Population aging is a major concern across the globe, and nowhere is the challenge more daunting than in China. Whereas 36 million seniors (age 65 and older) reside in the United States, 208 million seniors (defined in that country as age 60 or older) live in China. By 2050, China’s seniors will total 480 million — one-third of its entire population.

In 2011, the Center for Social Development (CSD) at the Brown School joined seven other academic institutions to organize an international Productive Aging Conference, held at Peking University. Conference planners brought together thought leaders from leading American, Chinese and other research universities to discuss ways to engage older adults in employment, volunteering, caregiving, education and skill-building. More than 240 Chinese researchers, educators, students and government officials attended, along with peers from Singapore, Japan, South Korea, Hong Kong, Taiwan and the United States.

“We all recognize the need to engage older adults in productive social and economic activities,” says conference leader Nancy Morrow-Howell, PhD, the Ralph and Muriel Pumphrey Professor of Social Work and director of the Friedman Center for Aging at Washington University. “The conference allowed us to reflect on the best approaches to the challenges of aging populations and to galvanize work on the productive engagement of older adults.”

“Our goal involved engaging Chinese researchers and policymakers in a discussion of the issues they face,” says Michael Sherraden, PhD, director of CSD and the Benjamin E. Youngdahl Professor of Social Development at the Brown School.

“Productive aging suggests that elders may continue to engage and contribute to the world around them. In a world where many people remain healthy for 20 or more years after retirement, every country must rethink the potential roles of older adults in society.”

Conference participants named the OASIS Institute as one example of a best practice. The national, nonprofit education organization offers a wide range of programs in the arts, humanities, health, technology and volunteer service through its educational centers and community partners in 39 U.S. cities.

“Our evidence-based programs bring people together to learn, lead and contribute in their communities,” says Marcia Kerz, president of the OASIS Institute. “The Chinese participants showed interest in our intergenerational approaches and chronic disease self-management programs.”

Kerz believes the OASIS model of enriching lives through lifelong learning, health self-management and community service can be adapted to work in China. “A tremendous opportunity exists for China to tap into a largely untapped resource in its seniors,” she says.

Morrow-Howell agrees. “A new Chinese nonprofit sector is springing up there, focused on how to use the human capital of..."
A recent finding by biologists at Washington University could aid in the fight against malaria. The research team, led by Joseph Jez, PhD, associate professor of biology, cracked the structure and function of a protein essential to survival of the malaria parasite. *Plasmodium falciparum* — the protozoan that causes the most lethal form of malaria — uses the protein, or enzyme, to form a cell membrane. Humans do not produce the enzyme, which makes it an ideal target for new antimalarial drugs.

The protein’s structure might have remained an enigma without the “unreasonable optimism” of Jez, which carried his team through a six-year obstacle course of failures and setbacks.

“My lab crystallizes proteins so that we can see what they look like in three dimensions,” Jez says. “If we know a protein’s structure, it will be easier to design chemicals to target the protein’s active site and shut it down.”

The latest discovery culminates a project that began years before when Jez worked at the Danforth Plant Science Center and collaborated with scientists at the biotech startup Divergence.

“At the time, the Divergence scientists explored using the recently sequenced *C. elegans* as an easy model to work out the biochemistry of parasitic nematodes,” Jez says.

*C. elegans* is a free-living nematode, or microscopic roundworm, but many nematodes are parasitic and cause disease in plants, livestock and people.

During this project, Lavanya Palavalli, an intern working with Jez, crystallized the *C. elegans* version of the enzyme, known as phosphoethanolamine methyltransferase, or PMT for short.

“When [doctoral candidate] Soon Goo Lee took up the project,” Jez says, “we wanted to grow better crystals of the *C. elegans* protein — ones good enough to get readable X-ray diffraction patterns.”

The scientists need crystals to stick in the path of an X-ray beam at Argonne National Laboratory in Chicago. (If the crystal is a good specimen, and all the atoms line up in a repeating array, the scattered X-rays will produce a clear pattern of spots.)

“Once we produced a crystal that diffracted really well, we could try back-calculation to see whether we could extract the atom positions from the data,” Jez says.

After the computer finished its calculations, Lee clicked a mouse button to see the results, which would reveal whether his years of work finally would pay off. To Lee’s delight, he got an electron density map in exceptionally sharp focus, making him the first to see the structure of this protein.

