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IN MEMORIAM: BAHAR YAGHOUBIAN
Bahar Yaghoubian, a member of the Class of 2011, passed away on January 9 as a result of injuries sustained in an automobile accident. An exemplary student and leader, Bahar aspired to serve as an independent community pharmacist. The School of Pharmacy community honored Bahar in a memorial service on January 19 at the Health Sciences Campus. Bahar will be greatly missed.

R. Pete Vanderveen
DEAN

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Pharmacist of the Year
This award recognizes a CPhA member pharmacist for outstanding activities in the profession of pharmacy. The recipient must be an individual who has demonstrated leadership at more than one level of organized pharmacy. He/she should be an energetic leader who has stimulated others to actively participate in professional, political, and/or community affairs related to the practice of pharmacy. The person should be well recognized by his colleagues for his/her professional advancements.

John Cronin, PharmD (’76), JD
Dr. Cronin is a pharmacy attorney with the law firm, Fredrickson, Mazeika & Grant, in San Diego. He also serves as general counsel for the California Pharmacists Association.

Distinguished New Practitioner
This award recognizes the most outstanding new practitioner who has demonstrated leadership at more than one level of organized pharmacy. He/she should be an energetic leader who has stimulated others to actively participate in professional, political, and/or community affairs related to the practice of pharmacy. The person should be well recognized by his colleagues for his/her professional advancements. The pharmacist must be licensed, a member of CPhA and have graduated less than 10 years prior.

Ken Thai, PharmD (’02)
Dr. Thai is an owner of several independent pharmacies in Southern California and a preceptor for USC students.

FROM THE AMERICAN PHARMACISTS ASSOCIATION

Distinguished Achievement Award in Clinical / Pharmacotherapeutic Practice
This award recognizes the achievements of an individual who has made a significant contribution or sustained contributions to the provision of pharmaceutical care within clinical/pharmacotherapeutic practice.

Jeffery Goad, PharmD (’94), MPH
Dr. Goad is an associate professor and director of Student Outreach for Community Health at the USC School of Pharmacy and director of International Travel Health Services at USC.

Bowl of Hygeia
This award recognizes a pharmacist for outstanding and continuing activity in the community outside of the profession. The recipient should be a person who has demonstrated how pharmacists can elevate themselves and their profession in the eyes of the public through participation in community civic programs or participation in government activities at the local or state level. The person must be a CPhA member pharmacist and have contributed to the advancement of the profession through his/her activities.

R. Pete Vanderveen, PhD, RPh
Dr. Vanderveen is dean of the USC School of Pharmacy.
Given the persistent negative mood of the nation during much of 2010, few people were sorry to see the year come to an end. That being said, let me lighten our mood with some very good recent news from the USC School of Pharmacy.

For starters, you’ll note that early announcements from our professional organizations have tapped USC for tops honors. Alumni John Cronin, PharmD ('76), and Ken Thai, PharmD ('02), have been signaled out for their professional accomplishments by the California Pharmacists Association. I’m especially honored to receive the Bowl of Hygeia Award in the company of these two distinguished alumni. Associate Professor Jeff Goad will also be honored by the American Pharmacists Association for his excellence in clinical practice.

Our Professor Roberta Diaz Brinton’s work on Alzheimer’s disease was featured in New York Times magazine and brought Maria Shriver to our school, when still the state’s First Lady, resulting in coverage on both Good Morning America and ABC News. Topping off Dr. Brinton’s very good year, President Obama presented her with the 2010 Presidential Citizen’s Medal at the White House.

Our Schaeffer Center for Health Policy and Economics had an exceptional 2010. They marked their one-year anniversary in the fall with an invitational conference that featured a participant roster that read like a who’s who in health-care policy. Headed by Professor Dana Goldman, the Schaeffer Center capped the year with a total of $25 million in grant support, including the School’s largest grant ever — an $11.4 million NIH award headed by Associate Professor Jason Doctor.

Our students continued to distinguish themselves among their peers across the nation. The AACP awarded USC the Student Community Engaged Service Award, recognizing the exemplary outreach our students provide to those in our community who most need health-care services. PharmD/PhD student Tim Bensman was the only student podium presenter at the 24th annual North American Cystic Fibrosis Conference while recent graduate Daya Perkins, PhD in Pharmacology and Toxicology, MS in Regulatory Science, was recognized with the President’s Young Investigator Award at the 2010 International Society for Biomedical Research on Alcoholism.

And, even in a year when financial fortunes seemed particularly low, our School was presented with a $1 million gift from our alumni, Dianne and Ron Jung. Their story is inspiring and their gift promises to enhance our school and the work we do for the future of our profession.

In 2010, we also saw new leadership installed at USC. Building on the legacy of President Sample, President C. L. Max Nikias and Provost Elizabeth Garrett were installed to guide us in this young decade.

While I recognize the nation is still working hard to recover from these past few difficult years, and we need to continue to work hard to fight for our profession and its pivotal role on the health-care team and for funding to continue our research enterprise, 2010 did not prove to be such a bad year at the USC School of Pharmacy.

With 2011 starting strong, we look forward to reporting more milestones to you in the coming months. Thanks for your continued support.

R. Pete Vanderveen, PhD, RPh
Dean
John Stauffer Decanal Chair in Pharmaceutical Sciences
Everyone who lives long enough no doubt wishes at least once for a fountain of youth. Of course there isn’t one, but that doesn’t mean the journey of aging has to be totally downhill.
The School of Pharmacy includes a cadre of experts whose work focuses in large part on maintaining health and vigor throughout our lifetimes. Following are tips from nine of the School’s many faculty conducting relevant work in this field.

**FIRST OFF, AGING IS A FACT OF LIFE**

“Aging is an intrinsic process,” says Raj Sohal. “There’s no escaping it and there are no elixirs that can extend the biological limits of life span.”

Still, human life expectancy has increased over the decades due to improvements in hygiene and the advent of antibiotics and vaccines, as well as cures and treatments for some age-associated diseases, including cardiovascular disease, diabetes and some cancers. Today, the average life expectancy is about 85 years for women and 80 for men. According to Sohal, the potential human life span is 100 years — maybe 122 tops. The final years are often dominated by struggles with various frailties and diseases.

While he adds that curing heart disease, cancer, neurodegeneration or diabetes, for example, may increase life expectancy by 10 to 15 years, to dramatically increase life span beyond the age of 100, we would have to find a way to change our biological/genetic nature in an as yet unknown way. Such a breakthrough is not on the horizon, partly because the causes of the aging process at the molecular level are not well understood.

If we accept Sohal’s premise, what can we do in the meantime to increase our own life expectancy and quality of life as we age? His tips include maintaining a normal body weight and a good lifestyle — marked by a diet heavy on fruits and vegetables — and avoiding stress by “banishing petty anxieties and shunning avoidable confrontations”.

He also suggests the desirability of a comfortable and enjoyable life by effective management of monetary resources, making the very best of daily life and accepting your limitations — because you can’t change your genes.

“Remember there isn’t another individual like you — not now, not before or after you. Each of us is unique. This is the genetic basis of life and it is truly precious.”

**LIVING THE GOOD LIFE**

At 78, Mel Baron has some experience on living the good life. Topping his advice? Have a happy and rewarding marriage. Baron and his wife, Lorraine, recently celebrated their 57th anniversary, and he believes that having this special relationship plays a big role in aging well.

“Oh, continuous exercise is an invaluable ingredient to health and healthy aging,” he adds. “But I greatly credit my happy marriage with keeping me on top of the hill.”

Baron is also quick to add the importance of pursuing work that you’re passionate about. He still approaches each new day at the School with excitement and pursues innovative projects that meet community needs. For instance, he recently developed an ambitious series of educational materials, including printed fotonovelas and videos, targeting the low-literacy Latino population with invaluable information on combating childhood obesity, preventing
and managing diabetes, and recognizing early symptoms of Alzheimer’s disease.

“It makes life sweet and easy when you enjoy what you’re doing,” says Baron. “This is a victory lap for me, allowing me to reach out and help others in the community.”

Glen Stimmel seconds Baron’s emphasis on relationships, citing the importance of staying connected to family and friends as a necessity throughout life, even more so as we get older.

“Nurture your existing network of family and friends and establish new relationships through outside activities,” he advises.

Stimmel tells of a man he knows who lives alone and whose retired life revolves around a weekly French class he takes at a community college. The class provides a new network of friends and a common interest that excites him. Stimmel believes this kind of connection is pivotal to enhancing life at any age, but especially after 60.

Also high on the Stimmel list is staying healthy and maintaining whatever health you have by keeping appointments for medical care, adhering to your medication regimen and avoiding unnecessary medication.

“All too often, older people take more medicine than they need because different physicians prescribe for them and don’t know what they are already taking. It’s very important to have all your medicines regularly reviewed by a pharmacist or a physician,” he says.

