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SEND US YOUR E-MAIL ADDRESS
The School of Pharmacy is moving in a digital direction. While we will continue to use print publications delivered via snail mail, we are also using E-mail to keep in touch with you and to keep you informed of upcoming events.
Please send your E-mail address to carr@usc.edu.
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R. Pete Vanderveen
DEAN

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Celebrating the Class of 2010

“I’M GLAD TO TAKE THE OPPORTUNITY TO OFFER A ‘thank-you’ IN ANTICIPATION OF ALL THE SPLENDID THINGS THAT LIE AHEAD: for the contributions that you have yet to make; for the creating and dispensing of prescription drugs; for educating patients and physicians about those drugs; and for all the support you are going to provide to the sick and to health practitioners who need and will want your knowledge and wisdom — benevolence and sacrifice.”

— Commencement speaker Stephen J. Trachtenberg

left: Resident Eva Barker and vice chair of the Titus Family Department of Clinical Pharmacy and Pharmaceutical Economics & Policy Annie Wong-Beringer celebrate the 2010 commencement.

center: Class President Pamela Lincoln welcomed everyone to the ceremony and briefly reminisced with her classmates about their last four years together.

right: Looking to the future is Anna Scott, newly minted PhD in molecular pharmacology and toxicology and MS in regulatory science.
### USC SCHOOL OF PHARMACY STUDENT AWARDS

**California Pharmacists Association Student Pharmacist of the Year** Bonnie Hui-Callahan with Danielle Colayco, PharmD ('08), MS ('10), who won the award in 2008.

#### AMERICAN COLLEGE OF CLINICAL PHARMACY
**M. KELLI JORDAN TRAVEL AWARD**
Tim Bensman

**BEST STUDENT POSTER**
Tim Bensman

#### AMERICAN PHARMACISTS ASSOCIATION — ACADEMY OF STUDENT PHARMACISTS
**NATIONAL OPERATION DIABETES AWARD**
Camille Pacis and Aubrey Moreau

**PROJECT CHANCE AWARD**
Jennifer Fu and Phuong Ho

**REGION 8 OPERATION IMMUNIZATION**
Michael Harvey and Justin Yee

#### CALIFORNIA PHARMACISTS ASSOCIATION
**STUDENT PHARMACIST OF THE YEAR AWARD**
Bonnie Hui-Callahan

#### INTERNATIONAL SOCIETY FOR PHARMACOECONOMICS AND OUTCOMES RESEARCH
**BEST STUDENT POSTER AWARD**
Danielle Colayco

#### PHARMACY FOUNDATION OF CALIFORNIA FILM FESTIVAL
**BEST PARODY**
Tony Dao and Diana Tran

**BEST PICTURE**
Tony Dao and Diana Tran

**MOST EDUCATIONAL FILM**
Matt Keushguerian

#### RHO CHI
**NATIONAL CHAPTER PROJECT AWARD**

#### USC STUDENT RECOGNITION AWARD
Bonnie Hui-Callahan

#### US PUBLIC HEALTH SERVICE AWARD
Bonnie Hui-Callahan
The Board of Councilors meeting at the School of Pharmacy on June 4 was marked by visionary thinking and discussion with a look at recent accomplishments and future goals.

Dean Vanderveen offered a review of the leadership that Denis Portaro, PharmD ('71), JD, has provided to the group and to the school during his chairmanship since 2007. “I knew from the beginning that Denis was a pragmatic leader, whose approach requires a sensible course to an achievable outcome,” said Vanderveen.

Dean Vanderveen went on to enumerate a series of goals achieved by various board committees during Portaro’s chairmanship. The Innovative Practice Models Committee saw the launch of Burt’s Pharmacy in Newbury Park (see article on page 10). This collaborative prototype provides an ownership path for new pharmacists interested in independent community pharmacy and an exit strategy for pharmacists ready to retire. The committee, along with Dean Vanderveen and school faculty, worked closely with AmerisourceBergen on this project.

The LINC committee guided an increase in industry fellowship opportunities, greatly resulting from member efforts to reinvigorate programs at Allergan and to launch new opportunities at Baxter. The Therapeutic Discovery and Development Committee saw the school’s first compound enter a clinical trial. Professor Roberta Brinton’s allopregnanolone has been funded for a trial by the NIH with Keck School of Medicine professor Lon Schneider as the primary investigator on the project. This is the first School of Pharmacy compound to progress to clinical trial.

Finally, when recalling the many achievements of “the Portaro Years”, Dean Vanderveen discussed the strong reception he has received from the Entrepreneurial Committee for his “next big project”, the establishment of the Center for the Advancement of Pharmacy Practice at the School (see article on adjacent page). “Denis knows how to move the ball forward, positioning for the touchdown,” said Vanderveen. “As dean, I’m grateful to have had his leadership these past years and look forward to his continuing influence on the board and at USC.”

Portaro acknowledged the upward trajectory the school is currently following and the contributions that his colleagues on the board, and other friends and alumni, have made to support the school toward achieving these goals and others. He also noted the leadership of the dean, describing him as a man who “thinks like a man of action and acts like a man of thought”.

Portaro will continue to serve on the board and has also been appointed as a member-at-large of the Board of Councilors of the USC Alumni Association. Ron Belville, PharmD ('70), assumed the chairman’s position with William A. Heeres, PharmD ('63), as vice-chair.

At the meeting, the board also approved the nominations of two new members, Scott Evans, PharmD ('98), and Ron Jung, PharmD ('72).
The School of Pharmacy has initiated steps to establish the Center for the Advancement of Pharmacy Practice (CAPP), designed to formalize and support many current and future programs of the school that promote advanced pharmacy practice and other attendant programs, developing demonstration models and studying impact on health outcomes and costs.

CAPP will engage the cornerstones of today’s pharmacy profession by demonstration projects of advanced pharmacy practice models, interdisciplinary training and practice models that maximize the effectiveness of the health-care team approach, community literacy materials, globalization that promotes pharmacy practice and optimal health outcomes, and the dedicated resources to study these projects with an intent to inform policy makers. The Center will actively create, demonstrate and study evidence-based care to patients, utilizing an effective health-care team model and developing attendant programs that enhance patient safety and compliance and extend the reach of successful programs worldwide.

“CAPP is an efficient way for the School of Pharmacy to promote advanced pharmacy practice and the research pertinent to practice models that may inform the health-care community and elected officials nationwide,” says Dean Vanderveen. “Formalizing these many activities in the school under one center allows us influence and positioning that is difficult to attain without this structure.”

Current projects that will be included under the CAPP umbrella are community pharmacy practice, distance learning, health literacy projects, continuing education, global outreach and research designed to study health outcomes and cost analysis. Fundraising is underway for the Center.

DONORS MAKING CAPP A REALITY

Cash and pledges to date: $282,300

$50,000 and above
- Candy and Edward Bubar, PharmD ('77)
- Joan and Sang Ju Lee, RPh
- Kumud and I.R. Patel, RPh
- James H. Roache, PharmD ('70)

$25,000 – $50,000
- Rosalie Phuong Lu Weber, PharmD ('90)

$10,000 – $25,000
- Marjorie Marks Fond and Richard Z. Fond, Pharm D ('65)
- Eleanor Kong, PharmD ('81)
- Sylvia Moore, PharmD ('61)

$5,000 – $10,000
- Annie Siu, DDS, and Tim Siu, MD

$1,000 – $5,000
- Joel Hoffman, PharmD ('61)
- Mary Frances and Mario Jimenez, PharmD ('77)
- Stacie Leach, PharmD ('80), and Gary Leach, PharmD ('80)
- Mary and Oscar Pallares, PharmD ('55)
- Fatin Sako, BSc ('93), PharmD
- Brian Thai, PharmD ('07)
- Herbert Weinberg, PharmD ('56), JD
- Marilyn Wittier, PharmD ('57)

Other Donors
- Kathleen Cross, PharmD ('74), Walter Nisbet, PharmD ('59), Robert Poolsawat, PharmD ('06), Jay Yamamoto, PharmD/MBA ('03), and gifts in memory of Derck Engelbert, PharmD (’55)

QSAD Centurion has pledged to raise $250,000 for CAPP.
In June, our school hosted a regional meeting co-sponsored by the American Association of Colleges of Pharmacy, part of the Health Resources and Services Administration’s Patient Safety and Clinical Pharmacy Collaborative. One of several held nationwide, the meeting aimed to engage more pharmacy schools and clinics in partnerships to improve medication safety and health outcomes for underserved patients.
We were happy to host this event for the western US because we recognize the tremendous opportunities these settings provide for pharmacists to practice at their highest level while meeting pressing societal needs. Our associate professor, Steven Chen, national co-chair of this project, along with colleagues, Titus Family Department chair Kathleen Johnson and associate professor Mel Baron, currently oversee our USC work in 12 clinics.

