New Chemistry Building reflects its environment

Ruth Stevens

While the sheer size of Princeton's new Chemistry Building is striking, the structure at the same time has a way of fusing with its surroundings — its glass façade reflecting the nearby woodlands and stream valley leading to Lake Carnegie. At 265,000 gross square feet, it will be the largest single academic building, excluding Firestone Library, on the University’s campus when completed this fall after three years of construction. Architects and planners have optimized energy efficiency by incorporating state-of-the-art sustainability features throughout the structure. The exterior glazing, for example, has sunscreens to optimize ambient day-lighting of interior spaces while controlling heat gain. This system also will be linked with sensors to control dimmable electric lighting.

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Shapiro brings scientific analysis to terrorism and counterterrorism research

Ushma Patel

As a graduate student a few years ago, Jacob Shapiro worked with a colleague to get internal documents from al-Qaida released from a U.S. government database. The files didn't reveal national security secrets — but they did portray the terrorist organization as a bureaucracy with plenty of red tape.

"This stuff was very useful in terms of dehumanizing these groups, because you see them arguing about the formatting of expense reports and other mundane issues," said Shapiro, an assistant professor of politics and international affairs in the Woodrow Wilson School of Public and International Affairs.

This data- and document-driven approach exemplifies Shapiro's work on the organization of terrorist groups and counterterrorism. Shapiro, who joined the Princeton faculty in 2008, has co-founded the Empirical Studies of Conflict Project to make more data about conflict available for research. He is collaborating with individuals in academia, government and the military on the project, through which he also hopes to inform public policy decision-making.

The group's primary research project examines the relationship between terrorism, governance and development. Funded by an $8.6 million grant from the Defense Department, it involves data analysis, surveys and field experiments, and he does both," Widner said. "There are a lot of surveys and experiments being done around the world, but very few are in areas of hard conflict. It’s hard to do and hard to do it well."

Building data
Shapiro and a friend, U.S. Army Col. Joseph Felter, had been thinking about creating the Empirical Studies of Conflict Project for about five years before it became a reality in 2009. In graduate school, Shapiro was discouraged from studying terrorism because of the difficulty of getting good data. "Lots of the intellectual brainpower that we have in the country isn't applied to studying conflict, because to work on it seriously requires a one- to two-year investment just in building data before you even get into doing the analysis," he said.

Shapiro received his Ph.D. in political science from Stanford University in 2007. He had been a research fellow at the Combating Terrorism Center at the U.S. Military Academy, was awarded fellowships by Stanford's Center for International Security and Cooperation and the Stanford Center on International Conflict and Negotiation, and had served in the U.S. Navy and Naval Reserve.

His primary collaborators on the Empirical Studies of Conflict Project are Felter, who co-directs the project; Eli Berman, an associate professor of economics at the University of California-San Diego; David Laitin, the James T. Watkins IV and Elise Watkins Professor of Political Science at Stanford, Jeremy Weinstein; Elie F. Berman, an associate professor of political science at Stanford; and Jason Lyall, a former Princeton assistant professor of politics and international affairs who is now an associate professor of political science at Stanford.

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What's inside?

Botstein wins Albany Prize for genomics work
Irreverent filmmaker John Waters to speak
Scientists test Einstein’s theory at cosmic scales

Bridge Year Program
students finding their way in the world
Memorial service for Kelley planned

A memorial service for Stanley Kelley Jr., Princeton professor emeritus of politics, is set for 1 p.m. Saturday, March 27, in the University Chapel. A reception will follow in the Chancellor Green Rotunda.

Kelley left an indelible mark on the University after chairing a key committee on governance in the late 1960s, helping to instill a more open process and greater participation by students and non-tenured faculty members. Kelley died Jan. 17 at age 83. A full obituary is available at <www.princeton.edu/main/news/archive/S26/39/19686/>.

The meeting also will include a panel discussion by faculty and students on opportunities for intellectual life outside the classroom. Emily Shandley, associate director of University Scheduling, will present on radical new models of campuswide public events calendar, which is scheduled to go live this spring.

In addition, the council will vote on an amendment to the charter regarding USG and CPUC election procedures.
Botstein wins Albany Prize for role in mapping human genome

By the numbers

Princeton has a rich history of scientific inventions and has won renown as a center for groundbreaking research in the sciences and engineering.