Stimmel finds that regular medication review is the best way to ensure that benefits of prescriptions are not outweighed by adverse side effects. Patients often continue taking medications that were intended to be temporary.

A simplified drug regimen also can help increase compliance among older people. If a patient can take a pill once a day instead of three times a day — or one pill that delivers the therapeutic effects of two — those changes should be incorporated into the regimen. “Simplicity encourages adherence,” he says.
“As you age, you have to focus on what you can do, not on what you can’t do,” adds Stimmel. “You have to shift your focus and adjust. How well you do that will have a big effect on how well you age.”

LOOKING AT THE NUMBERS
Geoffrey Joyce looks at aging through the lens of a health economist.

“Cost is a huge concern for Medicare,” he says. “The more we move toward a cost effectiveness approach, the elderly don’t fare so well.”

Unlike other fronts where technology saves the day, in health care, technology often increases costs as it extends life. For instance, if you don’t have diabetes at age 65, you’ll live approximately three years longer than your counterpart with diabetes. While your annual medical costs go down, your cumulative costs to Medicare increase.

Another major concern, end-of-life care, hasn’t changed substantially in 25 years. Some 27-29% of average lifetime health costs are for care in the final year of life. Prevention and education also play a role but must start early in life to have a profound effect.

“Social policy change is a slow process,” says Joyce.

He offers three tips for graceful aging from the perspective of the health economist. Start young with good health habits and prevention. Get ready to accept higher taxes to cover the escalating costs of Medicare and Medicaid. Be willing to have a frank discussion about end-of-life care that is incredibly expensive for individuals and society, and which often does not improve quality of life.

Also cognizant of the enormous cost that aging, and specifically Alzheimer’s disease, poses to society is Liqin Zhao — a neuroscientist whose research seeks to discover therapeutic strategies that will prevent or delay Alzheimer’s. She notes that some 5.3 million Americans currently suffer from the disease and this number is expected to triple to 16 million by 2050.

While scientists don’t clearly understand the cause of the disease, nor have they developed a drug that can stop Alzheimer’s, Zhao believes raising awareness is key.

“Research has identified a number of risk factors that may accelerate brain aging, including lack of physical, social and mental activities, malnutrition, stress and certain medical conditions, such as high blood pressure, high cholesterol and diabetes,” she says.

Additionally, Zhao points to nutritional research that indicates a link between a diet rich in phytoestrogens, found in soy-based foods, and lower rates of Alzheimer’s disease, menopausal symptoms, and breast and prostate cancers. These epidemiological studies were based on comparisons of populations in Asia, with a high intake of these foods, to those in North America and Europe where such intake is low. Zhao cautions that these studies were based on food intake rather than supplements.

“In our lab, we developed a phytoestrogenic formulation that is currently being tested in clinical trials for effectiveness against hot flashes and cognitive decline,” she says.

Additionally, Zhao notes that studies suggest having diabetes in middle and later life increases the risk for ultimately developing Alzheimer’s disease two-fold. While research is still underway, she says, “Diabetes is something you don’t want to get — and exercise and a healthy diet are a good defense.”

BEING SMART AS YOU AGE
Remember when you were 16, and you could undertake just about any physical challenge and wake up the next morning ready to do it all over again? As the
years pass, you still might meet those big challenges, but the aftermath is often marked by sore muscles. Or you may be confronted with arthritis, have become more susceptible to injury or face other conditions that cause pain.

Melissa Durham, who is a clinical pharmacist at the USC Pain Center, notes that many over-the-counter, herbal and nutritional remedies for pain pose significant and potentially harmful drug-to-drug interactions. While acetaminophen — brand name Tylenol — tends to have the least side effects of all the OTC analgesics, it is also present in many non-prescription and prescription medications.

“Be sure to read the packaging to make certain that you’re not taking an additional amount,” she cautions. “And, when in doubt, ask your pharmacist.”

Prescription pain medications have significant side effects, including constipation — which is a common ailment of older people. Durham recommends staying adequately hydrated and eating a diet high in fiber. These medicines also can cause drowsiness and dizziness, posing a risk for falls and other injuries. As a precaution, do not drive while taking these medications and clear your home of obstacles that you might trip over, remove any slippery rugs and always use a non-slip rug in the bathtub.

Finally, Durham suggests: “Exercise to strengthen your muscles and maintain muscle tone, which can help with stiffness and creaky joints. But know your limits and check with a health provider when in doubt.”

Echoing the universal call for exercise is Enrique Cadenas, whose research of over three decades focuses on the molecular mechanisms that underlie many age-related diseases, including neurodegenerative disease like Alzheimer’s.

Cadenas considers exercise and diet as good ways to delay or prevent the diseases of aging, such as diabetes, heart disease and neurodegenerative diseases.

“You can’t delay them forever,” says Cadenas. “But you can die healthy.”

Colleague Roberta Diaz Brinton adds that the body is a movement organism — so “move it.” In addition to its other benefits, exercise is the pump of the lymph system, much like the heart is the pump for the circulatory system, notes Diaz Brinton.

“There is no internal pump for the lymph system that removes waste materials from cells,” says Diaz Brinton. “So if you don’t move, this waste stays in the lymph fluid instead of exiting through the body’s waste system.”

She also notes that the brain is the most highly vascularized organ in the body, so playing havoc with the vascular system plays havoc with the brain. And she, too, stresses the importance of diet as one ages. “Less sugar is a very good goal,” she adds.

She also is a great believer in sleep. “Sleep is the time for the body to regenerate. So get enough of it.”

How much is enough? Diaz Brinton believes your body tells you how much you need — so listen to it. Her last tip is let gratitude be a part of your life. “Every minute of gratitude is a moment of happiness,” she says.
TAKING ACTION TODAY FOR A HEALTHIER TOMORROW

Brad Williams, a geriatric pharmacist, emphasizes a comprehensive strategy.

“I ask my patients, where do you want to be in 15 to 20 years?,” he says. “Their answers help us together plan a strategy for the whole person.”

Like his colleagues, he ranks diet and exercise at the top of the list of essential strategies for aging well. But he cautions that it’s important to design activities that meet your specific needs.

“If your heart isn’t doing what it’s supposed to do, work with your physician to design an exercise program with your heart goals in mind,” he says. “Likewise, if you have osteoarthritis, strengthen muscles to improve function.”

Williams believes that helping patients realize what they must do today to achieve the health status and abilities they hope to have in 20 years will help motivate them to make changes now. He recounts the story of a patient in his 60s who was still smoking despite repeated efforts to quit. After his physician referred him to Williams, the man told him, “If I have a heart attack or stroke today and die, I’m OK with that.”

“I reminded him that most victims of heart attack or stroke survive but need help, which typically places a burden on the family. That clicked for him and he became committed and successfully quit smoking,” says Williams.

Williams believes his generation, the Baby Boomers — who are used to getting what they want when they want it — may find it difficult to adjust to life after 60.

“As we age, we have to adjust to realistic goals,” he says. “You’re not going to be able to do what you did at 40.”

Williams suggests looking at the whole you and designing a lifestyle to maximize your older years — including diet, exercise, social connections, therapeutic adherence, outlook — that will help you live longer without disability.

“We’re not going to avoid the inevitable, but we need to plan and work toward dealing with it in the best way possible,” he says. “This is a good approach to keep from falling ‘over the hill.’”
School of Pharmacy alums got together to tee off against each other on the Angeles National Golf Course at the 6th Annual Alumni and Friends Golf Outing.

left: Walter Cathey, PharmD (’62), gets ready to tee off.
right: Gustavus Aranda, PharmD (’04), MS (’06), and Dean R. Pete Vanderveen flash a victory sign on the course.
Homecoming Weekend 2010

Alumni, current students, friends and family gathered at the School of Pharmacy Homecoming picnic to reunite with old friends and get geared up for the USC-Oregon game.

top left: Stacie Leach, Ken SooHoo, MaryAnn Jeu and Gary Leach, all PharmD ('80).
top right: Jane Bensussen and Denis Portaro, PharmD ('70), JD, display their USC pride before the football game.
bottom left: Karen and Dave D’Altorio, PharmD ('77), enjoy the picnic while decked out in cardinal and gold.
bottom center: Taking in the Trojan spirit are Leslie Blinn, PharmD ('74), Don Gelles, PharmD ('74), and Steve Litsey, PharmD ('72).
bottom right: Connie and Alex Cao, both PharmD ('01), introduce their son to Trojan traditions.
USC’s growing community of behavioral economists and other experts on health-care reform have received a $20 million boost with the announcement of three NIH research grants, including an $11.4 million award to Jason Doctor of the School of Pharmacy.

