

A workshop designed to help faculty, staff and students better explain their research to nonscientists and the media will be held from 9 a.m. to 4 p.m. Friday, April 23, in the Frist Campus Center, Room 330.

Hosted by the Princeton Center for Complex Materials, the workshop is tailored for members of the University community, but registration is open to the public. Registration must be completed by Monday, April 19, on the event website at <www.

princeton.edu/~pccm/outreach/ scicommworkshop>

The workshop will explore issues such as climate change, the teaching of evolution, the safety of vaccines and other scientific topics, and will address how to craft a message and prepare for media encounters.

Chris Mooney, a science journalist and visiting associate in Princeton's Center for Collaborative History, will speak at the workshop. Mooney is the author of "The Republican War on Science" and

"Storm World: Hurricanes, Politics and the Battle Over Global Warming." He

The Intersection, a Discover magazine blog, and also serves as a senior

writes for

9 a.m. to 4 p.m. April 23 Frist Campus Center, Room 330

correspondent for The American Prospect magazine and a contributing editor to Science Progress magazine.

CALENDARlinks

For broader listings of campus public events:

PUBLIC EVENTS CALENDAR

<www.princeton.edu/events>

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UNIVERSITY TICKETING

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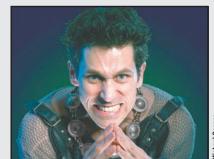
Lewis Center for the Arts

<www.princeton.edu/arts/events/calendar> 258-1500

<www.princeton.edu/~rbsc/exhibitions> 258-3181

McCarter Theatre

<www.mccarter.org> 258-2787



The McCarter Theatre Center presents "MacHomer" — Rick Miller's re-creation of the Shakespeare classic through the voices of "The Simpsons" - at 7:30 p.m. Friday, April 30.

Music Department

<www.princeton.edu/music> 258-4241

Office of Information Technology

<www.princeton.edu/~eos> 258-2949

Public Lecture Series

<lectures.princeton.edu>

President's Lecture Series <www.princeton.edu/president/

presidents_lecture_series> 258-6100

Princeton Institute for International and Regional Studies <www.princeton.edu/~piirs/calendars>

258-4851

Richardson Auditorium

<www.princeton.edu/richaud> 258-5000

School of Architecture

<soa.princeton.edu>

School of Engineering and Applied Science <www.princeton.edu/engineering/events>

Woodrow Wilson School of Public and International Affairs

<www.princeton.edu/events>

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University "A to Z" search page

<www.princeton.edu/main/tools/az> For audience members needing

assistance:

Office of Disability Services

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To submit "Nassau notes":

<www.princeton.edu/main/news/share/ submitevents>

Revealing the benefits of Colombian drug legalization

By Ushma Patel

he senior thesis often involves a moment of surprise for Princeton students — a late-night revelation, an insightful conversation with an adviser or an eye-opening encounter abroad. For Gustavo Silva Cano, it came when he realized his research supported drug legalization in Colombia, a conclusion opposing his personal beliefs.

"I was sort of mugged by reality, because I realized that prohibition has really high human costs," Silva Cano said. "That's one of the great things about the thesis — it's a great intellectual experience."

Silva Cano, who was born and raised in Bogota, Colombia, is majoring in the Woodrow Wilson School of Public and International Affairs, and pursuing a certificate in Latin American studies. His thesis is a cost-benefit analysis of drug prohibition and legalization in his home country.

During a summer internship with Colombia's high counselor for reintegration, Silva Cano was assigned to evaluate Colombia's drug crop eradication policy. The project, done after his sophomore year at Princeton, launched his interest in the topic, and he approached Professor Miguel Centeno last spring to serve as his thesis advisor.

"The idea sounded like an excellent one," said Centeno, a professor of sociology and international affairs. "It lent itself to the kind of analysis we're trying to teach here, to put a policy dilemma in context and play out the costs and benefits of the alternatives. Gustavo has a perfect case study of alternatives."