The work that pharmacists are doing nationwide in the safety net through the Collaborative — so far 110 partnerships are in full swing with more soon to join — is a testament to how well we pharmacists, as part of the interdisciplinary team of health professionals, are able to provide exemplary care to our patients. According to Paul Gregerson, MD, MPH, with whom we've worked closely and who also is part of the Collaborative, “Clinical pharmacists fill a gap in today’s health-care system where physicians are so rushed. Pharmacists know more about medications than anyone else in the health-care system.”

Dr. Gregerson is the chief medical officer for the JWCH Institute in Los Angeles, which operates a thriving clinic on LA’s skid row, among other locations, where he works with pharmacists from our school. He has seen first hand, and through data at his clinics, how pharmacist involvement improves patient outcomes while saving health-care dollars.

You might wonder what this looks like in practice. Typically, the physician refers patients, usually those with chronic disease who are not reaching therapeutic goals, to the pharmacist. Working under protocols, the pharmacist reviews the patient history and test results, meets with the patient and has the ability to order additional tests, change medications or dosages, and works closely with the patient until goals are achieved. This approach maximizes the utility of the team’s medication expert — the pharmacist — while also doing something else that is extremely important in today’s environment, which Dr. Gregerson mentions: freeing up the primary care physician.

The pharmacist allows the primary care physician to see more patients, increasing access to care. This objective is growing ever more important given the nation’s recently passed health-care reform legislation, which promises to bring over 30 million new patients into the system. And while the legislation has passed, the current system is woefully unprepared to meet this extraordinary new demand. Simply put, there are not enough physicians to take care of all these patients. And this will only get worse in the future, as predicted by the Association of American Medical Colleges who estimate the shortage could reach 150,000 physicians by 2025.
This crisis in care actually presents an opportunity for the health-care system to finally evolve to a point where optimal care is provided by a team — that includes the pharmacist. Given that some 40 percent of Americans have at least one chronic disease that requires regular oversight, having a pharmacist on board makes good sense.

Further, the complexity of today’s medications requires a dedicated expert. With over 10,000 drugs on the market and new ones being approved each year, the pharmacist becomes pivotal to ensuring optimal patient care. The incidence of medication errors, which the Institute of Medicine conservatively says affect over 1.5 million Americans annually, calls for yet another expertise that the pharmacist brings to the team.

As Dr. Gregerson said, pharmacists fill an important gap by using their specific knowledge and stretching their professional acumen to meet the needs of patients in a changing system. Necessity is the mother of invention, and health professionals who adapt to a model of care for the 21st century — expedited by this new legislation — will thrive professionally as they positively impact patients.

We’ve seen this with pharmacists working in the safety net and in many other settings, such as the Asheville Project and the APhA Foundation’s Diabetes Ten City Challenge.

Students are also rising to the challenge of “filling the gap”. For example, our USC students staff a weekly clinic at a local pharmacy – Botica del Sol in the heart of Boyle Heights – recognizing that the store patrons may not be accessing regular care, prompting them to provide screenings, immunizations and education. Their mentor, Board of Councilors member Raymond Poon, PharmD (’71), supported them on this project every step of the way, and Good Neighbor Pharmacy recognized Botica del Sol as Pharmacy of the Year for Dr. Poon’s innovative pharmacy practice.

Another group of our students filled a gap for patients receiving most of their care at the skid row clinic that Dr. Gregerson oversees. Learning that many of the patients smoked and that many suffered from mental health issues, the students offered mental health classes and a smoking cessation program at the transitional living facility where many of these people live. They’ve had tremendous success in helping patients quit smoking and in explaining various mental health diseases, helping residents overcome the stigma attached to their diagnosis and, in turn, promoting compliance to their regimen.

When I survey the elements of today’s health-care outlook — and tomorrow’s — I see great potential for pharmacists. The work of those in the field who are already practicing as pivotal members of the health-care team and of students stretching to fill gaps to meet pressing societal needs are examples of what we can do to help patients as a new model for health-care emerges. Pharmacists have unique training and expertise that allows us to positively impact an evolving system, meeting the needs of the influx of patients that the new legislation will bring.

Perhaps next June, we’ll host another meeting at USC that showcases outcomes data generated in the many clinics, and other settings, where pharmacists are practicing at the pinnacle of our profession as members of the 21st century health-care team. I look forward to that meeting.
CVS Caremark presented Dean R. Pete Vanderveen with a check for $250,000 to establish the CVS Caremark Technology Center at the School of Pharmacy’s Pharmaceutical Sciences Center.

“We are so grateful to receive this gift from CVS Caremark,” says Dean Vanderveen. “This marks the continuation of a long-term relationship between our school and CVS Caremark, which has continually demonstrated a dedication to USC through scholarships and support of various student activities.”

The gift will be used to establish a state-of-the-art classroom, complete with technology that will enable the capture of lectures to facilitate distance learning. The capture technology enables students to access lectures, as well as PowerPoint presentations and other visual content, online so that they can view the materials from any place at any time. This capability allows students to work independently and learn new material at their own pace.

Further, the technology enhancements better support today’s pharmacy curriculum, which emphasizes student-centered and small group learning complemented by traditional patient-focused modules. These enhancements expand and extend the classroom to meet student needs.

For example, the implementation of capture technology complements the School’s distance learning potential, expansion of which is part of the School’s future vision. The CVS Caremark gift will also support other technology upgrades that will enhance the overall student learning experience.

Nationwide, CVS Caremark employs hundreds of USC graduates, furthering the connection with the school.

“Our contribution to the USC School of Pharmacy serves two purposes. First, CVS Caremark is committed to giving back in the communities where we do business. Second, we want to support the profession of pharmacy and help create opportunities for future pharmacists,” said Papatya Tankut, vice president of pharmacy professional services at CVS/pharmacy. “We are proud to support USC and we are honored to have the School of Pharmacy’s Technology Center named for our organization.”

CVS Caremark operates more than 7,000 CVS/pharmacy and Longs Drug stores in 41 states, the District of Columbia and Puerto Rico. It is the largest provider of prescriptions in the nation, with more than 1 billion filled or managed annually.
When Robbie Leark was a freshman in college, he decided he wanted to be a pharmacist. He was especially attracted to the idea of owning his own store.

Leark started at the USC School of Pharmacy in the fall of 2003 and quickly got involved in community pharmacy classes. He met leaders from independent pharmacy groups and got to know Mike Quick, lead vice president of the west region at AmerisourceBergen Corporation (ABC), a top supplier to independent stores. In 2005, Leark won the Good Neighbor Pharmacy/Institute for Community Pharmacy Golf Scholarship, opening a door for him to get to know the various supporters of independent pharmacy even better.

At about the same time, the School of Pharmacy was talking with AmerisourceBergen and the United Pharmacists Network about ways to help students interested in owning their own store realize their dreams.

School of Pharmacy Dean R. Pete Vanderveen, along with Quick, executive director of USC Community Pharmacies Mike Rudolph and Board of Councilors member David Breslow met to discuss how to support students interested in owning their own store. Breslow is also the CEO of the Institute for Community Pharmacy, whose mission focuses on the advancement of independent pharmacies and their role in improving patient care.