• In 2009, Princeton faculty, staff and students from the main campus and the Princeton Plasma Physics Laboratory (PPPL) disclosed 77 new inventions that resulted from their research programs. Through the Office of Technology Licensing, 14 of the inventions were licensed or optioned and 31 patents were issued. About $63 million came to the University in 2009 as a result of technology transfer, or funds that were payment for licenses on research. The shortest period from filing a patent to receiving one was one year and eight months; the longest was six years. One hundred and seven patents were applied for during 2009, covering inventions in biology, chemistry, engineering, physics and psychology.
• The University received $158 million from government, corporate and foundation sources for research support last year. More than 120 corporations supported Princeton research during 2009 through gifts, grants and collaborations. The management of research funding and other aspects of commercializing technology developed at Princeton is overseen by the University's Office of the Dean for Research and its offices of corporate and foundation relations, research and project administration, and technology licensing.
• On Dec. 18, Princeton celebrated its 250th anniversary of discovery at an event designed to highlight inventions of the present and commemorate past achievements. At “Celebrate Princeton Invention,” held in Chancellor Green, 321 inventors, including faculty members, research professionals and students, were recognized for licensing inventions, applying for patents, having a successful issued or disclosing new technologies. More than 200 people from the campus and private industry attended. Inventions were presented by eight faculty members and their research teams representing the Princeton Center for Theoretical Science, PPPL, the Princeton Institute for the Science and Technology of the Extreme Frontiers, the departments of chemistry, computer science, electrical engineering, mechanical and aerospace engineering, and physics.

Profiles of several Princeton inventors and brief descriptions of their work can be found at <www.princeton.edu/main/news/archives/526/14/17040.html>. Those inventors include:

TOP (from left): John Groves; Vivak Pai and Larry Peterson; and Andrew Bocarsly
MIDDLE (from left): Paul Steinhardt, Salvatore Torquato and Marian Flenres; and Charles Gentle
BOTTOM (from left): Craig Arnold; Edward Taylor; and Claire Gmachl
Evolution of infectious disease is lecture topic

Andrew Read, an entomologist and biologist at Pennsylvania State University, will give a talk on "The Selfish Germ: The Future of Infectious Disease in a Pharmaceutical Age" at 4:30 p.m. Tuesday, March 23, in 101 Friend Center.

Read studies the ecology and evolution of infectious diseases. He is examining whether medical science is spurring the evolution of more virulent germs andwhat effect a malaria vaccine will have upon the evolution of the parasite causing the disease. He also is studying whether scientists can slow down the evolution of drug-resistant microbes and halt the development of insecticide-resistant mosquitoes.

Israel's U.N. ambassador to speak

Xie Feng, deputy chief of mission of the Chinese Embassy in Washington, D.C., will discuss "U.S.-China Relations" at 4:30 p.m. Wednesday, March 24, in Dodds Auditorium, Robertson Hall.

Xie has served in the Chinese foreign service since 1986. His work has centered on North American affairs, with most of his foreign posts located in the United States. His previous appointments include serving as director of the U.S. Affairs Office and deputy director general of the Department of North American and Oceanic Affairs within the Ministry of Foreign Affairs.

The talk is sponsored by the Woodrow Wilson School of Public and International Affairs and the Princeton-Harvard China and the World Program.

"Treasure Island," the classic tale of treasure and treachery by Robert Louis Stevenson, is the focus of this year's Princyclopedia, an interactive book convention hosted annually by the Cotsen Children's Library. The all-ages event will take place from 10 a.m. to 3 p.m. Saturday, March 27, in Dillon Gymnasium. Dana Sheridan (pictured), the library's education and outreach coordinator, and the Cotsen staff will lead visitors through hands-on projects, activities and demonstrations.

"This Filthy World," a presentation by film director John Waters that will be part of the 101 Friend Center lecture program, is set for 8 p.m. Thursday, March 25, in McCosh 50.

Waters will speak about the formative influences on his career, Hollywood, the art world, social taboos and modern culture in general.

Waters began his career making low-budget underground films. His first full-length feature film, "Mondo Trasho," appeared in 1969. He first came to public attention with "Pink Flamingos" (1972), "Female Trouble" (1974), "Desperate Living" (1977) and "Polyester" (1981). Waters then entered the mainstream with "Hairspray" (1988) and "Cry-Baby" (1990), which were later adapted to the stage. Those successes were followed by "Serial Mom" (1994), "Pecker" (1998), "Cecil B. DeMented" (2000) and "A Dirty Shame" (2004).

Waters writes all his screenplays and is the author of several books, including "Crockpot: The Obsessions of John Waters" (2000). In addition, he is a photographer whose work appears internationally in galleries and art museums.