Silva Cano and Centeno came up with a dozen precise variables to consider, such as government defense expenditures, economic growth and homicide rates. Then Silva Cano worked to identify the current figures under prohibition and what the figures might be if all drugs were legalized in Colombia. His primary focus was on

coca crops and cocaine — the target of Colombia's "war on drugs."

In addition to documents he had from his internship, he utilized numerous sources to perform his own statistical analysis, including Colombian government databases and reports online, United Nations documents, U.S. government surveys, U.S. think be internally displaced, according to his analysis.

The potential costs of legalization included diplomatic isolation from the United States, and possibly economic sanctions and loss of American investment. Silva Cano also considered the health risks due to increased drug consumption in the country, but he

he said. "I don't think any government would want to leave that utilitarian calculus out of the question."

Centeno and Silva Cano have had weekly meetings to discuss research, analysis and drafts. Along the way, Centeno has recommended sources, given writing advice and — as a skeptic of any state's ability to effectively



Woodrow Wilson School concentrator Gustavo Silva Cano (left) conducted a cost-benefit analysis of drug prohibition and legalization in his home country of Colombia, working with adviser Miguel Centeno (right), a professor of sociology and international affairs.

tank reports, news reports, and scholarly books and journals.

Silva Cano found that Colombia spends approximately \$7 billion a year on its drug war, equal to what it spends on education or health care. Meanwhile, the war on drugs has resulted in many deaths, displacement, environmental damage, hostile occupations of the countryside by drug cartels and insurgencies, and pressure on cities

If drugs were legalized, those funds could be used for infrastructure, health care, education and balancing the federal budget, Silva Cano noted. The government also would be able to collect tax revenue on the sale of cocaine. About 5,000 fewer homicides would occur, and 100,000 fewer people would

said the benefits outweighed all of these costs.

"Before starting to write my thesis I was a staunch believer of prohibition. I thought the Colombian government had done a great job, and they actually have. It might be the only nation in the world recently that has had great success against drugs," Silva Cano said. But, he added, "there's no end in sight."

Silva Cano's thesis purposefully avoids ethical and moral issues while examining the political and economic factors that he feels should be part of policymaking decisions.

"Some people just believe that using drugs is morally wrong. I'm trying to make a utilitarian calculus and am saying, this is how much this policy costs," prohibit drugs — played devil's advocate to Silva Cano's arguments.

"I like Professor Centeno's hands-on approach," Silva Cano said. "He is so well regarded but also so approachable and so fun to work with."

Centeno said he had not studied drug legalization in depth, but his work on state-society interaction helped guide Silva Cano's work on what makes a state and its laws most effective. The rest was of his student's making.

"No one has written about the Colombian situation with such precision, detachment and so many variables," Centeno said. The final chapter synthesizing all of Silva Cano's findings is "masterful," Centeno said.

Looking at Colombian politics, Silva Cano acknowledges in his thesis that his recommendations are unlikely to happen anytime soon, as they are contrary to popular opinion in Colombia and abroad, and to politicians' stances at the executive and legislative levels.

After graduating from Princeton,
Silva Cano intends to attend the University of Pennsylvania Law School
and work in the United States for a few
years before returning to Colombia to
work in public policy or politics.

The senior thesis: Quintessentially Princeton

The capstone of Princeton students' academic journey is the senior thesis, an independent work that requires seniors to pursue original research and scholarship under the guidance of faculty advisers.

Research topics are inspired by learning experiences in and out of the classroom – on campus or around the world. Known as a quintessential part of

the Princeton experience, the senior thesis encourages students to develop as independent thinkers by tackling a rigorous intellectual challenge. This issue of the Princeton University Bulletin profiles four students who have met that challenge in the areas of public and international affairs, psychology, English, and civil and environmental engineering.