“Working cooperatively, we wanted to develop a model that would support recent graduates striving to become pharmacy owners, while at the same time providing the school with ideal teaching sites where students could be trained in a state-of-the-art environment,” says Dean Vanderveen.

AmerisourceBergen, which has over 340 Good Neighbor Pharmacies in Southern California and over 3,600 nationwide, actively supports independently owned stores that comprise their customer base. The company has been a long supporter of School of Pharmacy students, funding scholarships and events and participating in the school’s entrepreneurial class.

“Independents are an important part of the health-care landscape,” says Quick. “Good Neighbor Pharmacies have successfully created some very innovative clinical pharmacy initiatives — like the Diabetes Shoppe. I want to make sure this continues.”

The group realized that today's economic times posed a particularly tough set of circumstances for new graduates to overcome before they could contemplate owning a store. Tighter lending, student loan debt and no collateral makes it necessary for a new pharmacist to work many years before having the access to loans required for ownership.

“We wanted to devise a way to help these new graduates become store owners, and help current owners wanting to retire find a good exit strategy,” says Quick.

“People getting ready to retire have put their heart and soul into their stores, and they want to see them continue — building on their legacy,” explains Breslow, who chairs the school's Innovative Practice Models Committee.

So together, the group came up with a novel business model. AmerisourceBergen agreed to purchase an independent pharmacy that would then be matched with a recent graduate who wants to become the owner, providing a bridge for him or her to slowly invest until they completely own the store.
The School of Pharmacy was interested in the idea of helping students pursuing the independent community pharmacy track but also in having a potential community teaching site offering state-of-the-art pharmacy practice including complete medication therapy management services.

They decided to test this premise with Burt’s Pharmacy in Newbury Park, selecting Leark, a 2007 graduate, as the eventual owner. AmerisourceBergen purchased the pharmacy, seeing it as an opportunity to also highlight the potential to practice independent community pharmacy at optimal levels while still having a profitable business.

“By setting up the store in an ideal way, we’re able to have a platform to show the opportunities for success while optimizing services,” says Quick. The store provides a number of Good Neighbor Pharmacy programs including the Diabetes Shoppe, home-health care and customized compounding of drugs.

“The opportunity sounded great to me so I jumped on it,” says Leark. “It puts me on a fast track to realizing my dream of owning my own store.”

The store re-opened in April, and with ABC’s involvement it immediately received signage, automation, software, clinical pharmacy services and outcomes programming. With Burt’s Good Neighbor Pharmacy now operating after a major renovation, the program is off and running.

“We see this as a prototype that has nationwide potential for independent community pharmacy,” says Vanderveen.

Gale and Jane Bensussen, benefactors of the Bensussen Research Floor at the School of Pharmacy, were among the seven honorees at the 77th Annual USC Alumni Awards held in April at the Westin Bonaventure in downtown Los Angeles. The Bensussens received an Alumni Service Award for “outstanding volunteer efforts on behalf of the university.” Both are longtime supporters of the School of Pharmacy’s research, particularly in the areas of cardiovascular health and neurodegeneration. Gale and Jane are both USC alumni, and Gale is a past chairman and longtime member of the USC School of Pharmacy Board of Councilors.
ALUMNUS APPOINTED ASSOCIATE DEAN

Scott Evans, PharmD (’98), has been appointed associate dean for academic health center programs at the School of Pharmacy. In this capacity, he will assist the School in developing new and innovative opportunities for pharmacy students and residents at the USC University Hospital and the Norris Cancer Hospital. In 2008, Evans was honored as Preceptor of the Year for his work with USC pharmacy students, and he frequently lectures in pharmacy courses and speaks at various pharmacy events. He was also named Pharmacist of the Year in 2008 by the Southern California Society of Health-Systems Pharmacists. Evans is also the executive administrator of medicine and hospital operations for both USC hospitals.

Clinical Pharmacy In Action At QueensCare

LA County Supervisor Mark Ridley-Thomas (second from left) visited the QueensCare Family Clinic in Echo Park to see how pharmacists contribute to improved patient outcomes while saving health-care dollars. Meeting with the supervisor were Walter Cathey, PharmD (’62), who leads the School’s diversity initiative, Dean Vanderveen and Barbara Hines, president and CEO of QueensCare.

Health-care Reform: IS IT GOOD FOR YOU?

That’s what Orange County friends and alums gathered to learn at the School of Pharmacy’s May event at the USC Orange County Center. School of Pharmacy faculty from the Leonard D. Schaeffer Center for Health Policy and Economics presented and fielded questions and engaged in a lively discussion. Pictured are Schaeffer Center director Dana Goldman PhD, Board of Councilors member DeWight Titus, PharmD (’58), and Dean Vanderveen.

first pharmacy student receives SCHWEITZER FELLOWSHIP

PharmD student Stephanie Liang will use her fellowship to organize student pharmacists to work in the newest safety-net clinic associated with the School, the Community Health Alliance of Pasadena, under the direction of associate professor Steven Chen. The prestigious Schweitzer Fellowship is awarded to students for projects dedicated to community service.
The School of Pharmacy’s associate dean of globalization and continuing professional development, Michael Wincor, visited the Yerevan State Medical University (YSMU) in Armenia to establish an academic partnership with USC in March. The partnership also involves the United States Agency for International Development-funded Competitive Armenian Private Sector Project, which aims to ensure that pharmaceutical program curricula in Armenian schools are in line with current employer needs and that teaching methods are up-to-date. USC was chosen to work with the Armenian university on this project from a competitive pool of U.S. schools.

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HOSTING Japanese STUDENTS

Associate dean Michael Wincor (center right) with Yoshito Kato, Atsuko Takei and Yusuke Sato, 5th-year students from Tokyo University of Pharmacy and Life Sciences, who visited USC for a view of pharmacy education and practice in the U.S. The visitors also got a taste of student life by attending the Pharmacy Alumni Association student mixer.

USC MAKING CONNECTIONS IN CHINA

Pictured in Nanjing, China, are professors Michael Wincor, Sarah Hamm-Alvarez and Wei-Chiang Shen, who met with representatives from China Pharmaceutical University. Other meetings were held at the Chinese University of Hong Kong, where former School of Pharmacy professor Vincent Lee met with his former colleagues. Meetings were also held at the School of Medicine at Shenzhen University.

Sharing Specialty Experience With Colleague From Singapore

Visiting scholar Boon Tat Ng, a pharmacist and professor at the National University of Singapore, spent last semester with School of Pharmacy associate professor Julie Dopheide, aiming to study clinical pharmacy practice models for direct patient care in psychiatric pharmacy. During his USC stay, Ng has worked to identify gaps in the pharmacy training in Singapore and ways to address them.
The 2010 Alumni/Senior Awards Banquet, hosted by the USC School of Pharmacy Alumni Association, was held May 2 at the Langham Huntington Hotel in Pasadena. The event honored the graduating Class of 2010 and the Class of 1960, which celebrated its 50th year in the pharmacy profession.

HONORING ALUMNI &

the class of 2010

left: Dean’s Medal Winner Bob Hahn, a longtime scholarship provider, with the current recipient of the Mary and Robert Hahn Scholarship, Emmanuel Akinwole, a PharmD student.

middle: Outstanding Alumnus of the Year William A. Heeres, PharmD ('63), celebrates with his wife, Josephine.

right: McKesson Corporation Award winners, past and present, Ravipal Singh, PharmD ('06), Bonnie Hui-Callahan, PharmD ('10), and David Truong, PharmD ('07).
William A. Heeres, who earned his PharmD in 1963 at USC, received the Outstanding Alumnus Award. Heeres and his wife, Josephine, actively support the school with their time and resources, with a particular focus on furthering independent community pharmacy as a career track. Also presented during the evening were Dean’s Medals to ardent supporters Bob Hahn and Mike Quick, recognizing their dedication to advancing the mission of the USC School of Pharmacy with distinction.
UniHealth Foundation awards School of Pharmacy a grant to expand and enhance work in safety-net clinics.

