Joshua Plotkin, the Martin Meyerson Assistant Professor in Interdisciplinary Studies, was one of 16 researchers in the United States selected for a Packard Fellowship for Science and Engineering. Plotkin holds appointments in the Department of Biology and in Computer and Information Science in the School of Engineering and Applied Science. Using math and computation, his research focuses on population genetics with the goal of understanding how organisms evolve at the molecular level.

The Packard Fellowship is one of the most prestigious awards for young faculty, providing $875,000 in unrestricted funds. “Each year the Packard Foundation is honored to support a cadre of innovative young scientists and engineers who are attacking some of the most important research questions of our time,” said foundation chair Lynne Orr. “Their research, and the talented students who will work in their research groups, will continue to have a profound impact … for years to come.”

Prestigious scholarships were awarded to a senior and a recent graduate of the School of Arts and Sciences.

Sarah-Jane Littleford, C’09, was named a Rhodes Scholar and will travel to the University of Oxford for graduate study. A citizen of Zimbabwe, Littleford graduated magna cum laude with an individualized double major in sustainable development and environmental studies. She was the student speaker at last year’s College graduation ceremony and has been working in Penn’s Office of Sustainability, where she assisted in the development of the University’s Climate Action Plan. At Oxford, Littleford plans to earn a degree in the Geography and the Environment program.

Senior Joshua Bennett received a Marshall Scholarship, which funds graduate studies in the United Kingdom. He is completing majors in Africana studies and English. Bennett is a member of the Excelano Project’s spoken-word group, co-founder of the Penn NAACP chapter, co-founder and chair of the Black Men United advocacy group and an editor of the undergraduate journal The Esu Review (see p. 4). Last spring, he performed at the White House Evening of Poetry, Music and the Spoken Word event, where he received a standing ovation from the First Family and 200 guests for his poem “Tamara’s Opus,” an account of his struggle to communicate with his deaf sister.
While economic troubles continue to command headlines, Penn students got a broader view of economic change when Lawrence Summers, Director of the National Economic Council and Assistant to the President for Economic Policy, delivered the 2009 Granoff Forum lecture last October.

When books about our era are written 300 years from now, Summers asked the audience, “What will history say? What will the big stories be?” He noted the unchanged standard of living for much of human history, from ancient Athens to pre-Industrial-Revolution Britain, and contrasted it with the economic growth occurring now. “It’s possible to imagine,” he said, “that within a single 70-year human lifespan, at seven-percent-a-year growth, people will see standards of living rise a hundredfold. … All this for billions of people will, I suggest, be the dominant story that history records from our time. It has the potential to be a staggeringly positive story of human emancipation and betterment.”

Economic change of this magnitude can’t help but create instability, he said, advising that the major challenge confronting world leaders is “how the global system accommodates to these tectonic shifts which are underway.” Thus, according to Summers, the significance of moving beyond the G7 to the G20 as the central global economic body and the need to address climate change while recognizing the legitimacy of the developing world’s interest in continuing to raise living standards for all peoples.

To view the Granoff Forum lecture, visit www.sas.upenn.edu/granoff2009.
Seniors Eric Augenbraun, Joshua Bennett, Jon Howard, Cami King and Chloe Wayne have launched the first undergraduate journal of Africana studies in the United States. Called The Esu Review (for a central character in Yoruba and African-American literary traditions), the journal is for students from universities across the nation to publish work about Africana topics.

“We recognized that there was no undergraduate journal of Africana studies anywhere that we could find,” Bennett says. “We thought that Esu would be a great intervention in the field and would serve primarily as a space for folks in the field to have a place to sound off.”

The journal is funded by the Center for Africana Studies, and submissions are reviewed by an editorial board composed of students and faculty. The first issue, which came out this past fall, featured creative and scholarly work, including papers exploring disfigurement as a metaphor in African-American literature, and poetry about Jackie Robinson and gun violence in Minneapolis. “I think Africana studies is inherently interdisciplinary,” says Bennett, “and I’m really proud that this is reflected in the journal.”

Sohani Amarasekera has been recognized as one of Glamour magazine’s “Top 10 College Women” and was featured in its October issue as “The Visionary.” A pre-med student majoring in biology and sociology, Amarasekera founded a clinic in Colombo, Sri Lanka, that provides low-income patients with free-of-charge diagnostic screenings for diabetic retinopathy, an eye disease caused by complications from diabetes. She collaborated with the Sri Lankan Ministry of Health and local physicians to open the Iragani Perera Eye Clinic for Diabetic Retinopathy in September 2008. The clinic screens approximately 600 patients a month and also provides community education services about risk factors for diabetes.

“I was able to build on what I’ve been learning at Penn,” says the College senior. “I want to understand the social and biological risk factors for various diseases and figure out how to make health services more accessible. I have a lot more to learn, but I now have the skill set to recognize a problem on an international level and figure out how to do something about it.”

The Glamour award came with a cash prize, which Amarasekera donated to the clinic, and the publicity garnered her an invitation to blog for the Huffington Post. Amarasekera is now applying to graduate programs in international health and advising others in Sri Lanka who are looking to start new clinics based on her model.
One day, Justin McDaniel went to the abbot of a forest monastery, which was on an island in a river along the Thai-Lao border. People called it Island Temple. McDaniel, an associate professor of religious studies, was in his early 20s and a monk there. One of his jobs was to bail out the rainwater that filled the canoe to the brim at night. It was a form of meditation training—437 bails every morning. So he said to the abbot, after doing three bows, “I have a great idea.”

