

UNIVERSITY of CALIFORNIA, SAN DIEGO

SKAGGS SCHOOL of PHARMACY and PHARMACEUTICAL SCIENCES

Fall 2006

White Coat Ceremony Class of 2010

Sixty future pharmacists and pharmaceutical industry researchers were welcomed to the profession at the White Coat Ceremony for the Class of 2010 of the Skaggs School of Pharmacy and Pharmaceutical Sciences. The ceremony, held on Friday, September 29, was the premiere event in the new UCSD Health Sciences Educational Center Auditorium, located directly adjacent to the Pharmaceutical Sciences building that was dedicated in spring 2006.

The incoming students were selected from more than 1,000 applicants. The class comprises 49 women and 11 men, ages 22 to 34; seven from out-ofstate universities and 53 who earned their undergraduate degree from a California institution. This is the School's fifth class since its opening.



Class of 2010

Palmer Taylor, Ph.D., Dean of Skaggs School of Pharmacy and Associate Vice Chancellor for



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Chancellor Marye Anne Fox

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White Coat Ceremony, Continued



Tom Tozer

career in pharmacy, which began working in his father's tiny pharmacy in Julian.

The students then came to the stage to receive their white coats - representing their initiation into the profession of pharmacyfrom Dr. Taylor, followed by the recitation of the Oath of a Pharmacist. Student Julia Harder. Class of 2009, welcomed the new

Health Sciences at UCSD, welcomed the audience. Chancellor Marye Anne Fox and David Bailey, interim Vice Chancellor for Health Sciences, also addressed the students, their family members and friends.

Faculty member Thomas Tozer, Pharm.D., Ph.D., was keynote speaker for the evening. Tozer, who is co-editor of the leading textbook in pharmacokinetics entitled Clinical Pharmacokinetics: Concepts and Applications, jokingly reminded the students that this was one book they'd need to learn cover to cover – and ended by saying he would see them in class on Monday. He shared his reflections on a



Julie Harder

students to the "Skaggs family," urging them to take advantage of the many opportunities to get involved in clubs and community service projects.

The ceremony, sponsored by Amylin Pharmaceuticals, Inc., Wal-Mart Stores, Inc. and the Skaggs Institute for Research, was followed by a reception and tour of the building facilities.

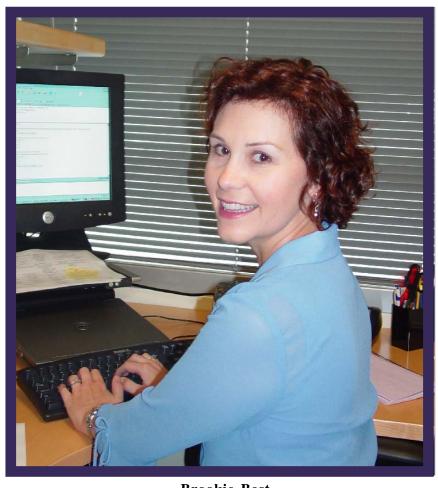




Faculty News

Brookie Best, "40 Under 40" Award

By Debra Kain



Brookie Best

Brookie Best, Pharm.D., an assistant clinical professor at UCSD's Skaggs School of Pharmacy and Pharmaceutical Sciences, was honored at the "40 Under 40" awards ceremony, organized by *San Diego Metropolitan Magazine* and held at the San Diego Convention Center on September 19. Now in its seventh year, the award recognizes the accomplishment of 40 of San Diego's brightest young business and civic leaders.

Dr. Best was recognized for both her professional and volunteer work, which she successfully juggles with her role as wife and mother. Brookie and her husband Trey – a 6^{th} -grade teacher at Muirlands Middle School in La Jolla – are the parents of two sons: Noah, age 4 and AJ, age 2.

Best attended UCSD as an undergraduate, and did her pharmacy practice residency at UCSD Medical Center. She specializes in Pharmacokinetics –

basically, the processes by which a drug is absorbed, distributed, metabolized, and eliminated by the body – and pediatric clinical pharmacology research. Best is also a faculty member in the Department of Pediatrics as well as a licensed pharmacist in the state of California.