“After getting the electron density map, the task consists of building a structure that matches the amino acid sequence of the protein,” Jez says. “Once you determine the structure, you can start to figure out how the enzyme works.”

Although much work remains, the advances made by Jez and Lee could eventually help decrease deaths from malaria, which took 655,000 lives worldwide in 2010. Nearly 40 percent of the human population lives in areas where *Plasmodium falciparum* is endemic. Moreover, current antimalarial drugs are beginning to fail, in part because widespread drug counterfeiting has led to resistance.

Countries around the world need new antimalarial drugs desperately, and the PMT protein is an ideal target. Disabling PMT would keep the protozoan from making cell membranes, resulting in its death. Moreover, a drug that would kill *Plasmodium* might have minimal side effects on patients.

To learn more about this research, visit pages.wustl.edu/jezlab.

**Productive Aging Practices, cont’d** from page 1

older adults. They want to increase volunteerism and test strategies such as OASIS’ intergenerational tutoring program.”

The conference highlighted another national model — the Women’s Initiative for Ageing Successfully (WINGS), an organization that began in Singapore in 2005. Developed by a group of female activists concerned with the growing number of older women, WINGS aims to empower women with a holistic view of aging. This view encompasses good health, financial security and societal engagement. It emphasizes preventive measures as well as intergenerational activities.

“Practitioners like OASIS and WINGS serve as good models in demonstrating how older people can do and how they can be engaged,” Sherraden says. “The conference attendees showed much interest in that.”

Researchers from 16 universities in Asia and the United States presented their findings on various aspects of productive aging related to work, volunteerism, education, caregiving, grandparenting and lifelong learning. In addition to Washington University, the U.S. schools included Arizona State University, Clemson University, Columbia University, University of Southern California, University of Iowa and University of Pittsburgh.

“We received extremely positive feedback from all of the attendees,” Morrow-Howell says. “The conference definitely served as an eye-opener for many, and it provided further impetus for China, the United States and other countries to create an agenda to address the aging issues they face.”

A follow-up conference is tentatively scheduled for 2013 in Korea.

“We look forward to continuing the cross-national discussion,” Morrow-Howell says. “We have so much to learn from each other.”
Evolution of Beijing Inspires Urban Lifestyle Products

by Blaire Leible Garwitz

Ed Hung, BSBA ’02, constantly strives to “preserve the old while creating new” as co-founder of NLGX Design in Beijing. Guided by this philosophy, he and his business partner produce graphic t-shirts and hoodies, bags from recycled materials and bicycle-inspired commuter clothing — all inspired by the graphics, materials and colors of traditional Beijing.

“The dynamic energy emerging in Beijing comes in part from the mix of Old and New, of East and West, and of new cultures springing up from the city’s multicultural neighborhoods,” Hung says. “This evolving culture affects everything we create at NLGX.”

When he moved to Beijing in 2004, Hung gravitated to an older neighborhood. “The people, food and architecture of these older, more traditional neighborhoods provide a living link to the capital’s rich heritage,” he says.

With an appreciation for the old and new aspects of Beijing, Hung created NLGX in 2008 as a store that combined retail, an independent gallery space and a coffee shop. Before long the in-house design team and products collection outgrew its retail space. In 2009, the company reorganized to better cater to retailing, while leaving an open-air space on the rooftop for creative events and product launch parties.

Most recently, NLGX opened one store at the Beijing Capital Airport and will be opening another one there in summer 2012.

The company’s design philosophy stems from its very first product — a T-shirt with the Chinese characters for “Do Not Destroy” on the front. This message refers to the historic courtyards and neighborhoods composed of hutongs (or alleyways) — “Old Beijing” — that are currently giving way to apartment high-rises, office buildings and shopping malls. NLGX aims to raise awareness and support preservation of these historical neighborhoods.

“With our designs, we challenge local authorities to find ways to keep these last remaining links to the city’s past heritage,” Hung says.

Future plans include growing the business in the area of travel retailing as well as in wholesale distribution to museum and specialty design stores, both domestically and internationally.

Hung credits his time at Washington University with helping him establish his startup company. “My classes at Olin Business School gave me the basic tools to start and run my own business without need for much outsourcing or hiring at the beginning stages,” he says.