Silk

Continued from page 1

perceived and treated women, specifically the prevalence of the paternalistic "rest cure" about which Gilman wrote. This treatment prescribed isolation, a specific diet and complete bed rest for women with a broad range of unexplained symptoms.

Silk's thesis "actually defines a whole new literary genre: the supernatural rest cure story," said Diana Fuss, the Louis W. Fairchild '24 Professor of English, who is Silk's adviser. "Emily deftly shows how these late 19th- and early 20th-century ghost stories worked to complicate and even subvert dominant medical practices at the time. I have never read a senior thesis as ambitious and entertaining as this one. It tackles a whole range of difficult historical, literary and cultural questions with considerable grace, intelligence and style."

studied, "The Gospel" by Josephine Daskam Bacon, had just a single paragraph in an anthology written about it, she said. By combing through Bacon's many other writings, including newspaper pieces on women's roles in society in that period, Silk came up with a fresh analysis of the story. "The Gospel" tells the story of a woman who has a nervous collapse after being unable to cope with her domestic duties as a wife and mother. While taking the rest cure treatment, she meets the ghost of a former patient who attempts to convince her to accept a traditional domestic role rather than strive for intellectual engagement. Though the anthology deemed Bacon's story a positive portrayal of the rest cure, Silk asserts that the tale conveys pessimism about the treatment.

Silk got so wrapped up in her research on early American ghost stories that the topic also became a focus of another senior thesis she wrote — a

collections of poems for her certificate in the Program in Creative Writing.

Ten of the 31 poems in her creative thesis involve a character she invented named The Panoptic Man, who has supernatural powers. "He can see things others don't. He sees the future, and he talks to the Sandman and to vampires," Silk said. "I didn't plan for the two theses to be connected, but now I see a thematic overlap, which is cool. I like it when work in one class informs work in another class."

Tracy K. Smith, an assistant professor of creative writing in the Lewis Center for the Arts who advised Silk's creative thesis, called her poems "exhilarating — rich with music, insight and a rare inventive quality that often makes me feel like she is refashioning the English language into something sharper, stranger and somehow more true. Her Panoptic Man sequence is quirky, empathetic, unsettling and boldly beautiful."

Smith also lauded Silk's work ethic. "Her commitment to the discipline of crafting and recrafting poem after poem isn't just admirable; it's outright inspiring," she said.

Silk's passion for literature blossomed during her sophomore year in a class on English writers from the 14th to the 18th century, taught by Associate Professor of English Jeff Dolven.

"I saw how much fun it can be to dive into a text," Silk said. "The class made classics by authors that I wasn't initially excited about — Milton, Chaucer — come alive, and they are now among my favorite writers."

After graduation, Silk, who is from Basking Ridge, N.J., will be a Princeton Project 55 Fellow, working with the CityBridge Foundation in Washington, D.C. Silk will conduct research on best practices in education and put together reports with suggestions for improving aspects of the D.C. public school system. After that, she may pursue graduate school in American literature. •

Testing ways to encourage students to save energy

Eric Quiñones

ith dorm rooms mostly empty and a snowstorm blanketing the Princeton campus, senior Julia Yang and a hardy group of student environmentalists spent three hours on the first morning of winter break combing residential halls for signs of energy savings.

This effort was the centerpiece of Yang's senior thesis, in which she tested the effectiveness of behavioral messaging aimed at encouraging students to conserve resources. Yang, a psychology major who is pursuing a certificate in environmental studies, used a flier campaign to study whether manipulating how messages are presented would change student behavior.

"This was a really good field experiment for me, because it does have practical implications and it can be applied in so many ways on college campuses and with different environmental initiatives," she said.

Yang collaborated on the project with faculty adviser Elizabeth Levy Paluck, the Office of Sustainability, Students United for a Responsible Global Environment (SURGE) and the Department of Undergraduate Housing. In addition to providing insights into research on behavioral theories, Yang's thesis will be used as a model for continuing sustainability awareness endeavors at Princeton.