The event is designated as a Spencer Trask Lecture sponsored by the University Public Lecture Series and the Performance Central program of the Lewis Center for the Arts.
NetApp chair to speak on technology leadership

Dan Warmenhoven, a Princeton alumnus who is chairman of the board of directors and executive chairman of NetApp, a leading computer storage and data management company, will discuss success in the technology industry at 4:30 p.m. Tuesday, March 23, in the Friend Center Convocation Room.

The talk is part of the “Leadership in a Technological World” lecture series sponsored by the Keller Center for Innovation in Engineering Education. Warmenhoven, a 1972 Princeton graduate, previously served as CEO of NetApp from 2003 to 2009 and as president and CEO from 1994 to 2005. Last year he received the Morgan Stanley Leadership Award for Global Commerce.

Conference explores funding of public higher education

“How to Fix a Broken System: Funding Public Higher Education and Making It More Productive” is the topic of a conference scheduled for 8:30 a.m. to 1 p.m. Friday, April 2, in Dodds Auditorium, Robertson Hall. The conference will explore how college education amid declining revenue and rising demand and how to improve access and affordability while maintaining accountability.

Jackson and West reflect on “Problem of Black Suffering”

Two leading figures in religious and cultural studies, the University of Michigan’s Sherman Jackson and Princeton’s Cornel West, will present a public dialogue at 4:30 p.m. Monday, March 29, in Room 104 of the Fields Center for Equality and Cultural Understanding, 58 Prospect Ave.

The event is titled “Reflections on the Problem of Black Suffering: A Conversation With Professor Sherman Jackson and Professor Cornel West.” It is sponsored by the Muslim Student Life, the Fields Center, the Center for African American Studies, the Muslim Student Association, the Black Student Union and the Department of Near Eastern Studies.
Scientists say Einstein’s theory applies beyond solar system

**Kitta MacPherson**

A team led by Princeton scientists has tested Albert Einstein’s theory of general relativity to see if it holds true at cosmic scales. After two years of analyzing astronomical data, the scientists have concluded that Einstein’s theory, which describes the interplay between gravity and space, works as well in vast distances as in more local regions of space.

The scientists’ analysis of more than 70,000 galaxies demonstrates that the universe — at least up to a distance of 3.5 billion light years from Earth — plays by the rules set out by Einstein in his famous theory.

Ever since the physicist Arthur Eddington measured starlight bending around the sun during a 1919 eclipse and proved Einstein’s theory of general relativity, the scientific world has accepted its tenets. But until now, according to the team, no one had tested the theory over such long distances and robustly at distances and scales that go beyond the solar system.

Reinabelle Reyes, a Princeton graduate student in the Department of Astrophysical Sciences, along with co-authors Rachel Mandelbaum, an associate research scholar, and James Gunn, the Eugene Higgins Professor of Astronomy, outlined their assessment in the March 11 edition of Nature.

Other scientists collaborating on the paper include Tobias Baldauf, Lucas Lombriser and Robert Smith of the University of Zurich and Uros Seljak of the University of California-Berkeley.

The results are important, they said, because they shored up current theories explaining the shape and direction of the universe, including ideas about “dark energy,” and dispel some hints from other recent experiments that general relativity may be wrong.

“All of our ideas in astronomy are based on this really enormous extrapolation, so anything we can do to see whether this is right or not on these scales is just enormously important,” Gunn said. “It adds another brick to the foundation that underlies what we do.”

First published in 1915, Einstein’s general theory of relativity remains a pivotal breakthrough in modern physics. It redefined humanity’s understanding of the fabric of existence — gravity, space and time — and ultimately explained everything from black holes to the Big Bang.

The groundbreaking theory showed that gravity can affect space and time, a key to understanding basic forces of physics and natural phenomena, including the origin of the universe. Shockingly, the flow of time, Einstein said, could be affected by the force of gravity. Clocks located a distance from a large gravitational source will run faster than clocks positioned more closely to that source. Einstein said. For scientists, the theory provides a basis for their understanding of the universe and the foundation for modern research in cosmology and astrophysics.

In recent years, several alternatives to general relativity have been proposed. These modified theories of gravity depart from general relativity on large scales to circumvent the need for new particles. But they must exist if the calculations of general relativity balance out. But because these theories were designed to test the predictions of general relativity about the expansion history of the universe, a factor that is central to cosmological work, it has become crucial to know which theory is correct, or at least to ascertain reality as best as can be approximated.