Partnership Serves Th
In the Community

UniHealth Foundation, the first foundation to provide funding for the School of Pharmacy’s involvement in safety-net clinics, has awarded an additional $401,370 grant to the School that will allow its already impactful work in these clinics to thrive and grow.

“It has been tremendous for the School of Pharmacy and the community that UniHealth has supported us through our work in these clinics,” says Kathleen Johnson, chair of the Titus Family Department of Clinical Pharmacy and Pharmaceutical Economics & Policy. “This support propelled our involvement forward, and continues to allow us to enhance and expand our services to the community.”

The project, entitled “Pharmacist Clinical Service Delivery Expansion and Medication Safety Improvement”, aims to deliver clinical pharmacy services to the Center for Community Health, a clinic of the JWCH Institute located in the Skid Row area of Los Angeles, and to identify the benefits in medication error identification and resolution, and quality of care. Additionally, the project increases access to care by freeing up physicians as pharmacists take on more of the medication therapy management and medication dispensing.

This project builds upon previous funding from the UniHealth Foundation, which helped established the framework for a clinical pharmacy program that now serves as a national model for over 100 safety-net clinics through the Health Resources Service Administration’s Patient Safety & Clinical Pharmacy Collaborative.

The funds from this grant will be used to expand existing pharmaceutical services at the Center for Community Health through the hiring of a full-time pharmacist and a resident clinical pharmacist, who will provide direct patient care, provide patient and staff education, and coordinate the activities of student pharmacists and residents serving in the clinics. The overall goal of the project is to increase the number of patients who are provided clinical pharmacy services.
"The USC School of Pharmacy’s commitment to safety-net providers is exemplary," observes UniHealth Foundation president, Mary Odell. “This grant will enhance existing services at the Center for Community Health and hopefully provide data to support reimbursement for clinical pharmacy services in the future. We are proud to partner with JWCH and the USC School of Pharmacy to further our shared missions.”

Kathleen Johnson, the William A. and Josephine A. Heeres Professor in Community Pharmacy, will oversee the project along with associate professor Steven Chen, who will direct the clinical pharmacists and residents providing care through the grant. The program strives to offer more patients health education and provide a structure that decreases medication errors while increasing overall medication safety.

“Also, training a resident pharmacist who completes the one-year program with the skills to take a job in another safety-net clinic will expand the number of pharmacists available to work in similar urban settings,” explains Johnson. “Additionally, because the pharmacists closely manage the most severe chronic disease patients, physicians can spend their time seeing a larger number of patients, which increases access to health-care services for patients overall at CCH.”

The School of Pharmacy is currently working with several safety-net clinics in addition to the JWCH Institute at the CCH, including QueensCare Family Clinics, South Central Family Health Center, Clinicas Del Camino Real in Oxnard and Community Health Alliance of Pasadena. UniHealth’s funding has been pivotal in the school’s expansions in the safety net.

The initial funding from UniHealth provided a pharmacist to expand patient care services and coordinate clinical and educational services provided by volunteer pharmacy students and residents at three of the clinics. To date, more than 300 USC students and residents have participated in these clinics, and over 3,500 patients have been managed and evaluated.

UniHealth Foundation is an a non-profit philanthropic organization whose mission is to support and facilitate activities that significantly improve the health and well being of the individuals and communities it serves.
Mel Baron, PharmD, presented at the annual Career Day for Juniors at Loyola High School in Los Angeles in March.

Steven Chen, PharmD, CDM, FCSHP, awarded a 2010 USC Good Neighbor Volunteer Award in the Faculty/Staff Volunteer category.

Jason Doctor, PhD, presented “A Comparison of Physician and Patient Time Tradeoffs for Postoperative Hip Outcomes,” at the 55th Orthopaedic Research Society Annual Meeting, in Las Vegas, NV, in February; served on a grant review study section for the Netherlands Organisation for Health Research and Development; awarded $119,336 grant from the Baxter Healthcare Corporation for the 2010 Pharmacoeconomics Doctoral Fellowship.

Julie Dopheide, PharmD, received the Amgen grant to support a PGY-2 resident in psychiatric pharmacy; presented “Antidepressants and Antipsychotics in Youth: Do the Benefits Outweigh the Risks?,” at the Pediatric Chronic Disease Specialty Conference, in Salt Lake City, UT, in April; authored the most downloaded article published in Pharmacotherapy over the past year: “Attention-Deficit-Hyperactivity Disorder: An Update,” which appeared in the June 2009 issue.

Melissa Durham, PharmD, presented “Preparing Your Patients for Travel: A Pharmacist’s Role in Travel Medicine,” at the CPhA Annual Outlook meeting in Long Beach in February; represented USC at the 8th Annual California Pharmacy Leadership Conference in Sacramento in February.

Jeffery Goad, PharmD, MPH, director of Student Outreach for Community Health, presented “Preparing Your Patients for Travel: A Pharmacist’s Role in Travel Medicine” and key-note address entitled “Roll Up Your Sleeves! Pharmacists and the Vaccine Generation,” at the CPhA Annual Outlook meeting in Long Beach in February; helped create the Pharmacist Professional Group within the International Society of Travel Medicine; represented USC at the 8th Annual California Pharmacy Leadership Conference in Sacramento in February; quoted in the Sacramento Bee about a bill that would expand opportunities for pharmacists to administer flu shots in February; featured in the Community Pharmacy Residency Programs booklet sponsored by AACP, APhA, ACCP, ASHP and NCPA.

Dana Goldman, PhD, wrote an op-ed in the New York Times about the shortage of healthcare professionals and how growing numbers of newly insured will exacerbate the problem in January; quoted in U.S. News & World Report for his research dealing with end-of-life health-care spending in January; quoted in Scientific American about the potential economic value of investing in preventive health causes in February; quoted in TIME magazine about what would happen if life expectancy continues to increase in America in February; cited by Livemint, a Wall Street Journal website, for his study on the effects of relative food prices on obesity in February; quoted in the New York Times in June about a Dutch study that linked obesity with lower lifetime medical costs due to earlier death.

William Gong, PharmD, FASHP, awarded $78,750 Medical Communication Fellowship from Allergan.

Joel Hay, PhD, quoted on WebMD about a new medical marijuana study in February; interviewed on NPR’s Marketplace about the possible advantages of using robots in patient care in March; interviewed by CNBC and KPCC-FM regarding the possible legalization of marijuana in April; in June, interviewed by CNBC about a newly released cannabis-based prescription medication.

Kathleen Johnson, PharmD, MPH, PhD, the William A. and Josephine A. Heeres Professor in Community Pharmacy, chair, awarded Best Poster Presentation award for her poster “Health Care Utilization and Costs in Patients with Hemophilia A: HUGS-Va Project,” at the National Conference on Blood Disorders in Public Health, in Atlanta, GA, in March; edited Volume 50, Issue 2, of the Journal of the American Pharmacists Association; featured in the Community Pharmacy Residency Programs booklet sponsored by AACP, APhA, ACCP, ASHP and NCPA.

Frances Richmond, PhD, quoted in Science Careers about what regulatory science entails in April.
Neeraj Sood, PhD, quoted in the LA Times and the Pittsburgh Post-Gazette about his report on the potential impact of health-care reform on employment growth in January; published on the Health Affairs blog in March; selected as one of five finalists for the 16th Annual NIHCM Research Award.

Kevin Weissman, PharmD, adjunct professor and drug information officer for the Los Angeles County Health Department, quoted on WebMD about how a new medical marijuana study done by California researchers is flawed in February.

Michael Wincor, PharmD, associate dean of Globalization and Continuing Professional Development, conducted a needs assessment of the new academic partnership program with Yerevan State Medical University in Armenia.