The three-year grant from the National Institutes of Health is the largest ever received by the School of Pharmacy. Doctor, an associate professor trained in psychology and behavioral economics, plans to explore ways to dissuade doctors from prescribing antibiotics unnecessarily.

His research partners include health care economist Dana Goldman, director of the Leonard D. Schaeffer Center for Health Policy and Economics at USC, where Doctor holds a joint appointment, and Joel Hay, professor of pharmaceutical economics and policy at the School of Pharmacy, also with a joint appointment at the Schaeffer Center. The Schaeffer Center is a collaboration between the Schools of Pharmacy and Policy, Planning, and Development.

The grant to Doctor’s group aims to improve prescription practices for common acute respiratory infections, which include bronchitis and influenza. Aggressive antibiotic prescribing is a major public health concern for its suspected link to the spread of antibiotic-resistant bacteria.

“It’s widely agreed among physicians that antibiotics are overprescribed, but if you ask a physician about their own care of patients, they tend to see less of a problem,” Doctor said.

Doctor and his team will apply behavioral economics — the science of how people make decisions — to help reduce the frequency with which doctors prescribe antibiotics for certain acute respiratory infections. Annie Wong-Beringer, an associate professor at the School of Pharmacy, is among the investigators on the grant. Other groups involved on the project are from UCLA, RAND Corporation, Harvard, University of Chicago and Northwestern University.

Dean Vanderveen said, “Jason Doctor is an exceptional scientist who is conducting important research. This project holds great promise for not only improving patient care, but reducing health care costs — a critical national priority.”

In addition to Doctor’s grant, Dana Goldman is the primary investigator on a $5.5 million grant addressing Medicare reform and both Goldman and Hay are involved in a third NIH grant, led by Shinyi Wu of the Viterbi School of Engineering and Kathleen Ell of the School of Social Work, which is studying ways to improve outcomes for patients with diabetes who become depressed.
The School of Pharmacy has once again been recognized for its outstanding dedication to community outreach.

The American Association of Colleges of Pharmacy has given a 2010-11 Student Community Engaged Service Award to PharmD students Terrance Yu who was the team leader on the award application, Phuong Ho, Jennifer Fu, Tina Patel and Sana Vaiyani for their leadership and active participation in the USC Volunteer Outreach Initiative & Community Education (VOICE). The two main components of VOICE are the pharmSC Clinic and SHARE (Students Helping and Receiving Education).

The pharmSC Clinic is located at the Botica del Sol Pharmacy in Boyle Heights, where there is a largely underserved population. PharmSC is the first student-originated and student-run clinic at the School of Pharmacy, created to make up for the lack of health services available to people in the area surrounding the Health Sciences Campus. Here, students screen, counsel, vaccinate and provide brown-bag medication reviews to locals.

“The clinic is really special because it allows students to actually go in and see patients in a one-on-one setting,” explained co-director of pharmSC Tina Patel.

“I have loved being a part of pharmSC because it’s a place where pharmacy students can work together to make an impact on the surrounding community, and in the process we’re learning how to improve our clinical and patient counseling skills,” added Sana Vaiyani, also a co-director of the clinic.

The other project recognized in the award, SHARE, offers mental health and smoking cessation courses to people living in a temporary housing facility on Skid Row.

“Many people in this area smoke, and many want to quit but don’t have the resources or the support,” explained Terrance Yu, who leads the project. “We try to motivate and inspire participants to quit smoking, and to see them want to make these changes has been amazing.”

As part of the award, the Dean will receive $10,000 to be used exclusively to support program expansion. “We are so proud of the work students at the School of Pharmacy are doing to aid the surrounding community, and we are very honored to receive such a prestigious award,” said Dean R. Pete Vanderveen.

According to the AACP, the Student Community Engaged Service Award recognizes student-led community engagement projects that involve service learning, delivering consumer education about medication use, expanding access to affordable medications and improving public health. Pharmacy schools from across the country apply for the award and four are given out annually.
The United States faces a Herculean challenge in trying to bend the curve on health costs and it may take a national emergency before something finally can be done about it, health policy experts warned at an October conference at USC entitled “Health Reform and the Economy: Are They Good For Each Other?”.

“ar is no organized constituency for reducing health care costs,” said Leonard D. Schaeffer, the Judge Robert Maclay Widney Professor at USC. “Everybody’s cut is somebody’s income or somebody’s treatment.”

Schaeffer said the federal government ultimately may establish a single-payer approach to health care if costs are not brought under control, even though this idea has been a political nonstarter for decades.

Schaeffer is the benefactor of the Leonard D. Schaeffer Center for Health Policy and Economics at USC, which sponsored the event. Dana Goldman, the center’s director, said this was just the first among policy forums, seminars and conferences to bring academia and industry together at the university. Policymakers, analysts and industry executives came from across the country and beyond to discuss the recently passed health reform legislation and measure its impact on the overall economy.

Launching the conference, USC President C. L. Max Nikias said he intended to help make the Schaeffer Center at USC one of the world’s top health-policy think tanks, noting that the topic of health care has now “taken center stage.”

Although most speakers said they thought health reform would be beneficial in expanding insurance coverage — albeit ineffectual in cutting costs — one expert said it would be a disaster for the country. Joel Hay, Professor of Pharmaceutical Economics and Policy at the School of Pharmacy, said it now gets in the way of real reform to control costs.

The Schaeffer Center is a collaboration between the USC School of Policy, Planning, and Development and the USC School of Pharmacy.

USC RECEIVES $56.8 MILLION NIH AWARD FOR CLINICAL AND TRANSLATIONAL RESEARCH

Good news: The School of Pharmacy is an academic partner with the Keck School of Medicine in a prestigious National Institutes of Health grant that will support and promote scientific discoveries and their application in real-life settings to health and health care. Dean R. Pete Vanderveen and Professors Roberta Diaz Brinton and Frances Richmond were all recognized for their work with the Los Angeles Basin Clinical and Translational Science Institute. The Clinical and Translational Science Award will have an important focus on health issues of people living in densely populated urban environments.
President Obama presents Roberta Diaz Brinton with the 2010 Citizens Medal, the nation’s second-highest civilian honor, during a ceremony in the East Room of the White House, Aug. 4, 2010. (Official White House Photo by Lawrence Jackson)

Brinton Continues on Forward Moving Trajectory

School of Pharmacy professor receives recognition from the White House and appears on Good Morning America.

Professor Roberta Diaz Brinton has had a whirlwind year of success. First, she was presented with the prestigious 2010 Presidential Citizens Medal by President Barack Obama in a ceremony at the White House this past August, and then was interviewed by Maria Shriver for a Good Morning America segment that aired in October.

Considered among the nation’s highest civilian awards, the Presidential Citizens Medal recognizes citizens who have performed exemplary deeds of service for the nation. Twelve other citizens were honored along with Brinton, having been chosen from a pool of some 6,000 applicants.

Brinton was recognized for her work in improving science education for students in Los Angeles through her role as director of the USC Science Technology and Research program for the last 22 years. The program provides elementary, middle and high school students and their teachers with unique access and tools that are structured to engage the students in science. The STAR program has served thousands of minority and disadvantaged children in the Los Angeles area over the past two decades.

“I am very grateful for this honor,” Brinton said. “And I especially want to thank USC President Nikias, President Emeritus Steven Sample and School of Pharmacy Dean R. Pete Vanderveen for their persistent support of this program and its outreach into our community.”

While Brinton has been a stalwart director of STAR, she also runs an impressive research enterprise at the School of Pharmacy, where she holds the R. Pete Vanderveen Chair in Therapeutic Discovery and Development. Her work focuses on neurodegeneration, with an emphasis on Alzheimer’s disease.

Maria Shriver, still First Lady of California at the time of her visit, chose to spotlight Brinton’s research when she made it her mission to bring attention to Alzheimer’s disease through her annual Shriver Report, with this year’s edition entitled “A Women’s Nation Takes on Alzheimer’s”.

Shriver spoke to Brinton about her research on the disease as it relates to women, and this aspect of her work was featured on a Good Morning America segment that aired in October.

Brinton explained that there is a connection between menopause and the development of Alzheimer’s, and that the disease can start to form in women as early as their 40s and 50s. Her advice to women of this age? “Maintain brain health by avoiding diseases like type 2 diabetes,” she told Shriver on the show.

Brinton is currently working to develop a functional therapeutic to affectively prevent and treat Alzheimer’s disease and other types of mental deterioration.

President Obama presents Roberta Diaz Brinton with the 2010 Citizens Medal, the nation’s second-highest civilian honor, during a ceremony in the East Room of the White House, Aug. 4, 2010. (Official White House Photo by Lawrence Jackson)
“We believe in education,” said Ron Jung, who along with his wife Dianne, recently made a $1 million gift naming the School of Pharmacy’s Dianne Kwock Jung and Lunny Ronnie Jung Centennial Park.