She teaches Pharmacy Practice courses ranging from infections, asthma and pulmonary devices to ergonomics in the workplace and smoking cessation. An up-and-coming leader in national research efforts to study drugs in pregnant and breast-feeding women and their infants, she was awarded a \$2 million NIH fellowship ("National Research Service Award") in 2004 in pediatric clinical pharmaceutical research to study safe and effective medicines for babies and children. Most recently, Dr. Best was accepted as one of only 20 participants from around the country to participate in a week-long course, the 2nd Annual Summer Institute in Maternal-Fetal Pharmacology held in July. She has also served as co-investigator on research on patients with Kawasaki disease, the leading cause of acquired heart disease in children. In 2004-05, she received a Young Investigator Award to fund research on how genes affect the effectiveness of HIV drugs, and has lectured widely on therapeutic drug monitoring in HIV disease, particularly in pregnant women.

Continued Next Page

Faculty News, Continued

In addition to her teaching and research accomplishments, Best serves as a volunteer clinical faulty member and attending pharmacist at the UCSD student-run Free Medical Clinic Project. As a fourth year pharmacy student, Best volunteered for a six-week elective at the student-run San Diego Free Clinics, where she saw a great many things that needed to be done, "but no one was doing them." Her volunteer work continued at the clinic throughout that year, working in two night clinics for homeless men in San Diego. Over time, she recruited 16 additional pharmacy students to volunteer to develop a pharmacy services branch at the clinics. She also lobbied to have the free clinics a permanent rotation site for pharmacy clinicians at UCSD. She was instrumental in beginning a brand new free clinic at Baker Elementary School, one where women and children could go during the day, and since then has co-founded a follow-up clinic at the Baker site, where she continues to serve as a volunteer attending pharmacist.

UCSD Research Project Awarded NIH To Support Counter-terrorism Research

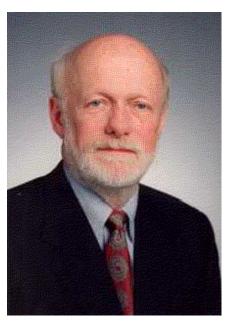
A project designed to develop new and improved medical countermeasures against chemical threats, directed by Dr. Palmer Taylor at the University of California, San Diego (UCSD) Skaggs School of Pharmacy and Pharmaceutical Sciences, has been funded with a five-year grant from the National Institutes of Health (NIH), Department of Health and Human Services.

Palmer Taylor, Ph.D., Sandra & Monroe Trout Professor of Pharmacology and Dean of UCSD's Skaggs School of Pharmacy and Pharmaceutical Sciences, received \$3.46 million to develop novel means for degrading nerve gas and eliminating toxicity after exposure.

The Countermeasures Against Chemical Threats (CounterACT) program is designed to support research to develop new and improved therapeutics and diagnostic techniques to enhance the nation's medical response capabilities in the event of a terrorist chemical threat. Chemical threats are defined by the NIH as toxic chemical agents that could be used in a terrorist attack against civilians, or those that could be released at toxic levels by accident or natural disaster. The NIH intends to commit about \$10 million this year for 10-15 CounterACT projects nationwide.

Degrading the toxicity of nerve gas agents

Taylor's project focuses on creating a modified, synthetic version of AChE, an enzyme in nerve tissue that is the target protein of nerve gas agents. AChE accelerates or catalyzes the breakdown of the neurotransmitter acetylcholine, allowing normal neural transmission across synapses in nerve and muscle to occur. But when a nerve agent interacts with this protein to inhibit its



Palmer Taylor

catalysis of acetylcholine, the normal signaling of these neurotransmitters is disrupted.

His research employs recombinant DNA to create a synthetic AChE that catalyzes breakdown of nerve gases

Continued Next Page

UCSD Research Project Awarded NIH To Support Counter-terrorism Research, Continued

as well as the natural transmitter, acetylcholine. The synthetic, modified human AChE enzyme would be administered in the case of contact with a nerve gas agent, together with a standard oxime antidote. This antidotal and prophylactic approach would allow the toxic agent, upon exposure, to be quickly degraded in the blood, before reaching vitally important nerve and muscle targets.

This scientific process, called "oxime-assisted catalysis," couples the modified AChE with an oxime, an antidote that has been used for the past 50 years to reactivate inhibited AChE. Taylor has been investigating the structure of AChE and the genes that encode this enzyme of the nervous system since 1975. Selective oximes and related reactivating agents are being synthesized through a unique *in situ* approach by K. Barry Sharpless' colleagues at The Scripps Research Institute (TSRI).

Taylor and Sharpless also collaborate on a second NIH supported project directed to the development of new nicotine analogues used in the treatment of smoking cessation and schizophrenia. Both of these projects employ novel freeze-frame, click chemistry, developed by the Sharpless group, to synthesize novel molecules on their very target site of activity.