Although the company continues to evolve and expand, one thing remains: its commitment to supporting and preserving the local community. NLGX works with Beijing Cultural Heritage Protection Center to raise awareness and funding for projects such as research, documentation and government lobbying to preserve local cultural heritage.

“Social awareness and supporting our local community are essential to our company culture,” Hung says. “The history of a place is the essence of its soul. As a resident of Beijing, I feel a responsibility to take care of our community, and these values naturally extend into the company and our designs.”

For more information on NLGX, visit www.nlgx.com.

Volunteer Spotlight

Song Jin, MBA ’05

“After the interview, I better understand Washington University and can feel its spirit and character ... Song Jin shortened the distance between the university and me. Interviewing with him was an excellent experience.”

— Review from a prospective student about her interview with Song Jin, MBA ’05, through the Alumni and Parents Admission Program (APAP)

In addition to interviewing prospective undergraduate students through APAP, Song Jin co-chairs the Washington University Singapore Alumni Association. “I always wanted to give back to the school that changed my life so much,” he says. He actively participates in various activities, including the following:

• Hosting several visiting delegates from Washington University to Singapore,

• Helping Olin Business School’s Weston Career Center on its global outreach and business development initiative through liaisons with various government and private corporations in Singapore, and

• Assisting Washington University students who are founding internships and seeking full-time employment opportunities in Singapore and around the region.

Although his background was in engineering, Jin wanted to switch careers and work in the financial sector. “Washington University helped me successfully transform from an engineer to a financial professional,” he says. Jin now serves as the head of portfolio management of a private equity fund of Oversea–Chinese Banking Corporation (OCBC Bank) in Singapore.

“I am so proud to be an alumnus,” Jin says. “I would like to do more in my capacity to contribute back to the university.”

He encourages other alumni to get involved, as well. “Try your best to participate in as many Washington University volunteer activities as you can,” he says. “Always look for more creative ways to get involved.”

Alumnus Ed Hung, co-founder of NLGX Design in Beijing, produces clothing and accessories inspired by the graphics, materials and colors of traditional Beijing.

(Courtesy photo)
First Chinese Citizen to Win Pritzker Architecture Prize Visits WUSTL

In 2012, Chinese architect Wang Shu became the first Chinese citizen to win the Pritzker Architecture Prize, widely considered the field’s highest honor, equivalent to the Nobel. Wang visited the Sam Fox School of Design & Visual Arts in spring 2012 to discuss his work. Peter MacKeith, associate dean of the Sam Fox School and associate professor of architecture, notes that Chinese architects are finding increasing prominence on the world stage. “Our Chinese students are really excited by this news,” he says. “It is a great honor that they all share in.” Wang’s Ningbo Tengtou Pavilion, Shanghai Expo, 2010, is shown above. (Lu Wenyu)

Kuan, Ma Join University Faculty

Seng Kuan, PhD, joins the Sam Fox School of Design & Visual Arts as assistant professor of architecture. He has published two books on architecture in China and is editing an anthology of recent scholarship on Tange and postwar Japanese architectural culture. Zhao Ma, PhD, joins the Department of East Asian Languages and Cultures in Arts & Sciences as assistant professor. His research interests include modern China, urban culture, women and gender, and political and legal history. Most recently, he served as a postdoctoral fellow in China studies at Washington University.

New Eurasian Studies Concentration Offered in Arts & Sciences

International & Area Studies majors may now study the culture and society of Eurasia through a new concentration. Students in the concentration will take a core course, “Ancient Eurasia and the New Silk Roads,” to lay the foundation for future studies. The concentration is interdisciplinary and may include courses in departments from history to economics.

EMBA Program Named Sponsor of the Year in Shanghai

The American Chamber of Commerce in Shanghai named the Washington University–Fudan University Executive MBA Program as one of 10 “Sponsors of the Year” in 2011 for the program’s exemplary support of the chamber. AmCham Shanghai is the largest chamber in Asia, and it is the second largest in the world.