Annie Wong-Beringer, PharmD, vice chair, presented “Variation in Vancomycin Tolerance Determination Among Bloodstream Isolates of Methicillin-Resistant Staphylococcus Aureus,” at the American Society of Microbiology 110th General Meeting in San Diego in May; awarded $101,100 grant from Pfizer for the project, “Anti-virulent Potential of Linezolid Against MRSA Strains Causing Invasive Infections”.

Numerous faculty members presented at the APHA Annual Meeting & Exposition, in Washington, DC, in March, including: Steven Chen, PharmD, CDM, FCSHP; Julie Dopheide, PharmD; Melissa Durham, PharmD; Jeffery Goad, PharmD, MPH; Kathleen Johnson, PharmD, MPH, PhD; and Edith Mirzaian, PharmD.

Faculty participants at the ISPOR 15th Annual International Meeting, in Atlanta, GA, in May, include: Jason Doctor, PhD; Dana Goldman, PhD; Joel Hay, PhD; Kathleen Johnson, PharmD, MPH, PhD; Geoffrey Joyce, PhD; Jeffrey McCombs, PhD; and Michael Nichol, PhD.

At this year’s National Conference on Blood Disorders in Public Health held in Atlanta, Georgia in March, professor Kathleen Johnson and PhD candidate Zheng-Yi Zhou received the Best Poster Presentation award for their poster entitled, “Health Care Utilization and Costs in Patients with Hemophilia A: HUGS-Va Project.”

Their poster was based on research that evaluated cost of care and burden of illness in persons with hemophilia A in several care centers across the United States.

Johnson and Zhou’s research demonstrated that prophylactic infusion of clotting factors, compared to episodic treatment, may be associated with decreased healthcare services utilization, including ER visits and length of hospital stay. It provided detailed information regarding factor utilization in patients with hemophilia A, and Johnson and Zhou hope it will lead to improved understanding of the economic impact of the condition.

The USC researchers also received recognition for their additional hemophilia research. “We have been accepted to submit a paper to the American Journal of Preventive Medicine on barriers to care in hemophilia A, based on the other poster we presented,” says Johnson.

The conference was sponsored by the Centers for Disease Control and Prevention and the National Center on Birth Defects and Developmental Disabilities, in partnership with the Health Resources and Services Administration, the National Heart, Lung and Blood Institute and the American Society of Hematology.
Professor’s Research Reveals Important Health Policy Insights

Neeraj Sood’s recent study takes a critical look at health-care costs and GDP.


The study, published in the *Health Services Research Journal*, analyzed data from 38 US industries from the period 1987-2005 using regression models. Sood and his colleagues, Arkadipta Ghosh of the Pardee RAND Graduate School and José Escarce of the David Geffen School of Medicine at UCLA, concluded that excess growth in health-care costs is adversely affecting the economic performance of US industries.

The National Institute for Health Care Management Foundation recognized Neeraj Sood as one of five finalists for the 16th Annual NIHCM Research Award based on his unique findings. Sood is director of international programs for the Leonard D. Schaeffer Center for Health Policy and Economics at USC. Prior to coming to USC, Sood was an economist at the RAND Corporation. He is a faculty research fellow at the National Bureau of Economic Research and the managing editor of *Forums for Health Economics and Policy*. He has published 10 peer-reviewed articles in the past four years.

DOPHEIDE PENS PHARMACOTHERAPY’S MOST DOWNLOADED ARTICLE

The associate professor’s article about attention deficit hyperactivity disorder received the journal’s most views over the past year.

Over 3,500 people downloaded the *Pharmacotherapy* article by the School of Pharmacy’s Julie Dopheide, making it the publication’s most viewed article of 2009.

Dopheide’s article, “Attention-Deficit-Hyperactivity Disorder: An Update,” was co-written by Steven Pliszka of the University of Texas Health Science Center. It received an astounding 1,500 more views than the 2008 most downloaded article.

Her article explains what ADHD is, how it manifests itself, how prevalent it is, its relation to substance abuse and the effectiveness of drug therapy for treating the disorder. The article explains that stimulants, such as methylphenidate and amphetamine, are the most effective drug therapies and have a good safety profile as well. It also discusses drug alternatives to stimulants, and suggests strategies for improving drug adherence in those suffering from ADHD.

Dopheide’s article is of particular relevance to readers because the disorder is so widespread. In the United States, 4.5 million children 5-17 years of age, or 6-9 percent of children in this age range, have ever been diagnosed with ADHD as of 2006. It has also been diagnosed in 3-5 percent of adults.

*Pharmacotherapy*, a PubMed journal, publishes original research related to all aspects of human pharmacology, and it is the official journal of the American College of Clinical Pharmacy.

Julie Dopheide, PharmD, is an associate professor in the Titus Family Department of Clinical Pharmacy and Pharmaceutical Economics & Policy. Her work focuses on clinical research on inpatients with psychiatric illness. She has published over 40 articles in peer-reviewed journals, textbooks and educational publications, on topics including ADHD, depression, sleep, insomnia and drug-induced psychiatric disorders.
WRESTLING WITH PEDIATRIC ASTHMA

Mel Baron’s new fotonovela dispels myths about the childhood disease.

Asthma affects a startling 10 percent of all children under the age of 18, many of whom are not taking the appropriate medications, an issue that School of Pharmacy associate professor Mel Baron tackles in his fifth fotonovela, “Oscar and the Giant.”

“Asthma affects low-income, minority and inner city populations at a greater rate,” explained Baron. “In addition, Latino children are less likely than non-Latino white children to be taking the recommended daily medications.”

In order to affectively change behaviors, Baron and his team conducted research to see what myths regarding pediatric asthma were prevalent in Latino communities. “We wanted to address common misconceptions about the disease, as well as provide information regarding how to recognize and treat asthma in children,” said Baron.

“Oscar and the Giant” uses a comic book-like format to tell the story of Oscar, a young boy struggling with asthma. Oscar visualizes his battles with asthma as a *lucha libre* fight, a form of professional wrestling popular in many Spanish-speaking countries.

A study published in the *Journal of Allergy and Clinical Immunology* concluded that educational intervention may improve asthma outcomes among at-risk Latino children, and “Sweet Temptations,” a previously released fotonovela, empirically demonstrated an increase in diabetes awareness and knowledge within the exposed Latino community.

Baron was the project director for “Oscar and the Giant,” which was produced by Gregory B. Molina, also of the School of Pharmacy, photographed by Mike Powers, and co-written by Josefina Lopez and Molina. Funding for the project was provided by L.A. Care Health Plan, QueensCare, AmerisourceBergen and the National Association of Chain Drugstores.

JUST IN...

The School of Pharmacy has released its sixth fotonovela, “Fiesta Fiasco,” which deals with medication compliance. The latest fotonovela addresses common misconceptions about prescription medication, including the belief that it’s okay to stop taking medicine once you start feeling better.

As several studies have found that Latinos have lower compliance and completion rates for prescribed treatments, the fotonovela aims to provide an effective intervention tool. Funding for the project was provided by the WellPoint Foundation.
Hamm-Alvarez will attend the HERS Institute for women leaders during the 2010-2011 academic year.

SCHOOL OF PHARMACY PROFESSOR
Selected To Attend Leadership Institute

Sarah Hamm-Alvarez, PhD, Gavin S. Herbert Professor of Pharmaceutical Sciences, has been chosen to attend this year’s Higher Education Research Services Institute for Advancing Women Leaders in Higher Education Administration at Wellesley College.

Beginning in October, Hamm-Alvarez will attend four sessions across the academic year. The Institute aims to promote a better understanding of the higher education environment through a curriculum that focuses on planning and leading change in the academic world, managing and investing resources strategically and developing as leaders.

Hamm-Alvarez was selected to attend the Institute by a committee who evaluated her based on an application, interviews and interest in senior administration. She is one of three women from USC who will be partaking in the Institute, and the only one from the Health Sciences Campus. Others selected for participation include Kathleen Speer, associate dean of faculty and research at the College of Letters, Arts & Sciences, and Allyson Hill, assistant dean of admissions at the Annenberg School for Communication and Journalism.