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Shapiro Continued from page 1

assistant professor of political science at Yale University. As group members collect data for their individual projects, they will make it available for other researchers through their data archive. They also are working with their contacts throughout government to release additional data. Currently, government contractors hold data and conduct analysis, or the government holds it and doesn’t have the resources or staff expertise to analyze it. In either case, Shapiro said, there’s no peer review challenging or improving the analysis.

“What you want is lots of people independently looking at the data,” he said. “What they’re going to study with it, who knows? But some portion of it is going to be relevant for policy.”

Nils Weidmann, one of two Princeton postdoctoral research associates working on the Empirical Studies of Conflict Project, is studying election fraud and violence in Afghanistan’s recent presidential election and the role of cell phone communications on information and violence in Iraq.

Jake [Shapiro] has detailed case knowledge, and at the same time is extremely skilled in the methods to study violence statistically,” said Weidmann, adding that having so many people with practical experience involved in the project “not only links our thinking to the reality on the ground, but also helps communicate our findings to the key decision-makers.”

Zeynep Bulutgil, the other Princeton postdoctoral research associate working on the project, said that as more detail becomes available, more avenues for study are open to researchers.

“What this project provides is fine-grained data about small locales within different countries. It lets us study violence in a more detailed way and allows us to observe patterns that we might not see at the level of countries,” said Buhitgil, who is studying sectarian violence in Iraq and seeking data on ethnicity.

Minerva Initiative

While studying reconstruction spending in Iraq — how violent groups were responding to the spending and what that revealed about their organization — Shapiro and his collaborators from the Empirical Studies of Conflict Project realized that larger questions needed to be asked about development.

“Though the United States allocated billions of aid dollars to rebuild the economies of Iraq and Afghanistan, little research existed on the effectiveness of development programs, and less so in areas wracked with violence. They sought and secured a grant in the new Minerva Initiative, which is intended to develop the Defense Department’s social science intellectual capital in order to enhance its ability to address future challenges. While the Defense Department is funding the research, it has placed no restrictions on the direction of the work and will not review it prior to publication, Shapiro said.

“The work in such areas is challenging, but Shapiro saw important reason to press forward.

“There’s a general public good interest in understanding how you can use this [aid] effectively,” Shapiro said. “We also thought that in the course of studying what kind of aid reduced violence and where, we actually got a lot of leverage on basic social scientific theories about political contestation and the production of violence. We also get knowledge about basic development questions like, ‘If you want to improve the economy in a place where there’s a lot of violence, how can you do it?’

The project has three simultaneous tracks. First, the group is generating data and performing econometric analysis of data on development and insurgent violence in Iraq, Afghanistan, the Philippines and Vietnam.

Second, field research is being conducted in the form of surveys and interviews to test and enhance the data, which is incomplete in many cases. For instance, the group has very detailed data on acts of violence in Iraq, but inconsistent data on employment — in some areas people said they were unemployed unless they were working for the government. The project includes fieldwork in Pakistan, Northern Ireland and the Philippines.

Third, the group is planning field experiments in partnership with the U.S. Agency for International Development and other aid agencies. These experiments are intended to precisely measure the impact of aid, complementing work on the other tracks.

Some of Shapiro, Berman and Felter’s early work on employment and violence uncovers conclusions contrary to conventional wisdom. In a recent working paper on unemployment and insurgency in Iraq and the Philippines, they examined the theory that employed young men are less likely to participate in insurgent violence. Shapiro said.

Their implication is that if their analysis of the data showed that unemployment correlated to less violence, policymakers might conclude that they should give jobs to unemployed youths. Instead, they might want to rethink these make-work projects predicated on the idea the government can just provide the job if they won’t pick up a weapon and fight,” Shapiro said.

Laitin, one of Shapiro’s other collaborators, said he hopes their work will “contribute to a more realistic knowledge base” for public policy decisions.

“Many conventional beliefs about insurgency, terrorism and the policies to counter them are false at worst and untested at best,” Laitin said.

Shapiro’s original research interest on the organization of terrorist groups provides a historical basis for his understanding of terrorism and counterterrorism, and he spends his spare time reading biographies of terrorists to fuel a manuscript. He is working on a book based on his doctoral dissertation titled “The Terrorist’s Challenge: Security, Efficiency, Control,” which describes patterns in how terrorists have organized from 1878 to the present and how to deal with these organizations. The group’s hierarchy, recruitment, financing, communication and recruitment tools follow similar patterns over the centuries, he said.