"It was a phenomenal effort and paved the way for future collaboration in the science and practice of sustainability campaigns on campus," said Paluck, an assistant professor of psychology and public affairs.

Toward the end of the fall semester, Yang worked with her collaborators to craft an e-mail that was sent by the housing office to residents of 716 dorm rooms seeking their participation in a "sustainability audit" of their rooms. The e-mail asked students to unplug their refrigerators and televisions as they left for break, building upon the "Pull the Plug!" campaign created in 2006 by SURGE and Greening Princeton, another student group.

Yang designed six fliers to hang on the doors of 472 rooms in 1901-Laughlin, Scully and Bloomberg halls and Forbes College whose residents agreed to participate in the audit. The fliers had the same visual design and roughly the same number of words, but each carried a different message framed to test certain behavioral theories.

To gauge the effectiveness of social norms messaging, which explores how people may conform to group identity, some fliers noted that 75 percent of all Princeton students or previous residents of a particular dorm room had "pulled the plug." Another flier said the Daily Princetonian student newspaper would publish the results of how many residents of a particular hall unplugged their appliances.

Yang also devised messaging to test prospect theory, a method typically used to examine economic decision-making behavior, by including the messages "Princeton will lose energy" or "Princeton will gain energy" if dorm residents unplugged. Other students received a generic flier that simply urged students to "save the environment," while others received no flier.

The project suffered a minor setback when a snowstorm hit campus as winter break began, leaving some students in their rooms temporarily and reducing the study's sample size. Yang's team — including 16 volunteers from student environmental groups, representatives from undergraduate housing and Shana Weber, manager



For her thesis, senior Julia Yang (left) tested the effectiveness of behavioral messaging with a flier campaign in four dorms that encouraged students to conserve energy. Yang conducted her experiment with help from adviser Elizabeth Levy Paluck (right), an assistant professor of psychology and public affairs, as well as student environmentalists, the Office of Sustainability and the Department of Undergraduate Housing.

Yang found that 38 percent of students who have a refrigerator or television in their rooms did unplug them.

tiative that people can

build upon next year,

it's still pretty useful,"

Yang said.

While there was not a major distinction in the effectiveness of social norms messaging versus prospect theory messaging, she found that students responded more strongly to both types of messaging than the generic flier or no flier.

"It was really rewarding to actually get results, to know that — no matter which one was most effective — my messages did have some kind of positive impact on energy conservation," she said.

Paluck said Yang's work was "original and rigorous."

"Julia's done an admirable job analyzing her results," she said, noting that Yang learned new techniques to examine complicated datasets. "She plowed through some dense statistical reading I gave to her, used graduate student help and worked with me on the analysis and interpretation."

Paluck added, "She designed the messages to retest some promising techniques and to test one theory (prospect theory) that, to our knowledge, has not been applied very often to sustainability behaviors. Both theories boosted unplugging in the dorms. We weren't sure what to expect, so this was an advance — food for thought, and for future testing."

Weber noted that Yang's research will benefit the Office of Sustainability's efforts to encourage individuals on campus to save energy.

"Work like this can give us a glimpse into how sustainability communication and education efforts on campus can actually result in behavior change,"

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Connecting art and engineering in Streicker Bridge critique

By Chris Emery

or his senior thesis project, Kenneth Liew found a bridge that connects his interests in art and engineering.

Combining concepts from architecture, sociology and engineering, Liew assessed whether Streicker Bridge, the new pedestrian walkway arching across Washington Road that will open in the fall, succeeds both as a work of art and as a functional structure.

His approach included working with his thesis adviser, Branko Glišic, an assistant professor of civil and environmental engineering, to use cutting-edge sensors to monitor the structural health of the bridge the way a doctor might measure heart rate or blood pressure to assess a patient.