“The objective is to further educate and expand the mindset of these already accomplished women,” says Carol Gray, senior vice president of USC Women in Management, which coordinated the USC interview process.

“The objective is to further educate and expand the mindset of these already accomplished women,” says Carol Gray, senior vice president of USC Women in Management, which coordinated the USC interview process.

HERS is a non-profit that focuses on educating women involved in higher education administration through institutes and other activities. Their curricula aim to provide leadership and management development to participating women, and alumnae of HERS hold top positions across the United States, Canada and South Africa.

At the School of Pharmacy, Hamm-Alvarez is associate dean for research affairs and chair of the Pharmacology and Pharmaceutical Sciences Department.
Professor Roberta Diaz Brinton’s latest research demonstrates that allopregnanolone, a naturally occurring steroid produced in the central nervous system, increases the number of neural stem cells and restores cognitive function in the Alzheimer-inflicted mouse brain.

Earlier this year, Brinton’s results were published online by the Proceedings of the National Academy of Sciences of the United States. The article, “Allopregnanolone Reverses Neurogenic and Cognitive Deficits in Mouse Model of Alzheimer’s Disease”, was co-authored by Brinton and Richard Thompson of the USC College of Letters, Arts & Sciences along with team members Jun Ming Wang, Chanpreet Singh, Lifei Liu, Ronald W. Irwin, Shuhua Chen and Eun Chung.

The published findings provide encouraging evidence that the early Alzheimer-inflicted brain can be stimulated to generate new neurons that can reverse the learning and memory deficits associated with the disease.

Before the administration of allopregnanolone, the Alzheimer mice had a lower number of neural stem cells and impaired learning and memory. After treatment, the number of newly generated nerve cells in the mice was restored to normal, as was their learning and memory function.

“These results are a significant advance in our path to develop allopregnanolone as a therapeutic to restore cognitive function in people suffering from Alzheimer’s disease,” says Brinton, who holds the R. Pete Vanderveen Chair in Therapeutic Discovery and Development. “We urgently need therapeutics to prevent and treat this disease given the alarming rates of incidence.”

According to the Alzheimer’s Association, 1 in every 8 Americans over the age of 65 currently has Alzheimer’s disease—and that number is predicted to double in the coming decades unless effective therapeutics are developed.

Brinton’s research has received pivotal support from the National Institutes of Health, the Kenneth T. and Eileen L. Norris Foundation, the L.K. Whittier Foundation, the Alzheimer’s Drug Development Foundation and the Bensussen Translational Research Fund.

AS SEEN IN THE NEW YORK TIMES
Brinton was highlighted in the April 18th edition of The New York Times Magazine for her work with estrogen hormone therapy. Read the article at: http://www.nytimes.com/2010/04/18/magazine/18estrogen-t.html?pagewanted=1&hpw
Jim Adams, PhD, presented “Nature’s Healing Plants,” at All Saint’s Church in Pasadena in April.

Marco Bortolato, MD, PhD, awarded a Zumberge individual research grant in the amount of $24,858 for the project, “Role of Monoamine Oxidase in the Outcomes of Early Maternal Separation”.

Roberta Brinton, PhD, R. Pete Vander-veen Endowed Chair in Therapeutic Discovery and Development, featured in a website video as part of the Investing in Recovery and Discovery report; awarded $1.25 million grant from the NIA for the project titled “Estrogen Receptor-β PhytoSERMs for Management of Menopause and Age-Associated Memory Decline: Pilot Development Trials”; presented “Estrogen Regulation of Mitochondrial Function in Brain Implications for Brain Metabolism, Prevention of Neurodegenerative Disease and Healthy Cell Bias of Estrogen Action,” at the Stanford Center for Neuroscience in Women’s Health in Stanford in January; presented “Diseases of Aging,” at What’s Hot in Aging research at uSC: Interdisciplinary Perspectives in April; cited in Alzheimer Research Forum for her allopregnanolone research in March; named the 14th recipient of the Trojan league’s Outstanding Service Award.

Julio Camarero, PhD, presented “Traceless and Site-Specific Immobilization of Proteins onto Solid Supports Using Protein Trans-Splicing,” at PepCon 2010, in Beijing, China, in March.

Roger Clemens, DrPH, featured on Voices of America talking about benefits of increasing the amount of omega-3 fatty acids in the American diet in January; quoted in the Los Angeles Times about upper limits of vitamin consumption in January; quoted in USA Today about reducing salt intake in April; appointed president-elect of the Institute of Food Technologists.

Andrew MacKay, PhD, awarded $445,500 grant from the National Institute of Bio-medical Imaging and Bioengineering for his project, “Rapid Reversible Switch for Controlling Intracellular Trafficking”.

Liquin Zhao, PhD, awarded $1.25 million grant from the NIA for the project titled “Estrogen Receptor-Δ PhytoSERMs for Management of Menopause and Age-Associated Memory Decline: Pilot Development Trials”.

Paul Hochstein, PhD, died at his home in Cambria on June 12. Joining the School of Pharmacy faculty in 1980, Dr. Hochstein served as the founding director of the Institute for Toxicology and associate dean for research and graduate affairs. Dr. Hochstein held the Charles Krown/Pharmacy Alumni Professorship at the School and was well known for his work in oxygen and free radical research. In 1993, Dr. Hochstein, retiring as a Professor Emeritus, went on to study sculpting and painting.

Welcome to new faculty member Bogdan Olenyuk, PhD, a chemical biologist who has just joined the School from the University of Arizona where he was an assistant professor of chemistry. Olenyuk is the recipient of a prestigious National Science Foundation Career Award as well as the National Institutes of Health Ruth L. Kirschstein National Research Service Award. He is also a current NIH R21 award recipient.

Olenyuk’s research focuses on the regulation of gene expression through synthetic molecules.

NEW FACES

Wealthy individuals often spend large amounts of their wealth on medical treatments and services. This is because medical treatments can be expensive, and wealthy individuals often want to ensure that they can afford the best possible care for themselves and their family members.

MEMORIAM

We are saddened to report the passing of Paul Hochstein, PhD, who passed away in late May.

MEMORIAM

We are saddened to report the passing of Paul Hochstein, PhD, who passed away in late May.
ONE DRUG, TWO DISEASES

Professor Nouri Neamati’s lab receives grant to test novel inhibitor compound.

“We’re the first group to test the hypothesis that the same inhibitor can be used to treat and prevent both lung cancer and chronic obstructive pulmonary disease,” explains Nouri Neamati, PhD, associate professor at the School of Pharmacy.

Neamati has been working with PhD candidate Helen Ha and post-doctoral researcher Srinivas Odde to develop a novel inhibitor, CX25. Their ground-breaking research recently earned them a $75,000 Concept Award from the Department of Defense Lung Cancer Research Program, part of the Office of Congressionally Directed Medical Research. The grant was extremely competitive: out of over 400 applicants, only 11 received funding.

The funding will allow Ha to continue her research, which will be the focus of her PhD dissertation. “Helen is the driver of this project,” said Neamati. “She pretty much singlehandedly did all of the work in the lab.”

However, the research has definitely been a collaborative effort. While Ha has conducted all of the “wet” work, Odde has done all of the computational modeling. He has narrowed down a database of 10 million chemical compounds, mining for selected inhibitors and their analogues. One thousand were chosen, which Ha then tested in the lab until the best one was selected to create CX25.

Right now testing is being done in mice, but Neamati, Ha and Odde hope their research will ultimately be useful for treating humans. If their compounds successfully treat COPD and lung cancer in animal models, they will further pursue the clinical development of CX25 as a treatment for COPD and lung cancer patients, as well as a cancer-prevention agent for COPD patients and other at-risk individuals.

“I hope that our work will make an impact, not only for the treatment of two diseases, but also in the training of two bright young scientists,” said Neamati.