“Certainly, there are elements of technology that change quickly, and how economies work changes some,” Shapiro said. But “over the last 100 years, the basic problems that terrorist groups have had are the same.”
filled this stream valley and landscaped “rain gardens” will provide biofiltration of stormwater.

Interaction is a theme with the new four-story modern-style building. On the inside, laboratories and teaching spaces are in a wing on the east side of the building, encouraging the integration of the chemistry department’s teaching and research programs. Offices are in a wing on the west side of the building, which is joined to the east wing by a large skylit atrium featuring common spaces and pedestrian bridges at three levels and at three locations — north, center and south.

Designated by Hopkins Architects of London in collaboration with Payette Associates of Boston, the building evolved through discussions between representatives of those firms, the Office of Design and Construction and the Department of Chemistry, which is using it as a key tool in the recruitment of new faculty members. Labs are being customized as faculty come on board.

“It will be spectacular!” Robert Cava, chemistry chair, wrote in a recent departmental newsletter.

Six-month move-in

The Department of Chemistry is expected to begin relocating from Frick and Hoyt laboratories in fall 2010. “We’re working hard for a move-in during the fall,” said James Wallace, project manager in design and construction, who noted that the building was about 80 percent complete in mid-February. “We assess progress on a regular basis.”

The move will take place over six months, and classes will be held for the first time in the building in spring 2011. When the building is fully operational, it will accommodate up to 300 faculty, 30 departmental staff, 250 to 300 graduate students, postdoctoral fellows and research staff, and several hundred undergraduates.

The main entrance to the building will be on the north side from a new pedestrian plaza.

“The building will sit at the edge of Jadwin Hall’s Brush Gallery and Lewis Bernoulli Hall’s porter’s lodge, creating an architectural gateway to the University, further enhancing interior spaces to McDonnell Hall.”

The atrium will feature common spaces and pedestrian bridges at three levels and at three locations — north, center and south. Overhead, an array of photovoltaic panels will generate power while also providing shading for the glazed roof — just one of many state-of-the-art sustainability features incorporated throughout the structure to optimize energy efficiency.

Important sustainability feature of the latter will be the 200 high-efficiency fume hoods installed at work areas. These are equipped with automatic sash closers that will reduce both air supply and exhaust requirements. The lab systems also will have heat recovery equipment that captures energy from exhaust air.

The labs have light-colored wood cabinets with gray epoxy resin tops. Blue rubber flooring is used throughout the research areas.

Below grade on the B level of the building, there will be a 250-seat auditorium. In addition, research functions that require very low vibration conditions will be located on this level, such as dedicated space for laser tables and the nuclear magnetic resonance (NMR) equipment lab. The NMR equipment will sit on 10-foot-thick monolithic concrete blocks founded on bedrock and isolated by perimeter joints from the building structure.

Those descending the stairway from the main entrance on their way to the auditorium will be able to see the NMR suite through a panel of glass. A tunnel on the B level will connect the Chemistry Building with Jadwin Hall.

Einstein

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“We knew we needed to look at the large-scale structure of the universe and the growth of galaxy clusters, composing it over time to find out,” Reyes said. The team used data from the Sloan Digital Sky Survey, a long-term, multi-institution telescope project mapping the sky to determine the rotation and brightness of several hundred million celestial objects.

By calculating the clustering of the galaxies, which stretch nearly one-third of the way to the edge of the universe, and analyzing their velocities and distortion from intervening material, the researchers have shown that Einstein’s theory explains the nearby universe better than alternative theories of gravity.

The Princeton scientists studied the effects of gravity on these objects over long periods of time. They observed how this elemental force drives galaxies to clump into larger collections of themselves and how it shapes the expansion of the universe. They also studied the effects of a phenomenon known as “gravitational lensing” on galaxies as further evidence.

In weak lensing, matter — galaxies and groups of galaxies — that is closer to viewers bends light to change the shape of more distant objects, according to Mandelbaum. The effect is subtle, making viewers feel as if they are looking through a window made of old glass. Studying data collected from telescope surveys of regions showing what the universe looked like 5 billion years ago, the scientists could search for telltale factors in the distortion of multiple galaxies.

And, because relativity calls for the curvature of space to be equal to the curvature of time, the researchers could calculate whether light was influenced by local amounts by both, as it should be if general relativity holds true.