"The bridge is an important piece of structural art, and we can use structural health monitoring to ensure its long-term existence on campus," said Liew, a civil and environmental engineering major who also is pursuing a certificate in the Program in Architecture and Engineering.

Liew was intrigued when he learned that Streicker Bridge was designed by Christian Menn, an influential Swiss bridge engineer whose work Liew had studied under David Billington, an emeritus Princeton engineering professor. Menn's bridges blend artistic flair with innovative concrete engineering to assure structural integrity, prompting Billington to label him a "structural artist."

Liew, who grew up New York City, one of the world capitals of artful structures, has long been fascinated by the nexus of aesthetics and function. "As a kid I always liked to build with Legos and work with my hands," Liew said. "I wanted to do something creative in my career. So engineering and architecture seemed like the perfect combination."

For his thesis, Liew explored the social importance of the bridge, including its functional and symbolic role connecting various scientific disciplines on campus. The bridge will link Icahn Laboratory, which houses the Lewis-Sigler Institute for Integrative Genomics, and the new Neuroscience and Psychology Buildings, all situated on the west side of Washington Road, with the new Chemistry Building and



Kenneth Liew (right) focused his senior thesis project on an assessment of Streicker Bridge that brought together concepts from architecture, sociology and engineering. Liew's thesis stemmed from a project led by his adviser, Branko Glišic (left), an assistant professor of civil and environmental engineering, to monitor the structural health of the new pedestrian bridge.

Jadwin Hall, home of the Department of Physics, on the east side.

"The bridge's design, a single span in the middle that splits in two on either end, symbolizes this connection," Liew said. "But it's a difficult shape to engineer."

To monitor the structural health of the bridge as it settles and ages, Glišic oversaw the installation of special sensors in the bridge as it was being constructed. The sensors measure temperature, strain and vibration in the concrete, allowing engineers to determine if the bridge is behaving as expected from its design.

Interest in such techniques has grown in response to recent unexpected failures of large structures, such as the 2007 collapse of the Interstate-35W bridge spanning the Mississippi River in Minneapolis, which have raised concerns about the safety of aging U.S. infrastructure.

"I decided to use Streicker Bridge as a laboratory for structural health monitoring," Glišic said. "It was a great opportunity, since we have limited places where we can place sensors on older bridges. In this case we will have data that give us a view into the entire history and lifespan of the bridge."

The bridge is outfitted with some 100 point sensors, together capable of taking about 25,000 measurements per second. Also running through the concrete is a 122-foot-long, cable-like sensor that takes measurements at 800

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on top of a train car with her 7-year-old twin siblings, Hee-Soo and Ji-Young. They have joined the throngs of refugees fleeing south on the eve of the Korean War, piling onto a train so packed that they must ride on top. When the train stops short, the twins are thrown to the ground. The wheels have severed Hee-Soo's legs and Ji-Young's foot. Hee-Soo is dead. June watches helplessly as the life drains from Ji-Young's body.

The scene was inspired by the experience of Lee's father, who witnessed his younger brother falling from a boxcar and losing his life as the family left Pyongyang, now the capital of North Korea, in 1950. Lee was born in Seoul and emigrated from South Korea to the United States when he was 3, but didn't know the details of his father's experiences before the war until he was studying the subject in a college course and pressed his father for details. The story of his uncle's death troubled Lee for years, and eventually formed the catalyst for "The Surrendered."

"The kernel of that story, which had really haunted me from the time I heard it, was something I wanted to honor and retell," said Lee, who has taught at Princeton since 2002.

Nonetheless, he put his notes aside several times to work on other novels. "I think for me this was certainly the most difficult time I've had writing a book," Lee said. "I felt like I was on a mission to Mars and I had nothing with me."

The novel was challenging in some ways because it departs from the approach of his previous works, which were in-depth psychological investigations of a central character, told in the first person. Lee started writing "The Surrendered" with a single main character — Hector, a Korean War veteran. But he eventually expanded it to become the entwined stories, over 30 years and three continents, of three characters whose lives have been shattered and rebuilt in the shadow of the Korean War.