Doctoral Student Wins Prestigious Grant

School of Pharmacy student Robert Mo will use the grant to continue his innovative research.

PhD candidate Robert Mo has received his second year of pre-doctoral fellowship funding from the American Foundation for Pharmaceutical Education.

“I hope that the research I’m doing now will lead to positive changes for gene therapy in the future,” says Mo, who is working in the lab of Dr. Wei-Chiang Shen. His AFPE fellowship is going toward his project entitled, “Comparison of Hexa-arginine-Polypex, N-palmitoyl-Polypex and Model Amphipathic Peptide-Polypex for siRNA Delivery In Vitro and In Vivo”.

Mo’s research focuses on optimizing siRNA (small inhibiting-RNA) delivery methods. Currently, many limitations exist in terms of both targeting and delivering these genes into cells, which impedes their potential therapeutic effects. Mo is testing different peptides and lipids, seeking ways that enhance siRNA intracellular uptake in the appropriate cells, and gauging the biological effects that result.

“In the long-term, this research is paving the way for the application of gene therapy to treat diseases such as cancer,” explains Mo. “Effective gene delivery methods could silence certain genes, making chemotherapy and other cancer treatments more successful.”
School of Pharmacy
annual

Students and benefactors came together to celebrate the generosity that

The USC School of Pharmacy held its annual scholarship lunch in the spring at Centennial Park.
Hosting the event was Dean R. Pete Vanderveen, who thanked some 50 donors for their
willing support of students at the school. The event allows students an opportunity to sit with
their donors and to thank them personally for their scholarships.
The keynote address at the event was offered by David Bruhn, PharmD/MBA (’02), who
was awarded the K. Robert and Mary C. Hahn Scholarship during his time at the School. Bruhn’s
remarks focused on Bob Hahn, who has provided substantial support for many students at the
School over the years.
“Bob Hahn redefined what scholarship means to me,” Bruhn said. “He goes far
beyond the tremendous financial support that he provides to also include personal
interest and accountability. Bob wants to make sure of our success.”
Before his retirement, Hahn, an attorney, was a successful businessman in the aviation field. As an undergraduate, he was given a full scholarship. “As a result,” Hahn said, “I always felt I had to give back.”

Besides Bruhn, alumni Raffi Svadjian and Winnie Chan, both recipients of the Hahn scholarship when students, also attended the event. Paul Vasquez, a Hahn scholarship recipient who graduated this May, was also on hand. These “Hahn scholars” unveiled a plaque honoring Hahn in the school’s Centennial Park.

During the luncheon, Dean Vanderveen introduced pharmacy student Emmanuel Akinwole, who was surprised to learn that he had been selected to receive the Hahn scholarship for the upcoming academic year. This scholarship will cover Akinwole’s full tuition.
Alumni who participated in this year’s International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 15th Annual Meeting include podium presentations by: Hae Sung Suh, PhD ('09), who received a Best Podium Presentation by a New Investigator award for her project, “Dealing with Selection Bias in Nonlinear Settings: A Case of Comparative Effectiveness of Statin Plus Fibrate Combination Therapy versus Statin Monotherapy in Type II Diabetes,” which she worked on with professor Joel Hay, one of the original founders of the ISPOR, and associate professor Jason Doctor; Ning Yan Gu, PhD ('09), who also received a Best Podium Presentation by a New Investigator award for her project, “Evaluating the Measurement Properties of an Augmented EQ-5D with the Inclusion of Two Single Quality-of-Life (QOL) Indicators Using the Medical Expenditure Panel Survey (MEPS)”; and Patrick Sullivan, PhD ('01), who presented “Incorporating Tariff-Level Uncertainty Around Estimates from the Catalogue of EQ-5D Scores” and “Comparison of Health State Utility Estimates in Cost-Effectiveness Analysis”.

**ALUMNI PRESENTING POSTERS INCLUDED:**

- GUSTAVO ARANDA, PharmD ('04), MS ('06)
- ARIE BARLEV, MS ('04)
- CRAIG CHEETHAM, PharmD ('80), MS ('97)
- KRISTINA CHEN, MS ('01)
- LEI CHEN, PhD ('05)
- MICHAEL JUZBA, MS ('99)
- IVY MIHARA, MS ('04)
- PARVEZ MULANI, MS ('02)
- BIMAL PATEL, MS ('02)
- PANKAJ PATEL, MS ('02)
- JULIANA SETYAWAN, PharmD ('02), MS ('04)
- LIZHENG SHI, PhD ('01)
- JAMES SPALDING, MS ('04)
- PATRICK SULLIVAN, PhD ('01)
- T. JEFFREY WHITE, PharmD ('95), MS ('99)
- QIONG (ERIC) WU, PhD ('02)
- ANDREW YU, PhD ('05)
- YONG YUAN, PhD ('98)

**Celebrating Achievement**

Willie Quan, PharmD ('76), and John Sang, PharmD ('92), both members of the School of Pharmacy Alumni Association Board, were on hand to toast award winners at the recent Alumni/Seniors Awards Banquet festivities.

USC alum winners Ning Yan Gu, PhD ('09), Hae Sung Suh, PhD ('09), and Danielle Colayco, PharmD ('08), who received her MS in pharmacological economics at this year’s commencement.
KEEPING TRACK OF **classmates**

**Caroline Chellamy**, PharmD (‘96), named director of Ambulatory Pharmacy at the USC University Hospital and the Norris Cancer Hospital.

**Lida Etemad**, MS (‘02), has been promoted to vice president of PDL and Clinical Program Strategies at UnitedHealth Pharmaceutical Solutions.

**Mark Henschke**, PharmD (‘83), received a national “On-Time Physician” Award as part of his “Patients’ Choice” Award, which he received from MDx Medical, Inc., for the second year in a row.

**Gail Orum-Alexander**, PharmD (‘88), is now dean of the College of Science and Health at Charles Drew University of Medicine and Science.

**Ed Sherman**, PharmD (‘63), has retired as trustee-at-large and was installed as treasurer for the California Pharmacists Association.

**Lizheng Shi**, PhD (‘01), was awarded the Endowed Regents Professorship in Health Systems Management by the Tulane University School of Public Health and Tropical Medicine, where he is an assistant professor.

**Dorothy Chui-Wong**, PharmD (‘86), is the new assistant director of pharmacy at University Hospital.

Several alumni were recognized by the California State Board of Pharmacy for serving 50 years as a licensed pharmacist: **Vernon Mah**, PharmD (‘59), **Robert Adams**, PharmD (‘59), **William Adams**, PharmD (‘59), **Lawrence Barche**, PharmD (‘59), **Charles Brettell**, PharmD (‘59), **David Butler**, PharmD (‘60), **Roy Cullipher**, PharmD (‘60), **Harold Eisenberg**, PharmD (‘60), **Donald Frank**, PharmD (‘60), **Earl Glass**, PharmD (‘60), **Alex Golbiff**, PharmD (‘59), **Clifford Herring**, PharmD (‘59), **David Hirscher**, PharmD (‘61), **Martin Honig**, PharmD (‘60), **Herbert Mercer**, PharmD (‘60), **Ronald Miller**, PharmD (‘59), **Iwao Mochidome**, PharmD (‘60), **Eliseo Samaniego**, PharmD (‘60), **Thomas Shapiro**, PharmD (‘59), **Carol Silveria**, PharmD (‘59), **Leonard Spitzer**, PharmD (‘59), **Marvin Sugarman**, PharmD (‘59), **Hiroshi Tsuno**, PharmD (‘59), **Perry Yamamoto**, PharmD (‘60), and **Robert Zuckerman**, PharmD (‘59).

**remembrances**

**James Bryan ‘JB’ Edmiston**, BS (‘49), passed away in March. Edmiston was a passionate Trojan and spent many Saturday afternoons cheering for the USC football team. He owned and operated several pharmacies during his career, including The Drug Store in Kernville, where he worked until his retirement. Edmiston is survived by his wife, Beverly; brother, Paul Edmiston; and son and daughter-in-law, David and Kathy Edmiston.