“You’re not supposed to speak, unless spoken to,” the old man admonished. The abbot was then 78 and had come from Laos to the monastery at age 11. He was tough and direct and called the young monk from America falang (“white person”).

“What’s your great idea?” the abbot softened, spitting out betel-nut juice.

“At night,” McDaniel explained, “drag the canoe up on the shore and flip it over. Then you don’t have to bail it.”

“That’s fascinating,” the abbot said. “Good idea. You’d think we would have thought of it. But do you know why we don’t need to do that?”

“Why?”

“Because we have falang to bail out the boat. So, Bai (“Go away”)!"

After finishing an undergraduate degree at Boston College, McDaniel traveled to Thailand. For young men there, spending time in a Buddhist monastery—a day, a few weeks or months—is a rite of passage. He’d been teaching in Thailand for two and a half years, and orange-robed monks were everywhere. “I figured I do everything else Thais do,” he explained of his decision to become a monk. “I learned how to go shrimping. I learned to kickbox. I’d like to say it was a spiritual calling, but I just wanted to join in with what my friends were doing.”

He stayed at Island Temple for the traditional monsoon-season retreat, chanting, meditating, performing rituals, teaching English and sometimes doing weddings, cremations or assorted protective blessings for the locals. The monks slept outside at night for four hours, wrapped in their robes on a wooden platform with a wooden pillow and a mosquito net. They ate once a day and begged for their food, paddling to the mainland, then walking, in ranks and in silence, through the village—1,782 paces each day. The villagers put food into the monks’ bowls. “My abbot was really into mixing everything up,” McDaniel says, “and then you dump water on top of it to make it like a disgusting soup, because it’s about nourishment, not enjoyment. And he was very strict on the number of times you chew”—12 chews for each spoonful.

When he first went to Thailand, McDaniel weighed 145 pounds. He came away from Island Temple with a few snake bites and malaria, and he had dropped down to 123 pounds. “I was too thin, but I felt very strong, very awake,” McDaniel says, “and it ended up making me want to study languages, especially Pali,” which is one of the oldest Buddhist languages.

McDaniel came to Penn last fall and teaches Buddhist studies, specializing in practices and beliefs of Southeast Asia. He understands Sanskrit, Pali, Lao, Thai and Middle Indic languages, and has written a study of Buddhist monastic education in Laos and Thailand, Gathering Leaves and Lifting Words. He has recently finished writing another book titled The Ghost and the Monk: Thai Buddhist Histories, Modernities and Cacophonies.

McDaniel considers his grizzled abbot “a great man,” and is even fond of him. “He was never easy on me, but he never made me feel that I wasn’t a full-fledged monk.” Imagine what it’s like to spend your life like that, he proposes, living in a jungle without shoes and chewing on betel nut. “There was no artifice or formality. To him, things are what they are—life without adjectives. I’m going to visit him again next year. He’s still rough with me, but he always wants to see pictures of my kids, which is very sweet.”
As advances in neuroscience further our understanding of the brain, they often raise as many questions as they answer. The ethical, legal and social implications of brain science in areas such as the biological basis of criminal behavior or artificial brain enhancement are vast. Penn’s recently launched Center for Neuroscience and Society (CNS) aims to understand the impact of discoveries and to encourage the responsible use of neuroscience for the benefit of humanity.

Martha Farah, the Walter H. Annenberg Professor of Natural Sciences in the Department of Psychology, leads the new center as director. Farah, who is also director of the Center for Cognitive Neuroscience, has conducted extensive research that applies the methods and insights of neuroscience to societal issues.

For nearly a decade, scientist Sarah Tishkoff has been venturing into the bush country of Africa, collecting more than 7,000 DNA samples from 100-plus ethnic groups. Her efforts have yielded the world’s most extensive DNA database, which now provides information for new insights into human origins and migration out of Africa, population history (and prehistory) of peoples within Africa, the genetic basis of resistance to infectious diseases, and much more. Last fall, the National Institutes of Health officially took notice of Tishkoff’s ambitious and trailblazing research, presenting her with its Pioneer Award.

Tishkoff is the David and Lyn Silfen University Associate Professor and holds a joint appointment in the Department of Biology in the School of Arts and Sciences, and in the Department of Genetics in the School of Medicine. The NIH award provides support—$2.5 million over five years—to “individual scientists of exceptional creativity who propose pioneering and possibly transforming approaches to major challenges.”

“One of the major challenges of the post-genomic era,” Tishkoff says, “is understanding the complex web of genetic, developmental, physiological and environmental interactions underlying continuous trait variation, including susceptibility to disease. … This work will produce fundamental insights into the genetic, epi-genetic and environmental factors that play a role in health and disease, and will expand our understanding of human evolutionary history.”

CNS draws on faculty from the School of Arts and Sciences as well as from the schools of Medicine, Law, and Engineering and Applied Science, bringing together many perspectives. The center expects to extend its reach beyond academia and engage policy-makers, advocacy groups, industry and professionals in the full range of fields affected by neuroscience progress.

“Neuroscience is giving us increasingly powerful methods for understanding, predicting and manipulating behavior,” Farah says. “Every sphere of life in which the human mind plays a central role will be touched by these advances. We are fortunate at Penn to have the largest and most accomplished group of scholars anywhere in the world working on issues of neuroscience and society.”