The Jungs are no strangers to the School, both having received their PharmD degrees at USC back in the 70’s. Then and now, they’ve maintained ties with USC even while building a successful pharmacy business and raising two sons in the San Joaquin Valley.

“When our boys were growing up, our lives were very busy with their activities, making it hard for us to get back to campus,” said Ron. “But once they too became Trojans, we reconnected and started going to games and other events.”

Reconnecting with the School is one thing, but giving a $1 million gift is quite another thing.

“We never thought we’d be where we are today,” said Dianne. “We’ve worked very hard and continue to do so running our three pharmacies. But we’ve also realized the importance of estate planning, making it possible to use your money in ways that you believe are important.”

To the Jungs, using the money to further the mission of the School of Pharmacy and perpetuate a good educational system made sense. While both of them are grateful for the opportunities their education at the School opened to them, they hope their gift will do the same for others.

“Our parents emigrated from China, and worked very hard to provide an education for us. They really instilled the value of education in our thinking,” noted Dianne. “And we’ve done the same for our sons.”

Son Nicholas has both medical and undergraduate degrees from USC while son Jason earned both his bachelor’s and MBA at USC’s Marshall School. When deciding on this gift, the Jungs discussed how it would affect their sons and their inheritance.

“We hope that we have laid a good foundation for our boys, through education and now their professions,” said Dianne. “Now we trust that they’ll build their own legacies through their work as we’ve tried to do.”

The Jungs compare the foundation that they’ve provided to their sons with their gift to the School, seeing it as an asset to the School’s foundation.

As Ronnie put it, “If you don’t plan ahead, you’ll pay more taxes on money. To us, it was very important to identify how we wanted our money spent. And it wasn’t for taxes.”

Working with the School, the Jungs were able to customize a combination gift that provides a portion in cash and a portion through planned giving. Experts at USC Planned Giving designed a gift that met the objectives of the Jungs while supporting the School.

“Working with USC on this gift has really made it a win-win,” said Ronnie. “This was a big decision for us — and having done it, we believe it was the right decision and encourage others who have worked hard to look at the opportunities that a planned gift provides to you and to the School of Pharmacy.”
ALUM updates

Ning Gu, PhD (‘10), has been published in the *Journal of Bone and Joint Surgery*.

Ryan Hamilton, PhD (‘02), received a Linus Pauling Institute Award for his poster presentation on caloric restriction at the Oxygen Club of California 2010 World Congress in Santa Barbara; received a Biology of Age Training Grant at the University of Texas Health Science Center, where he is now a postdoctoral fellow.

Quang Le, PhD (‘10), has accepted a tenure track position at the Western School of Pharmacy.

Daya Perkins, MS (‘06), PhD (‘08), presented a paper on mechanisms of ethanol action, at the 2010 ISBRA World Congress, in Paris, France, in September; abstract has been published in *Alcoholism: Clinical and Experimental Research*; selected for the 2010 International Society for Biomedical Research on Alcoholism President’s Young Investigator Award at the 2010 ISBRA World Congress in Paris, France, in September.

Eric Qiong Wu, PhD (‘03), MS (‘02), MA (‘00), has been named managing principal of Analysis Group in Boston.

Yong Yuan, PhD (‘98), presented “Chronic Hepatitis C Infections and the Risk of Depression and Other Adverse Events,” at the American Association for the Study of Liver Diseases Annual Meeting, in Boston, MA, in October.

B. Joseph Gugliemo, PharmD (’78), published an article in the *Archives of Internal Medicine*, “A Prescription for Improved Chronic Disease Management: Have Community Pharmacists Function at the Top of Their Training.”

remembrances

Sidney Chambers, BS (’47), passed away in July. Chambers worked for Thrifty Drug Company (now Rite Aid Corporation) for over 30 years as assistant vice president and director of professional and personnel affairs. He was instrumental in establishing the Thrifty Drug Store Scholarship that awarded over $150,000 in scholarship support to students at the School of Pharmacy. An avid Trojan, Dr. Chambers was a charter member of QSaD Centurion and served on the University’s Board of Governors and on the Pharmacy Alumni Association Board of Directors. Chambers is survived by his wife Helen and two daughters.

Vincent A. Gish, BS (’52), passed away in December in Pomona. He owned Owl Rexall Drug in Covina for many years and also worked at the health center at California State Polytechnic University.

Howard Love, BS (’55), passed away on October 3, 2010.

Steve Malott, PharmD (‘59), passed away in August. He owned Malott’s Pharmacy on the Westside.

Amos Roulette, PharmD (‘60), passed away last December.

Perry Yamamoto, PharmD (‘60), passed away November 9, 2010.

Barbara L. Heun Yamato, PharmD (‘61) passed away in June. She remained active with her graduating class, coordinating all of their reunions. Yamato is survived by her husband of 47 years, Richard “Dick” Yamato, PharmD (‘62); their daughters, Deanne Yamato-Tucker, Stacy Yogi (Todd), and Trisha Yamato; sister Laura Lee (Tom Long); grandchildren Kelli, Kristen, Ryan, and Andrew.

all in the NEIGHBORHOOD

Board of Councilor Keith LaFond, PharmD (’63), recognized a need for clinical pharmacy services in the area of his Lincoln Heights Pharmacy. To make it happen, Dr. LaFond provided the funding for USC clinical pharmacist Rory O’Callaghan, PharmD, who recently completed her residency at USC, to work with patients at the pharmacy and at the neighboring Arroyo Vista Family Health Center. Dr. O’Callaghan also oversees residents and student pharmacists at the two locations.
Vanderveen and Wincor met with officials from National Taiwan University, China Medical University in Taichung, Kaohsiung Medical University and Taipei Medical University during the trip, where their work culminated with the signing of formal academic exchange agreements providing opportunities for faculty and students at each of the schools.

Vanderveen and Wincor also made presentations at the various universities, providing an overview of community pharmacy practice experiences and discussing the pharmacy profession as it currently exists in the United States.

At China Medical University in Taichung, Wincor presented an interactive medication counseling session.

“This was really quite new to the students,” Wincor said. “In Taiwan, students currently receive very little clinical training, so the exercise really provided a new experience for them.”

During the visit, Vanderveen and Wincor also met with the vice minister of the Department of Health and with an officer from the Taiwan Food and Drug Administration, providing an opportunity for them to explain the approach taken by USC in educating pharmacy students and the expanded role that the pharmacist plays on the health-care team.

“It was very encouraging to talk with the vice minister and to learn of her total understanding and support of the expanded role of the pharmacist,” Vanderveen said. “In the U.S., we’ve seen how the pharmacist is able to improve health outcomes for patients, and we’re happy to tell this story to our colleagues around the world.”

Currently, pharmacy programs in Taiwan, as well as in many other parts of Asia, primarily focus on a basic science curriculum with minimal training in the counseling of patients. However, there is a trend to change this educational paradigm and provide students with more patient-centric skills comparable to those of U.S. pharmacy students.
Pharmacy Duo Meet

A collaboration between the School of Pharmacy and the School of Cinematic Arts has created a unique science education DVD, entitled “A Tale of two MAO Genes: Exploring the Biology and Culture of Anxiety and Aggression.” The DVD, which explores the MAO brain enzymes that control anxiety and aggression in both humans and animals, is based on University Professor Jean Shih’s 30 years of groundbreaking research on these genes. Shih is currently using the DVD in the instruction of the course Biochemical and Molecular Targets of Drug Action, a first-year PharmD class at the School of Pharmacy. It is also being used at USC in the College of Letters, Arts & Sciences, as well as abroad at the Tsinghua University of Beijing in China.

Innovative Education Tool Makes Its Way Across University and World

University Professors collaborate on genes DVD.

A collaboration between the School of Pharmacy and the School of Cinematic Arts has created a unique science education DVD, entitled “A Tale of two MAO Genes: Exploring the Biology and Culture of Anxiety and Aggression.” The DVD, which explores the MAO brain enzymes that control anxiety and aggression in both humans and animals, is based on University Professor Jean Shih’s 30 years of groundbreaking research on these genes. Shih is currently using the DVD in the instruction of the course Biochemical and Molecular Targets of Drug Action, a first-year PharmD class at the School of Pharmacy. It is also being used at USC in the College of Letters, Arts & Sciences, as well as abroad at the Tsinghua University of Beijing in China.

SCHOOL HOSTS TAIWANESE STUDENTS

Visiting scholars from three medical universities spent July at the School of Pharmacy.

This summer, 32 students from Taipei Medical University, China Medical University and Kaohsiung Medical University in Taiwan participated in a four-week program at the School of Pharmacy, which gives the visiting scholars the opportunity to expand their pharmacy education both culturally and academically. The students were enrolled in a three-week course that focuses on drug delivery and design followed by a week of interactive seminars, presentations from USC students, patient education challenges and group tours of different pharmacy settings.