"Chang-rae Lee is a true author of globalization," said Edmund White, a professor of creative writing in the Lewis Center. "All of his books, but especially his latest, 'The Surrendered' — which moves from Korea to New Jersey and New York and ends in Italy — reveal his grasp of the international situation and the tragedies of contemporary war. As a friend, teacher and writer, Chang is gentle but strong, wry but serious, boyishly curious but completely adult."

The wars in Afghanistan and Iraq became "the spiritual and emotional backdrop" to the writing of "The Surrendered," Lee said. "I think the wars — and 9/11 — informed the novel in a way I hadn't really expected or counted on. Those events encroach upon our lives, consciously or unconsciously."

As he shaped his characters, Lee found himself studying their imagined physical dimensions much the way a visual artist would. Besides Hector there is June, the Korean orphan who in adulthood is ravaged by stomach cancer, and Sylvie, the wife of a missionary who crosses paths with June and Hector at the orphanage she helps run in Korea after the war.

"I saw myself in the position of a sculptor, rather than a writer, really looking at what I imagined them to be on the outside and inside, in a way that I hadn't really looked at characters before," he said. "Maybe

it was a different way to see usage on their bodies, and wounds."

He also researched the Korean War, mainly by reading first-person accounts and studying newspaper photographs from the period, especially images of Korean refugees and ruined Korean villages. To write one of the novel's climactic scenes, Lee traveled to Italy to visit an astonishing tribute to war: a chapel in the village of Solferino in which floor-to-ceiling shelves along every wall are stacked with the skulls and bones of soldiers who died in the 1859 Battle of Solferino, a decisive conflict in Italy's history.

Lee was struck by the hue of the chapel, which

he describes in "The Surrendered" as "awash in a light pewter shade, this rubbed, high-burnished grayness."

"The chapel was shockingly startling and impressive, and made sense of a lot of things I was thinking about" in writing the novel, Lee said. He came to see the church's color and tone as "the hue of the book, of the characters and their emotions," he said.

The novel's precise, often elegiac prose was not arrived at easily.

"The way I write is, it's methodical to the point of pathology," he said. "I work through every sentence over and over again — 10 times, 20 times. I can't seem to move on until I get each sentence the way I want to leave it, until I get it — I don't know if 'right' is the right word — but I really work in those units. I like to put a lot of pressure and attention on every sentence, and I really can't move on until I'm satisfied by the previous sentence." Lee acknowledges that his method "is not a great way to write long novels — it's kind of torture. I don't recommend it to my students."

Examining fiction, sentence by sentence

What he does stress in the classroom is that the most important element of learning to write fiction is studying how others write.

hang-rae Lee will read from his new novel, "The Surrendered," at 4:30 p.m.

creative writing at the University this year. It is free and open to the public.

For more information, visit <www.princeton.edu/arts>.

Wednesday, April 28, in the Stewart Theater at the Lewis Center for the Arts, 185

He will be joined by poet and Princeton alumnus W.S. Merwin, who will read from his

work. The event is part of a yearlong reading series celebrating the 70th anniversary of



In the classroom, Chang-rae Lee conveys to students that the most important element of learning to write fiction is studying how others write. "To really try to take apart what happens, sentence by sentence by sentence, you just need to read very carefully, and with a different kind of hat on," Lee said.

"There are no names for the boys, no coherent identities," pointed out junior Johannes Muenzel.

"If there isn't any differentiation, what's the effect of that?" Lee asked.

The discussion shifted to the story's point of view. "I perceived the house as being the protagonist,"

said senior Janet Tambasco.
"That's a great idea," Lee said. He asked the students about the story's refrain, "Boys enter the

students about the story's refrain, "Boys enter the house."

"What is that doing for the story?" Lee asked.