‘Japan Embodied’ Seminar Explores Ways to ‘Live Beyond the Body’

During the spring semester, Washington University hosted a seminar to examine ways in which people seek to live beyond the body. Over the years, new technologies inspired a radical transformation of the very notion of “body” and its limits. Speakers explored the body as a cultural text mapping out the anxieties of a postmodern world. Topics included “Female Ghosts & Invisible Monsters: Unbodying the Body in Japan Past & Present,” “Not Just Any Body: Raced Bodies & Reading Women in East Asian Studies,” and “Technologies of the Imagination: Cyborgs & Cyberpunks in Postmodern Japan.” The Andrew W. Mellon Foundation and WUSTL’s East Asian Studies and Japanese Program sponsored the seminar.

Levin Lectures on Litigation Law in China

Ronald M. Levin, the William R. Orthwein Distinguished Professor of Law, served as the featured speaker at Shanghai’s International Workshop on Amendment of the Administrative Litigation Law. Adopted in 1989, China’s Administrative Litigation Law (ALL) provides a structure by which decisions of administrative agencies can be challenged in the courts. It is comparable to the judicial review chapter of the Administrative Procedure Act in the United States. The Asia Foundation and the China Law Society Administrative Law Research Association convened the conference to refine and finalize a “scholars’ draft” to amend the ALL. After revision, the draft will be submitted to the National People’s Congress for deliberations.

Jain Serves as Chief Guest at International Conference

Raj Jain, professor of computer science and engineering, served as the chief guest for the inaugural ceremony at the National Institute of Technology Karnataka at Surathkal in Mangalore. The conference covered several topics, including high-performance computing, service-oriented computing, information retrieval, pattern recognition, image processing, wireless and ad hoc networks, sensor networks, cryptography and web security.

Patrick Moreton (center), former associate dean and managing director of the EMBA–Shanghai program, receives the 2011 Sponsor of the Year Award from AmCham Shanghai. Pictured with Moreton are Eric Zheng (left), general manager of Chartis Insurance Company China, Ltd., and Eric Musser, CEO of Corning Greater China. (Courtesy photo)
A new program allows Washington University faculty and staff to apply for a weeklong study abroad experience. In summer 2012, one group will be traveling to Shanghai to explore issues related to ethnic minorities and urban change. (©iStockphoto)
Help Recruit Talented Students Through the Alumni and Parents Admission Program

Throughout the world, many university alumni (undergraduate) and parents of current undergraduate students are ambassadors for the university as they help recruit, interview and enroll talented students from their areas.

Working as part of the Alumni and Parents Admission Program (APAP), they offer interviews to applicants (students), help staff College Fairs, refer prospective students to the Office of Undergraduate Admissions, and contact and respond to questions from parents of admitted/enrolling students. Some volunteers also host Summer Send-off parties for incoming freshmen in their areas prior to the start of the fall semester at the university.

In addition to APAP volunteers in Hong Kong, Singapore and Tokyo, volunteers can also be found in the Asian nations of South Korea, Taiwan, Turkey, India, Malaysia, People’s Republic of China and Thailand.

If you are interested in becoming involved in APAP efforts, please contact the APAP office at apap@wustl.edu or 1-314-935-4826.

In Asia, the committee chairs are:

**Hong Kong**
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**Singapore**
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**Tokyo**
Michelle Gravel, Director of APAP
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Alumni Website Launches

Experience a new connection to Washington University through a new website, unveiled by the university’s Alumni and Development Programs in February. The site features an online alumni directory, a searchable calendar of events and community pages to help you stay connected to the university wherever you live, work or travel. There are international events and community pages, and you can also search for alumni in specific countries. In addition, you can access Washington University LinkedIn groups and Facebook groups through the website. Connect with us today at alumni.wustl.edu.

If you have any questions please contact: alumniassociation@wustl.edu.

Contacts

**Your Washington University Contacts**

Washington University **Alumni Clubs** offer alumni and parents of current and former students a way to stay connected with the university. For more information on the clubs in Asia, visit http://aisweb.wustl.edu/alumni/internationalrelations.nsf or contact:

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The **Alumni and Parents Admission Program (APAP)** involves alumni and parents of undergraduates in recruiting, selecting and enrolling students at Washington University. APAP members interview applicants, staff college fairs and host receptions for admitted students. For information, contact:

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Alumni, parents and friends of the university often help identify students who would benefit from a Washington University education. Refer names and addresses of talented prospective students to:

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