China Medical University students Chang Yang Tan and Ting-Ruei Chang with one of their USC PharmD student hosts, Elina Baskina.
GOLD STANDARD

Dana Goldman, PhD, professor at the School of Pharmacy and director of USC’s Leonard D. Schaeffer Center for Health Policy and Economics, has been named lead researcher on a $5.5 million grant to advance the science of Medicare reform. The grant is funded under a high-profile program addressing top priorities of National Institutes of Health Director Francis Collins.

The grant is part of a $1.1 billion commitment for comparative effectiveness research in health care and policy. Comparative effectiveness research, also called evidence-based health care, evaluates how various drugs, treatments and services stack up against one another in efficacy and cost. Goldman’s is one of three NIH grants awarded to the School of Pharmacy, all of which were made possible by the American Recovery and Reinvestment Act of 2009.

Goldman also recently shared his expertise on the topic of health-care reform as a featured speaker at a lunch policy briefing conducted for the Sacramento policymaking community. The event was co-sponsored by the USC Sacramento Center and the USC Office of Government and Civic Engagement. The lunch furthered the university’s mission to connect and make available USC’s research and experts with the policymaking community in California. The day’s activities consisted of a group meeting with USC adjunct faculty interested in the Center’s work, and meetings with OSHPD, the New America Foundation and CAHP.

Bridging Language Barriers

Health Promotion Practice featured an article co-written by Dr. Mel Baron about the development of his depression-focused fotonovela and what beneficial health implications this type of literacy tool could have on Latinos with limited English proficiency. Meanwhile, Baron has just released the latest fotonovela in his series, “Forgotten Memories,” which focuses on dementia and discusses what patients and their caregivers should do to get the help they need. This is the sixth in the series produced by Baron and his team at the School of Pharmacy.

JUST IN The National Institute of Transplantation, in partnership with School of Pharmacy’s Professor Mel Baron and the Institute for Health Promotion and Disease Prevention at Keck, has received a $599,887 grant from UniHealth Foundation to fund a kidney transplant series of videos, in both English and Spanish, to educate patients and their families about the transplant process. In addition, Baron has received a $43,340 grant from the Anthem Blue Cross Foundation to evaluate the effectiveness of his fotonovela, “Fiesta Fiasco,” as a health literacy tool for educating low-literacy, low-income Latino populations about medication adherence.

Obesity Summit

School takes up battle against childhood obesity.

School of Pharmacy student Camille Pacis takes Congresswoman Lucille Roybal-Allard’s blood pressure as part of the “Childhood Obesity: A Call to Action” conference. The School of Pharmacy was among the sponsors of the event and students were on hand to do blood pressure screenings. Professor Mel Baron spoke at the conference about the school’s outreach efforts to combat the epidemic and his upcoming fotonovela on the topic.
Following The Building Blocks Of DISCOVERY

A paper by USC Professor Ian Hutchinson makes its mark on DNA science.

Scientific research is a process whereby scientists from around the world make stepped discoveries, building on each other’s work along the way.

This collaborative process is illustrated by having research cited by colleagues — often a sign of its influence and significance. Of note, School of Pharmacy Professor Ian Hutchinson recently reached a 1,000-citation milestone for an article he wrote on an anti-inflammatory protein, indicating his research has proven a valuable jumping-off point for future scientific developments.


“My hypothesis was that genetic variability was responsible for the huge range in production of IL-10 among normal people,” says Hutchinson. “However, no one believed this was the reason, and computerized genetic analysis was not yet available to show this.”

So without the aid of computers, Hutchinson pursued his hunch the old-fashioned way. He printed out several available IL-10 DNA sequences, lined them up on his kitchen table and compared them, letter by letter, to find putative differences. “Today, this work is done with push of a button, taking seconds on the computer,” says Hutchinson. “But my decade-old method proved my point — albeit the hard way.” Once he identified the differences, he returned to the lab to confirm his discoveries, again using now-outdated technology such as long sequencing gels.

Hutchinson’s research showed that people who are low producers of the IL-10 protein have a strong defense against certain infections and possibly cancer. “On the down side, these same folks have a greater susceptibility to inflammatory conditions, such as heart disease, allergies and autoimmune disorders,” he explained. “For high producers of IL-10, the opposite protections and susceptibilities are true. Those who are intermediate producers are the lucky ones.”

So what made his work so citation-worthy? “This was our first description of the genetic variation (polymorphism) in the IL-10 gene, and our research suggested the wide clinical importance of this finding,” explained Hutchinson. “I picked a very important gene to study in the sense that it is involved in a lot of pathological processes.”

Because of the gene’s diverse involvement, other researchers have cited Hutchinson’s paper in their work on a plethora of topics, including infectious diseases, inflammatory conditions, autoimmunity, transplantation of organs and bone marrow, asthma, allergic reactions to drugs, cancer and cardiovascular diseases.

A professor of pharmacy in the Titus Family Department of Clinical Pharmacy and Pharmaceutical Economics & Policy, Hutchinson joined the School of Pharmacy in 2005 after teaching at the University of Manchester in England.
Mel Baron, PharmD, presented during the panel discussion “Innovative Strategies to Address Health Literacy” at Improving Health Literacy in Los Angeles: A Multi-Sector Multi-Disciplinary Challenge in Los Angeles in May; presented as a panelist at the “Childhood Obesity: A Call to Action” Summit in Los Angeles in September; presented at Francisco Bravo Medical Magnet High School’s 28th Annual Health Education Fair in Los Angeles in October; featured in the August 2010 issue of Pharmacy Today for his use of fotónovelas for community outreach; received a Los Angeles Basin Clinical and Translational Science Institute 2010 Pilot Grant for his collaboration on the project, “Efficacy of Fotonovelas to Improve Health Literacy and Health Behavior among Hispanic/Latinos in Los Angeles”.

Paul Beringer, PharmD, presented “Hospital Clinical Pharmacy in the U.S.” and “Antibiotic Pharmacokinetics/Pharmacodynamics: Clinical Application,” at the State University of Maringa, in Brazil, in November; interviewed by the local TV station when invited to speak at the State University of Maringa, in Brazil, in November; received a $52,844 Cystic Fibrosis Center Grant from the Webb Foundation at the Children’s Hospital Los Angeles for the project, “Effect of CXCr2 Inhibition on Induced Inflammation in Cystic Fibrosis Mice”.

Steven Chen, PharmD, FASHP, FCSHP, presented on innovative models and approaches for interdisciplinary training and health care delivery at the Institute of Medicine’s Roundtable on the Promotion of Health Equity and the Elimination of Health Disparities, in Washington, DC, in September; participated in a National Institutes of Health workshop, in Washington, DC, in October; presented “Partnerships between Schools of Pharmacy and Safety Net Clinics: Patient Care, Teaching and Scholarship Opportunities” as the 2010 Philip C. and Ethel F. Ashby Distinguished Lecturer, at the University of Oklahoma College of Pharmacy, in Oklahoma City, OK, in November.

Daryl Davies, PhD, received a Los Angeles Basin Clinical and Translational Science Institute 2010 Pilot Grant for his collaboration on the project, “Developing High Alcohol Sensitivity Mutant Receptors as Novel Tools for Identifying the Neurochemical Bases of Alcohol Use Disorders”.

Jason Doctor, PhD, awarded three-year $11.4 million Behavioral Economics RC4 grant from the NIH for the project, “Use of Behavioral Economics to Improve Treatment of Acute Respiratory Infections”.

Julie Dopheide, PharmD, BCPP, presented as an invited panelist at the Best Pharmaceuticals for Children Act Annual Meeting at the NIH, in Rockville, MD, in November.

Melissa Durham, PharmD, promoted to Assistant Professor.

Dana Goldman, PhD, had his research featured on WebMD, Los Angeles Times, CBS News, CNN, Forbes, Bloomberg News, International Business Times, Xinhua News Agency, Time, Seattle Weekly and Fox News Houston affiliate KRIV-TV, which found that men over 40 who use erectile dysfunction treatments are two to three times more likely to pick up a sexually transmitted disease than men who don’t in July; had his research regarding medical care spending featured in The Hill in July; quoted in the Sacramento Bee about new legislation that would make California the first state to establish a health benefits exchange in October; quoted in the New York Times about Medicare issues in October; quoted in the New York Times about luxury perks offered in hospitals in December; lead researcher on a $5.5 million grant to advance the science of Medicare reform funded by National Institutes of Health Director Francis Collins; received a $3 million grant from the Department of Health and Human Services for research to improve outcomes for diabetic patients who become depressed.