"Why does he have to report it?" For every story.

"Why does he have to repeat it?" For every story, said Lee, the reader must answer the question: Why does the author like it this way? "It feels like an English class in some ways, and I

really appreciate that," said junior Chloe Hall after class. "There's a lot to learn from studying more experienced writers."

For sophomore Zack Newick, who took Lee's "Introduction to Fiction" class last fall, reading short fiction by Junot Díaz, Richard Ford and Susan Minot, among others, for the class helped him appreciate "how differently one could approach the art form," Newick said.

And Lee's copious notes on Newick's stories were "especially helpful in showing me how I could chan-

nel my highly stylized voice into the constraints of narrative," Newick said.

Sophomore Jenna Devine, who also took Lee's "Introduction to Fiction" class, said Lee's "attention to detail and ability to pinpoint exactly what your piece needs is amazing."

At times, Lee finds he needs to gently nudge students to explore darker themes in their fiction, such

as betrayal, addiction or violence, some of the themes in "The Surrendered."

"Sometimes students seem shy about writing about people who do the wrong thing — we're all taught to do the right thing and focus on the right thing," Lee said. "But all of literature is about people who do the wrong thing, despite themselves. What would the story be if they did the right thing? No story at all. Fiction wants to look at all the things that go wrong." ▼

On a Wednesday afternoon in February, Lee's "Advanced Fiction" class gathered in his office, eight students arranged around Lee on couches and chairs.

students arranged around Lee on couches and chairs. Before workshopping several student pieces, the class discussed Rick Moody's "Boys," a short story about childhood and growing up that uses the repetition of a phrase to move the characters through their lives.

"Let's just take apart that word: 'boys,'" Lee began. "What is this word? Who are these people? Maybe we can unpack it."

Liew

 $Continued\ from\ page\ 7$

additional points. This allows the engineers to collect large amounts of data and compare the actual performance of the bridge with computer simulations of how it is supposed to behave. "The sensors serve as a kind of nervous system for the structure," Glišic said. "They tell you when something is wrong."

Although the sensors measure a range of parameters, Liew's project has focused on tracking the changes in strain and temperature in the concrete to see if they match with the predictions of the designers. Daily and seasonal temperature changes cause bridges to alter shape, potentially stressing the structure in surprising ways. "Structures move a lot more than people think they do," Glišic said. "A car bridge, for

instance, moves far more from daily temperature changes than from the weight of the vehicles."

Liew combined his preliminary physical assessment based on the sensor data with his study of the economic, social and artistic values of the structure, and used these criteria to measure Streicker against similar bridges. "Compared with other bridges, its cost is warranted based on its functional and social value," he said. "But it's also exceptionally elegant."

Liew said his interest in the design of objects that people put to practical daily use has extended to an interest in furniture, which, like well-designed buildings and bridges, can merge structural soundness and elegance. With graduation approaching, he is applying to work for product-design firms where he can continue to mesh art and engineering.

"I came away from my thesis with a better appreciation of structures in general," he said. "A lot more goes into them than I'd expected." \blacktriangledown

Yang

Continued from page 7

Weber said. "The more we can partner with students and faculty who are interested in researching these ideas, the more effective we will be in achieving the culture shift needed to reach our aggressive sustainability goals."

Yang, who is from Silver Spring, Md., currently is exploring her postgraduate options and may pursue environmental law studies after a few years in the work force. ♥

International

Continued from page 2

of Davies, who worked with history professor Jeremy Adelman, the inaugural director of Princeton's Council on International Teaching and Research, to develop a plan for better serving Princeton's international students and scholars.

Davies and Adelman have consulted with a variety of constituents in shaping their plan, including students, staff, faculty, alumni and members of the Friends of the Davis International Center. They also looked at best practices used at other institutions.

To read more about the changes, as well as a story about Chow's retirement, visit <www.princeton.edu/main/news>.