**Blair Lenhoff**, PharmD (‘77), passed away in April 2010 while visiting China. Lenhoff was a pharmacist at Kaiser Permanente Riverside.

**Roy Smith**, PharmD (‘59), passed away on April 13, 2010 from complications due to Alzheimer’s disease. The family has requested that memorial gifts in memory of Smith be directed to: QSAD Centurion, USC School of Pharmacy. For further information contact Mary Wackerman, 323.442.1360 or mwacker@usc.edu.
community outreach

school of pharmacy

LENDS A HELPING HAND

AT THE YMCA

Students, faculty and alumni from the School of Pharmacy participated in the second annual Health Fair held at the YMCA of West San Gabriel Valley on January 30.

Faculty member Cynthia Lieu, PharmD, Board of Councilors member Tim Siu, MD, and his wife Annie Siu, DDS, and (back) Board of Councilors member Raymond Poon, PharmD (’71), join pharmacy students at the health fair.

for the KIDS

The School of Pharmacy hosted 150 kids from Hollenbeck Middle School during the 13th Annual Kids’ Day in March. The event, organized by the Skull and Mortar Honorary Service Fraternity, invites local children to participate in all-day workshops and activities aimed at teaching them important health and well-being lessons, while encouraging them to consider careers in health care. This year’s theme was an “Ocean Odyssey,” and the event included educational workshops, as well as interactive games, prizes and entertainment during the lunch break.

PharmD students Jessica Kuo, Jarrin Cheng and Eric Yang hosted middle schoolers at the School of Pharmacy’s Kids’ Day.

Homecoming with a Cause

Ruth Awosika returned to her high school, King Drew Medical Magnet High School, as part of the School of Pharmacy’s Pharmacy Explorers Program (PEP) to motivate students toward success. The outreach program encourages young people to think about pharmacy as a career, to urge them to stay focused on their education and to guide them in choosing classes.

Pharmacy student Ruth Awosika with her high school teacher Pamela Woodlief, who is the adviser to the King Drew PEP Program.
LET’S dance!

In April, local senior citizens put on their dancing shoes as part of Skull and Mortar’s 4th annual “Senior Prom” event held at St. Barnabas Senior Center in Los Angeles. Over 70 students from the School of Pharmacy and 80 senior citizens participated, marking the largest turn out to date. Attendees were given raffle tickets in exchange for participating in health screenings for hypertension, diabetes and cholesterol, and engaging in education booths set up to inform the seniors about preventive measures for falls, arthritis and cancer. The tickets could be exchanged for a free hot lunch as well as raffle prizes.

PharmD student Jasmine Chung, next year’s co-president of Skull and Mortar, twirls with a senior citizen at the annual “Senior Prom”.

EDUCATING FUTURE Pharmacists

Skull and Mortar’s Advanced Pharmacy Exposure Conference took place in April with a goal to fully immerse 17 motivated local high school students in the field of pharmacy. The weekend was a forum for the students to learn the multi-faceted nature of the pharmacy profession, including how to conduct screenings and how to compound drugs in a lab.

PharmD student Peter Ty teaches two high school students how to check blood pressure.
Student Updates

Jennifer-Ann Bayan, PhD candidate, was featured in the *Investing in Recovery and Discovery* report by United for Medical Research.

Anna Deng, PharmD candidate, won the American Pharmacists Association-Academy of Student Pharmacists Regional Chapter Challenge on behalf of the USC chapter at the Region 8 Midyear Regional Meeting in Albuquerque, NM.

Vivian Galicia, PhD candidate, won first prize for her oral presentation entitled, “Activation of Cancer Stem Cells in Hepatic Pten Deficient Mice Requires Liver Injury,” at the 13th Annual Pathology Conference in Dana Point in February.

Robert Mo, PhD candidate, received a renewal of his American Foundation for Pharmaceutical Education Pre-doctoral Fellowship.

Ni Zeng, PhD candidate, won the top prize for her poster presentation entitled, “PTEN Regulates Pancreatic Beta Cell Proliferation and Aging Process,” at the 13th Annual Pathology Conference in Dana Point in February.

ISPOR Annual Meeting

USC students dominated at this year’s International Society for Pharmacoeconomics and Outcomes Research 15th Annual Meeting, held in Atlanta, Georgia in May. Danielle Colayco, MS (’10), PharmD (’08), won a Best Student Poster designation for her project entitled “Association between Glycosylated Hemoglobin and Cardiovascular Outcomes in Patients with Type 2 Diabetes: A Nested Case-Control Study”. Other students presenting posters included:

- Jae An, PhD candidate
- Soo Bang, PhD candidate
- Jerry Chang, PhD candidate
- Karen Chu, PhD candidate
- Janice Chung, PhD candidate
- Yao Ding, PhD candidate
- Vaidyanathan Ganapathy, PhD candidate
- Ning Yan Gu, PhD candidate
- Aniket Kawatkar, PhD candidate
- Jane Pai, PhD candidate
- Jiat Poon, PhD candidate
- Nazia Rashid, MS candidate
- Elizabeth Schwartz, PhD candidate
- Janet Shin, PhD candidate
- Dana Stafkey-Mailey, PhD candidate
- Hae Sun Suh, PhD candidate
- Jae Suh, PhD candidate
- Adam Turpcu, PhD candidate
- Jennifer Wang, MS candidate
- Phillip Wiegand, MS candidate

no bones about it

Three School of Pharmacy students were recognized at the Clinical Osteoporosis 2010 Symposium taking place in March in San Antonio, Texas. Pharmacy students Thu Huynh, Tasneem Sheikh and Bryan Coleman (pictured here) received a Young Investigator award for their poster entitled “Community Based Osteoporosis Screening and Education of Ethnically Diverse Populations by Pharmacy Students,” which illustrates the role that pharmacy students can play in the screening process, allowing patients to get care for osteoporosis before it becomes severe, or preventing onset all together. The students have been working with associate professors Cynthia Lieu (on left) and Kathleen Besinque on this project.
We are committed to furthering the education of exemplary students in the University of Southern California School of Pharmacy program, who may require financial assistance. Craig was afforded that opportunity as an undergraduate at USC and we believe in “giving back” to the profession through educating students.

It is our hope that all dedicated students who want a chance at a future in pharmacy should have it. We believe this is one of the best investments one can make in developing tomorrow’s pharmacists.”

CRAIG STERN, PHARM.D. (’76), MBA (’94), and CAROL STERN, RN, BSN, MBA (’94)

Uzoamaka Enwerem, PharmD candidate (’11), is the recipient of the Carol and Craig Stern Endowed Scholarship.

To learn how you can change a life, contact Mary Wackerman at 323.442.1360 or mwacker@usc.edu.

WWW.USC.EDU/PHARMACY
August 2–6, Monday–Friday
53rd Annual Hawaii Refresher
Maui, Hawaii
Information: 323-442-2403 or pharmce@usc.edu

August 19, Thursday
White Coat Ceremony
HSC Quad
Information: 323-442-1360 or mwacker@usc.edu

September 2–5, Thursday–Sunday
Aloha Weekend
Thursday — USC Trojans 2010
Opening Football game — USC vs Hawaii
Friday — 9am–12pm — Continuing Education Program — Sheraton Waikiki
Information: 323-442-1360 or mwacker@usc.edu

October 29, Friday
6th Annual Alumni and Friends Golf Outing
Angeles National Golf Course
Information: 323-442-1738 or stanovic@usc.edu

October 30, Saturday
Homecoming and Class Reunions
University Park Campus
Information: 323-442-1381 or carr@usc.edu

January 28 – 30 (2011), Friday–Sunday
16th Annual Winter Retreat
Silverado Resort
Information: 323-442-1360 or mwacker@usc.edu

February 5 (2011), Saturday
2011 Interview Day
USC Health Science Campus
Information: 323-442-1738 or stanovic@usc.edu