Joel Hay, PhD, quoted in Investor’s Business Daily about a Genentech drug to treat macular degeneration that is 40 times more expensive than a similar drug manufactured by the company in November; interviewed by American Public Media’s “Marketplace” about the financial costs to society of diseases like diabetes and Alzheimer’s in December.

Kathleen Johnson, PharmD, MPH, PhD, William A. and Josephine A. Heeres Professor in Community Pharmacy, chair, presented two papers at the World Federation of Hemophilia, in Buenos Aires, Argentina, in July; presented poster on Utilization and Costs of Hemophilia at the ISPOR 4th Asia-Pacific Conference, in Phuket,
Thailand, in September; presented on utilizing pharmacoeconomics and outcomes research to evaluate clinical pharmacy services as an invited speaker at Mahidol University, in Bangkok, Thailand, in September; gave a research update for the Hemophilia Utilization Group Study to consumers, families, clinicians and researchers as an invited speaker at the National Hemophilia Foundation annual meeting, in New Orleans, LA, in November; appointed as the USC Faculty Task Force representative to the California Health Benefits Review Program for the third year; received funding to co-advice a current PhD student along with her former graduate student through the Royal Golden Jubilee PhD scholarship program.

Geoffrey Joyce, PhD, presented “The Costs of Chronic Disease,” as part of a World Bank video teleconference in Los Angeles in June.

Jeffrey McCombs, PhD, director of Graduate Studies, presented “Chronic Hepatitis C Infections and the Risk of Depression and Other Adverse Events,” at the American Association for the Study of Liver Diseases Annual Meeting, in Boston, MA, in October; published in the Los Angeles Times with a letter to the editor regarding health care and job creation in January.

Edith Mirzaian, PharmD, promoted to Assistant Professor.

Michael Nichol, PhD, presented “Finite Mixture Modeling Analyses of Healthcare Utilization in Patients with Type II Diabetes and Comorbid Cardiovascular Disease” and “The Impact of Depression on Medication Adherence in a California Medicaid Population with Cardiovascular Disease,” at the 32nd Annual Meeting of the Society for Medical Decision Making, in Toronto, Canada, in October.

Tien Ng, PharmD, FCCP, BCPS, elected Fellow of the American College of Clinical Pharmacy; presented “Comparative Effects of Nesiritide and Nitroglycerin on Renal Function and Incidence of Renal Injury by Traditional and RIFLE Criteria in Acute Heart Failure” and “Therapeutic Approach to the Patient with Left Ventricular Dysfunction and Atrial Fibrillation,” at the American College of Clinical Pharmacy Annual Meeting, in Austin, TX, in October.

Susie Park, PharmD, BCPP, elected Fellow of the California Society of Health-System Pharmacists.

Paula Phongsamran, PharmD, elected Fellow of the California Society of Health-System Pharmacists.

Neeraj Sood, PhD, quoted in the Los Angeles Times about how the recently passed federal health-care reform could help to reduce medical costs, which in turn could create tens of thousands of new jobs annually in other industries in November.

Glen Stimmel, PharmD, BCCP, presented “Maximizing Antidepressant Outcomes in Primary Care,” at the Sierra Heart Institute’s 21st Annual Trends in Cardiovascular Medicine: Cardiology for the Primary Physician conference in Squaw Valley in November; presented “Orgasmic Dysfunction” and “How to Counsel Patients on Sexual Issues,” at Loma Linda University in Loma Linda in November.

Bradley Williams, PharmD, CGP, presented “Pharmacokinetic Considerations in the Elderly” and “Clinical Pearls in Geriatric Drug Treatment,” at the UCLA Intensive Course in Geriatric Medicine and Board Review in Marina del Rey in September; presented “New Drugs for Older Adults,” at the California Pharmacists Association Academy of Long-Term Care Weekend in Huntington Beach in October; presented “Medication Challenges in Older Adults,” at the 3rd Annual USC Geriatric Dentistry Symposium in Los Angeles in October; participated in a panel discussion on “Geriatric Education Centers and Opportunities for the Geriatric Pharmacist” and presented “Developing and Implementing an Elder Abuse Curriculum for Student Pharmacists,” at the annual meeting of the American Society of Consultant Pharmacists, in Orlando, FL, in November.

Michael Wincor, PharmD, associate dean of Globalization and Continuing Professional Development, presented with an official certificate of appreciation by the president of Tokyo University of Pharmacy and Life Sciences in recognition of his many years of service and collaboration with the school.

Annie Wong-Beringer, PharmD, FCCP, FiD Sa, vice chair, elected Fellow of the Infectious Diseases Society of America, 2010; presented “Hospital Clinical Pharmacy in the U.S.” and “Antibiotic Pharmacokinetics/ Pharmacodynamics: Clinical Application,” at the State University of Maringa, in Brazil, in November; interviewed by the local TV station when invited to speak at the State University of Maringa, in Brazil, in November.
School of Pharmacy scientist’s research explores how to easily turn proteins on and off.

A MICROSCOPIC “On-Off” SWITCH

The National Institute of Biomedical Imaging and Bioengineering, part of the National Institutes of Health, has awarded Assistant Professor Andrew MacKay with a $445,500 grant for his project entitled, “A Rapid Reversible Switch for Controlling Intracellular Trafficking.”

“We’re working with a short polypeptide that aggregates when heated, and tagging it onto proteins in cells,” explains MacKay. “When the proteins stick together, their function gets turned off.”

MacKay’s research focuses on GFD, a fluorescent protein, and its ability to aggregate other proteins. He is developing ways to easily shut proteins on and off. “The whole process happens very quickly—in 10 or 20 seconds,” says MacKay, who foresees his research being used to develop technology to target specific proteins.

“This new mechanism can be used as a research tool for a broad range of diseases, including cancer and infectious diseases,” he says.

MacKay is an assistant professor of biomedical engineering in the Department of Pharmacology and Pharmaceutical Sciences.

“His previous research has involved developing a genetically engineered drug carrier, called chimeric polypeptides, which target therapeutics through controlled release, a process that makes old drugs behave like new drugs, and may be used to overcome current problems with chemotherapy.

He joined the School’s faculty in 2008 and has a background in chemical bioengineering. His lab focuses on developing new drug carriers to aid in diseased microenvironments, with a specific focus on cancer.
Assistant Professor Bangyan Stiles has received a 5-year, $1,417,500 RO1 grant from the National Institute of Diabetes and Digestive and Kidney Diseases, part of the NIH, for the project titled “The Mechanism of Beta-Cell Regeneration.”

Stiles’s research aims to discover if the regeneration of beta-cells in adult tissue can be induced by manipulating the PTEN gene, which is present in almost all cells of the body. This type of research targets both adults suffering from type 1 diabetes, whose beta-cells no longer regenerate, and adults with type 2 diabetes, who with time lose function in their beta-cells.

“This grant money will allow us to analyze exactly how removing PTEN causes these effects and what molecules are responsible for the changes,” said Stiles.

“By the end of the five years, we hope to discover the molecules that control the aging of beta-cells,” explained Stiles. “In the long term, this research can be used to develop drugs that can target these molecules to induce beta-cell growth, which would in effect cure both type 1 and type 2 diabetes.”

In addition to the grant, Stiles was honored with a cover feature on the December issue of Gastroenterology, the official journal of the AGA Institute. Stiles’s article, “Expansion of Hepatic Tumor Progenitor Cells in Pten-Null Mice Requires Liver Injury and Is Reversed by Loss of AKT2,” examines PTEN’s role as a tumor suppressant.
The Alzheimer’s Association has honored Research Assistant Professor Liqin Zhao with an Investigator-Initiated Research Grant in the amount of $200,000 and a featured profile in their nationally distributed report, “Perspectives in Alzheimer Science.”

Zhao received the grant for her project titled “Insulin-Degrading Enzyme, ER Subtype, ApoE Genotype & Alzheimer’s Prevention vs Treatment.” Her research will explore the hypothesis that insulin-degrading enzyme (IDE) may be linked directly to both type 2 diabetes and Alzheimer’s disease.

“I believe this basic science research could lead to new opportunities for translational therapeutic developments, specifically the development of an effective and safe estrogen alternative therapy to prevent menstrual estrogen deficiency-related disorders such as type 2 diabetes and Alzheimer’s disease.”

“This basic science research could lead to new opportunities for translational therapeutic developments, specifically the development of an effective and safe estrogen alternative therapy to prevent menstrual estrogen deficiency-related disorders such as type 2 diabetes and Alzheimer’s disease.” said Zhao. The development of alternative therapies is important, as the use of estrogen therapy is limited due to its cancer risks.

This is Zhao’s second grant from the Alzheimer’s Association. “I am very grateful for the Association’s generous funding that has greatly advanced both basic and translational Alzheimer’s research,” said Zhao.