“This is the first time this test was carried out at all, it’s a proof of concept,” Mandelbaum said. “There are other astronomical surveys planned for the next few years. Now that we know this test works, we will be able to use it with better data that will be available soon to more tightly constrain the theory of gravity.”

Astronomers made the discovery a decade ago that the expansion of the universe was speeding up. They attributed this acceleration to dark energy, which they hypothesized to be a repulsive force that has caused the expansion to accelerate and has been driving the exact same process as energy and momentum.
Bridge Year Program students finding their place in the world

Karim Dienst

Transformation was the desire of the 20 students selected for Princeton’s inaugural Bridge Year Program. Now, six months into the program, they have experienced just that.

From learning to speak a new language to discovering another culture to building cleaner-burning stoves, these students have been transformed by daily life in another country. Progressing from the first day, when everything was new and different, they now feel that they have a home away from home.

Settling in

Now, activities such as navigating the maze-like alleyways, buying the foods for breakfast each from a different street vendor, arguing with Rickshaw wallas, or biking on the mostly empty congested streets, that at first seemed daunting and impossible, are completed within thoughtful hesitation.

—Joe Barratt, India, November

Many rural communities in the Peruvian Andes are difficult to access, requiring long treks up steep slopes. (From left) Tugce Tunuslar, David Hammer, on-site program facilitator Javier Saldivar Durand, Brian Reilly, Leah Bushin and Agnes Cho stop on their way to work with the people of Ch'uru, a village high above the town of Huaran, Peru.

Culture and environs

“We have learned that regardless of the area, whether we have been there before or not, we will be flexible. This is a part of the best ways to learn about the language to discovering another culture to building cleaner-burning stoves, these students have been transformed by daily life in another country. Progressing from the first day, when everything was new and different, they now feel that they have a home away from home.”

In groups of five, the students are based in Ghana, India, Peru and Serbia. They have deferred the start of their freshman year at Princeton to spend a tuition-free enrichment period abroad focused on public service.

In each location, the students live with host families as they gain firsthand knowledge of their new surroundings and begin to play a meaningful role in the communities in which they live and work.

Each student is engaged in a volunteer assignment organized by on-site partners selected by the University. Projects range from education to health care to environmental conservation and more.

“I’m very pleased with how the Bridge Year Program has been unfolding in these first few months,” said John Luria, the program director. “Our first cohort of students is a remarkable group. It’s a challenging experience, and participants seem to be fully embracing the challenge.”

Impressions of the students’ experiences are posted monthly on the Bridge Year Program website www.princeton.edu/bridgeyear-updates. Brimming with personal discoveries, the accounts suggest that when these students begin their studies as freshmen at Princeton in fall 2010, they will have a world of ideas to share with their classmates.

Luria noted that in an early blog, one of the students, Lizzie Martin, wrote about her desire to push herself outside of her comfort zone and into a ‘learning’ zone while in India. “This is something that we’ve seen from all of our participants over the past few months — the desire to be challenged, and the capacity to learn. It’s been very rewarding to see the students reflect on the Bridge Year experience and, in the process, gain greater awareness of who they are, their place in the world and their capacity to influence change.”

Many of the students’ comments focus on settling in, host families, cultural practices, volunteer work and the environs. Below are some excerpts spanning different locations over different time periods.

Watch a video about the Bridge Year Program at giving.princeton.edu/news/media/bridgeyear.

Challenges and learning

“When we first arrived in Peru it was as if we did not just the culture, but also the daily routines. At first, we were starting to and time to make changes of our own will.”

—Tugce Tunuslar, Peru, November

Volunteering

Though program participants live with different host families and work separately, they find many opportunities to spend time with each other as a group. (From left) Ashley Vinson, Alex Rafter, Katherine Mount, Mariam Wahed and Lelebari Gwea-Ojuri share their experiences over a home-cooked meal in Novi Sad, Serbia.

Host families

“My host mother, Nada, has busied herself for the last month with preparing food for winter, a process that only exists in fairy tales and supermarkets. Nada asks if I know that in the United States are making the same preparations, and I had to admit that no, I didn’t know of any families that have 200 pounds of tangerines and oranges in their garden. But it is hard and funny to make into juice. This process may seem a bit antiquated because in both Serbia and the U.S., we have access to and apples and pears year round, but it is a sign of family, tradition and food.”

—Katherine Mount, Serbia, November

From the second half of their program, Bridge Year participants in Ghana support local teachers in rural junior secondary schools. In Seniagya, Jessica Haley teaches math class to first-year students and supports other teachers when needed.

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March 22, 2010