In addition to the funding, the Association honored Zhao with a profile in their recently released report, and was one of only five chosen to appear in the publication. The feature recognizes Zhao’s Alzheimer’s Association-funded research on phytoestrogens that resulted in the discovery of the phyto-beta-SERM formulation, currently being tested in a clinical trial funded by the National Institute of Aging.

The Alzheimer’s Association is the largest private non-profit funder of Alzheimer’s research worldwide, and has provided $300 million in grant funding since its grant program started in 1982.

Liqin Zhao has been awarded a $200K grant for her research, and was also honored with a profile in the Association’s annual report.
James Adams, PhD, presented “Chumash Traditional Medicinal Uses of California Plants” and “Chemical Characterization of Salvia Columbariae and Papaver Californicum,” at UC Davis in October.

Ronald Alkana, PharmD, PhD, associate dean of Graduate Studies and Curricular Development, co-chaired a symposium entitled “GABA-A Receptor Subunit Selectivity in Alcohol Action: Focus on Delta Subunit,” at the International Society on Biomedical Research on Alcohol World Congress, in Paris, France, in September; received a Los Angeles Basin Clinical and Translational Science Institute 2010 Pilot Grant for the project, “Developing High Alcohol Sensitivity Mutant Receptors as Novel Tools for Identifying the Neurochemical Bases of Alcohol Use Disorders”.

Roberta Diaz Brinton, PhD, R. Pete Vander-veen Endowed Chair in Therapeutic Discovery and Development, is among 13 winners of the 2010 Presidential Citizens Medal, the nation’s second highest civilian honor; interviewed by KPCC-FM after receiving the Medal in August; featured in La Opinion for her work as director of the USC Science Technology and Research program; part of the NIH Clinical & Translational Science Award to USC-based Los Angeles Basin Clinical and Translational Science Institute for $56.8 million; presented “Vasopressin and Oxytocin: Rationale for Therapeutic Potential for Autism Spectrum Disorder,” at Ironwood Pharmaceuticals, in Boston, MA, in June.

Enrique Cadenas, MD, PhD, Charles Krown/Alumni Professor, presented “Protein Post-translational Modification in Aging and Neurodegenerative Diseases,” at the SFRR-Europe Summer School on Protein Maintenance and Turnover in Aging and Diseases, in Spetses, Greece, in June; presented “Lipoic Acid and Thiol-disulfide Exchange in Aging,” at the Annual Meeting of the Hellenic Academy, in Spetses, Greece, in June; presented “MAPK and Insulin Signaling in Aging and a Model of Alzheimer’s Disease: Role of Mitochondria,” at the Conference on Lipid Oxidation, Human Diseases, and Aging, in Turin, Italy, in June.

Julio Camarero, PhD, presented “Cyclotides, a Novel Natural Peptide Scaffold for Drug Delivery,” at the Roche Colorado Corporation Peptide Symposium, in Boulder, CO, in September.

Roger Clemens, DrPh, interviewed by Health Castle about the significance of new regulations on olive oil in November; cited in The Gleaner (Jamaica) regarding the purported health benefits of raw cane juice in November; presented “Fearmongers: Mythbusting Consumer Perceptions on Food and Health,” at Brigham Young University, Provo, UT and California State University, Fresno in Fresno in September; presented “Translation and Implementation of the 2010 USDA Dietary Guidelines” and “Media Snapshots of the 2010 USDA Dietary Guidelines,” at the 2010 American Dietetic Association Food & Nutrition Conference & Expo, in Boston, MA, in November.

Sarah Hamm-Alvarez, PhD, Gavin S. Herbert Professor in Pharmaceutical Sciences, chair, associate dean for Research Affairs, received a renewal of her R01 grant for her project, “Microtubule-based Transport in Lacrimal Gland Function”; presented “Insights into Lacrimal Gland Interaction with the Immune System from the Polymeric Immunoglobulin A Receptor Knockout Mice,” at the ISER Meeting, in Montreal, Canada, in July; presented “Funding of Postdoctoral Fellowships,” at the Provost’s retreat in Rancho Palos Verdes in August; presented “Basic Science Conference Summary” and hosted the Tear Film and Ocular Surface Society International Meeting, in Florence, Italy, in September.

Andrew MacKay, PhD, received a Los Angeles Basin Clinical and Translational Science Institute 2010 Pilot Grant for his collaboration on the project, “Nanoparticle Encapsulated Alphaβ Crystallin Minipeptide as a Therapeutic Agent for Atrophic Age Related Macular Degeneration”; received a 2010 Stop Cancer Research Career Development award.

Nouri Neamati, PhD, received a Los Angeles Basin Clinical and Translational Science Institute 2010 Pilot Grant for his collaboration on the project, “A Novel Therapeutic Approach to Sepsis”; received a $52,844 Cystic Fibrosis Center Grant from the Webb Foundation at the Children’s Hospital Los Angeles for his collaboration on the project, “Effect of CXCR2 Inhibition on Induced Inflammation in Cystic Fibrosis Mice”.

Bogdan Olenyuk, PhD, attended the 8th Globalization of Pharmaceuticals Education Network meeting, in Chapel Hill, NC, in November; attended the 2010 Annual Meeting and Exposition Awards, in New Orleans, LA, in November; presented “Multivalent Nanoparticles and Dendritic Wedges for Molecular and Functional Imaging,” at the USC Biomedical Nanoscience Retreat in La Canada in November.

Wei-Chiang Shen, PhD, John A. Biles Professor in Pharmaceutical Sciences, presented “Effect of Spacer Insertion on the Biological Activity, Production, and Pharmacokinetics of Recombinant Bifunctional Fusion Proteins,” at Trinity College, in Dublin, Ireland, in July.

Jean Shih, PhD, University Professor, Boyd P. & Elsie D. Welin Professor, presented “Translational Regulation and Multiple Functions of MAO A” as the invited opening speaker, at the Amine Oxidase International Symposium, in Edmonton, Canada, in July; presented “MAO: From Impulsivity to Compulsivity Animal Models for Mental Disorders,” at Taipei Medical University, in Taipei, Taiwan, in July; presented “MAO KO Mice as Models for Mental Disorders,” at the National Taiwan University, in Taipei, Taiwan, in July.

Bangyan Stiles, PhD, awarded $1,417,500 R01 grant from the National Institutes of Health for her project, “The Mechanism of Beta-Cell Regeneration”; had her article, “PTEN Loss in Liver Cancer, a Two Edged Sword: Priming Progenitor Cells to Become Tumor Initiating Cells; Promoting Expansion of Tumor Initiating Cells by Inducing Lipotoxic Cell Death of Hepatocytes,” featured on the cover of the December issue of Gastroenterology.

Liqin Zhao, PhD, awarded $200,000 Investigator-Initiated Research Grant funded by the Alzheimer’s Association for her project, “Insulin-Degrading Enzyme, ER Subtype, ApoE Genotype & Alzheimer’s Prevention vs. Treatment”.  
The School of Pharmacy’s Tina Patel, PharmD/MPH candidate, has been named a recipient of the Pharmacy Times/Wal-Mart reSPy Award, given to students who demonstrate “Respect, Excellence, and Service in Pharmacy.”

“As pharmacy students, it’s important to get involved in the community because we have so much valuable knowledge, and by sharing it, we are bettering the community and helping in our professional training as well,” said Patel.

Patel knew she wanted to take part in community outreach as soon as she started at the School of Pharmacy, and when she found there were no leadership roles available for first-year students, she decided to start something of her own.

“I had this idea to start a free clinic,” said Patel. “This was something a first-year had never done, but with the help of Professor Jeffery Goad and the support of some of my friends and fellow students, we were able to make it happen.”

After a year of planning, with the support and mentorship from Board of Councilor Raymond Poon, PharmD (’71), the free clinic was opened at the Botica del Sol Pharmacy in Boyle Heights, which received the 2010 National Health Conference Good Neighbor Pharmacy Pharmacy of the Year award for its innovative practices. The weekly clinic provides screenings for hypertension, cholesterol and blood pressure to local residents.

“The most rewarding experience for me was when we got our first repeat patient at the clinic,” said Patel. “It was a month or two after we started the clinic, and a man came in who we had previously referred to a physician for his high blood pressure. To me, this was a sign of our success: showing he trusted us and our guidance enough to come back.”

Each year only eight students nationally receive the reSPy award, selected by a panel of judges who evaluate the students’ commitment to community service. Tina Patel was featured in the September 2010 issue of Pharmacy Times as part of her award.

CLASS OF 2014 SUITS UP

Dean Vanderveen and School of Pharmacy faculty welcomed the incoming Doctor of Pharmacy class at this year’s White Coat Ceremony, which took place August 19 in the Health Sciences Campus Quad. During the ceremony, the 189 entering students — including a record 38 students from the Trojan Admission Pre-pharmacy (TAP) program — were “coated” by either a faculty member or a member of the QSAD Centurion board of directors. QSAD Centurion sponsors the annual event with support from Albertsons/Sav-on.
Nearly 150 students, faculty, clinicians and industry representatives attended the 9th annual “Moving Targets” symposium, hosted by the USC School of Pharmacy in October.

The event brought leaders in the field of immunotherapy from around the country together to share their insights on the cutting-edge research being implemented to enhance the immune system in defense against many common infectious diseases.

“The program provided all attendees with the latest research on the topic from academic, industry and government labs, and an opportunity for students to freely interact and network with faculty and industry leaders,” said Ara Moses, USC-AAPS student chapter chair.

Presenters included Dr. Kary Mullis, who received a Nobel Prize in chemistry for his invention of the polymerase chain reaction; Dr. Andrew Chan, senior vice president of research-immunology at Genentech, Inc.; Dr. Larry Steinman, chair of the Stanford University Program in Immunology; Dr. James Hodge, director of the Recombinant Vaccine Group for the National Cancer Institute; Dr. W. Martin Kast, a professor of Molecular Microbiology & Immunology, Obstetrics & Gynecology and Urology at the Norris Comprehensive Cancer Center at USC; and Dr. Jae Jung, chair of Molecular Microbiology and Immunology at the USC Keck School of Medicine.

The lecture portion was followed by a student poster competition, with School of Pharmacy students Megan Yardley, Kavya Ramkumar and Divya Pathania, all PhD candidates, taking home the top prizes.

Support for the event was provided by the USC School of Pharmacy and the American Association of Pharmaceutical Scientists.
Jason Shan, PharmD candidate, appears in a bus billboard that ran throughout Los Angeles, encouraging people to get vaccinated. The poster was placed in 72 buses that ran for a 12-week period. The project was a collaborative effort between CVS/pharmacy and the USC chapters of the Alpha Iota Pi Fraternity and the American Pharmacy Student Alliance.

Cynthia Gong, PharmD candidate, was awarded a 2010 Student Leadership Award from the California Society of Health-System Pharmacists in recognition of her work within the organization. In addition, she recently won the Foundation for Managed Care Pharmacy Summer Intern Best Project Competition of the Academy of Managed Care Pharmacists for her poster entitled, “Hepatitis C: A Budget Impact Model for Two Novel Protease Inhibitors, Telaprevir and Boceprevir from a VA Drug Budget Perspective.”

Tim Bensman, who is pursuing a PharmD and a PhD in Clinical and Experimental Therapeutics, was honored with an invitation to give a poster and oral presentation at the 24th Annual North American Cystic Fibrosis Conference, which took place October 21-23 in Baltimore, Maryland. Bensman, the only student presenter at the conference, gave a platform presentation entitled “Immunomodulatory Effects of Doxycycline in Cystic Fibrosis Airway Epithelial Cells” as part of the Inflammation in Cystic Fibrosis Airways workshop. Pictured with Bensman is Professor Paul Beringer.
Alcohol Research Earns Student Acclaim

Daya Perkins, a recent MS in regulatory science and PhD graduate from the labs of Daryl Davies and Ron Alkana, was selected for the 2010 International Society for Biomedical Research on Alcoholism President’s Young Investigator Award at the 2010 ISBRA World Congress, held in Paris, France, September 13-16. Perkins is currently doing a fellowship in global pharmaceutical sciences at Allergan.

GETTING TO KNOW you

Dean Vanderveen invited new students to a welcome party at his home, complete with live music and delicious food. The party was a chance for the Dean to meet members of the Class of 2014, and a way for the students to get to know each other, Dean Vanderveen and faculty members.

taking HOME top prizes

Several students from the USC chapter of the Student National Pharmaceutical Association were recognized at the annual meeting in Seattle last July. Among the honors earned by the group was the First Place 2010 National Scrapbook Award, which went to Susan Won and Ruth Awosika. Henry Delu received a Rite Aid Scholarship for $2,000 and a Walgreens Scholarship for $1,000. Also earning scholarships were Saleema Kapadia and Awosika, who each received Rite Aid Scholarships. Walter Cathey, PharmD (’62), special assistant to the dean for the School’s Diversity Initiative, is the chapter advisor and attended the meeting with the students.
Student Updates


Xiaoying Chen, PhD candidate, presented “Pharmacokinetics of Bifunctional Fusion Proteins,” at the Interdisciplinary Program in Drug Discovery retreat at USC in June.

Doctoral students Helen Ha, Kavya Ramkumar and Yumna Shabaik were named Best Teaching and Research Assistants at the School of Pharmacy.

Sara Han, PharmD candidate, was featured in the Korean media outlets Korea Daily, Korea Times and MBC America for her work organizing the KAPSA health fair, which took place in October.

Quang Le, PhD candidate, was published in Medical Decision Making for the article “Detecting blood laboratory errors using a Bayesian Network: An evaluation on liver enzyme tests,” which she co-authored with her professor Jason Doctor.

Dimple Modi, MS candidate, presented “Role of His192 in Mammalian Intestinal Oligopeptide Transporter-hPepT1,” at the 2011 Annual Meeting and Exposition Awards, in New Orleans, LA, in November.

Nick Mordwinkin, PharmD, PhD candidate, presented on the role of Angiotensins (1-7) on the production of nitric oxide and the proliferation of endothelial progenitor cells at the Gordon Research Conference, in Biddeford, ME, in August.


Anna Popova, PhD candidate, presented “Mapping DNA with a Nucleotide-Independent Spin Probe,” at the Interdisciplinary Program in Drug Discovery retreat at USC in June.

Kavya Ramkumar, PhD candidate, elected for membership to Phi Kappa Phi, USC’s oldest all-University honor society.

Sandra Safford, PharmD candidate, received the Amy Ross Scholarship in Lesbian Health Studies.

James Sanchez, PhD candidate, received the Krown Fellowship.

Tino Wilson Sanchez, PhD candidate, presented “Novel HIV-Integrase Inhibitors,” at the Interdisciplinary Program in Drug Discovery retreat at USC in June.

Janet Shin, PharmD (’07), PhD candidate, has been published in the Journal of the American Academy of Dermatology; presented “Chronic Hepatitis C Infections and the Risk of Depression and Other Adverse Events,” at the American Association for the Study of Liver Diseases Annual Meeting, in Boston, MA, in October.

Yan Wang, PhD candidate, presented “Proinsulin-Transferrin Recombinant Fusion Protein is a Novel and Potent Inhibitor in Hepatic Glucose Production,” at the 37th Annual Meeting & Exposition of Controlled Release Society, in Portland, OR, in July.

Letisha Wyatt, PhD candidate, received an NIH NRSA Pre-doctoral Fellowship.

Shili Xu, PhD candidate, presented “Targeting Bel-2 in Cancer,” at the Interdisciplinary Program in Drug Discovery retreat at USC in June.

Jason Yamaki, PharmD (’09), PhD candidate, presented “Antivirulence Effect of TR-700 on MRSA Strains Causing Complicated Skin Structure Infections (cSSTIs),” at the 50th Interscience Conference on Antimicrobial Agents and Chemotherapy Meeting, in Boston, MA, in September.

Megan Yardely, PhD candidate, presented “Ivermectin Significantly Reduces Alcohol Consumption in Male and Female C57BL/6 Mice,” at the 20th Neuropharmacology Conference in San Diego in November.

Zheng-Yi Zhou, PhD candidate, had a poster and was invited as one of the top four posters to give an oral presentation on Bleeding Episodes and Indirect Costs in Hemophilia A at the National Hemophilia Foundation annual meeting, in New Orleans, LA, in November.
February 5, Saturday
Interview Day
HSC - School of Pharmacy
Information: 323-442-1738 or stanovic@usc.edu

February 23, Wednesday
Health Care Panel Discussion
USC Orange County Center
Information: 323-442-1381 or carr@usc.edu

March 5-6, Saturday-Sunday
24th Annual Las Vegas Continuing Education Program
Caesars Palace
Information: 323-442-2403 or pharmce@usc.edu

April 28, Thursday
SoCalBio Research Event
Health Sciences Campus
Information: 323-442-1381 or carr@usc.edu

May 1, Sunday
Alumni/Senior Awards Banquet
Langham Huntington Hotel and Spa
Information: 323-442-1381 or carr@usc.edu

May 13, Friday
School of Pharmacy Satellite Commencement
Pappas Quad/HSC Quad

June 8, Wednesday
GNP/ICP Scholarship Golf Classic
Robinson Ranch Golf Club
Information: 323-442-1738 or stanovic@usc.edu

August 1-5, Monday-Friday
54th Annual Hawaii Postgraduate Refresher Course
Hyatt Regency Maui
Information: 323-442-2403 or pharmce@usc.edu