"Many insecticides used in agriculture, which are especially prevalent in California, cause toxicity upon exposure similar to nerve gas," said Taylor. "The same technology we are developing to deactivate nerve gas can be used as an antidote to accidental insecticide poisoning that can occur with home and garden pesticides."

The project will utilize AChE/nerve agent adducts produced by government labs in initial in-vitro studies. As the modified enzyme distribution is limited to the bloodstream, oxime-assisted catalysis can readily be tested in human blood samples in later stages of the project, avoiding animal or human exposure.

Additional contributors to the NIH CounterACT studies include Zoran Radiæ and Shelley Camp from UCSD and Barry Sharpless and Valery Fokin from TSRI.



Dr. Charles Daniels, Associate Dean for Clinical Affairs was appointed to the Professional Affairs Committee of the American Association of Colleges of Pharmacy for 2006-07. This committee studies issues associated with professional practice as they relate to pharmaceutical education and establishes and improves working relationships with all health affairs organizations.



Charles Daniels

Student News

OTC Early Experientials in Community Pharmacies

The students were in community pharmacies on Wednesday, November 8, 2006 from 1-5pm, and Wednesday November 15, 2006 from 1-5pm

As part of our first year Pharmacy Practice course (our OTC course), and for the first time, we have partnered with 7 community pharmacies (three different corporations to provide self care assessment, non-pharmacologic and OTC product recommendations and OTC medication counseling to patients in the OTC aisles of their pharmacies. This experiential will be conducted over two weeks in November this year, which is the first quarter of their professional doctoral degree. The goal of these partnerships is two fold; the sites provide an early experiential opportunity for our 60 students, who will have completed a number of self care modules, including communication skills, OTC history taking and documentation, respiratory, GI and pain management within our course. Students will have the opportunity to take their classroom and conference skills into an actual patient care environment, which will provide relevancy and depth to their understanding of patient health issues as well as help students, appreciate the value of their knowledge as a student pharmacist. Secondly, it will provide a valuable service to the patients at the community pharmacies who are confronted with an enormous number of medications in the OTC aisles of a pharmacy, and are frequently confused and frustrated when trying to select the appropriate medication for their condition. Pharmacist preceptors at each site will be evaluating our students for their ability to provide professional and sound patients care advice. Our goal is to offer this experiential on a regular basis so that students can build on their practical experiences and gain confidence in their abilities to provide patient care.

The SSPPS participated in the UCSD Open House on Oct. 21, 2006. Kappa Psi Pharmaceutical Fraternity, Inc. had a booth set up to screen people for hypertension (high blood pressure). This group of students screened over 60 people for hypertension by providing free blood pressure readings and using automated sphygmomanometers. SDSHP had a booth set up to educate people about Poison Prevention. People that stopped by this booth were interested in the many look-alike items that are poisonous if confused with candy or other edibles. At our third booth information was given out about the school's admissions requirements and to educate the public about the many different careers in Pharmacy. Students from each year

UCSD Open House By Kim Ciero



Dr. Brookie Best, Andy Chang, Leopla Hau and Sara Aghassy

participated in one or more of the booths. This outreach was an excellect example of how our students are giving back to the local community.

More Student News

Promoting Heartburn Awareness in the Community

By Anh-Thu Ha



Dr. Renu singh, Lannie Duong and Cynthia Shin

Approximately 25 million Americans suffer from heartburn symptoms daily, and the problems associated with heartburn have been shown to decrease the patients' quality of life. Unfortunately, many sufferers do not understand their condition, and as such, are not treating it effectively. Student pharmacists nationwide are aiming to improve heartburn awareness by offering the Heartburn Awareness Challenge (HAC) to their local communities. HAC uses presentations, screening assessments, and management recommendations. HAC is sponsored by the National Heartburn Alliance in cooperation with the American Pharmacists Association Academy of Student Pharmacists (APhA-ASP). At UCSD SPPS, the 2005-2006

HAC co-chairs were Anh-Thu Ha and Jim Connor, and the HAC team consisted of Lannie Duong, Cynthia Shin, and Jennifer Tran first year student pharmacists. During 2005-2006, HAC held two events to help educate patients about heartburn. Under the supervision of Dr. Renu Singh and Dr. Anthony Morreale, the first event was held at the



Sheri VanOsdol and Robert Mancini

Classic Residence by Hyatt at La Jolla Village, and the second outside Walmart Pharmacy in Clairemont. For the first event, the focus was on the geriatric population, while the second event was geared towards the general population.

The first HAC event included a 30 minute educational slide presentation by Jim Connor. Both events included patient assessments by student pharmacists to determine the patients' heartburn severity. From the assessment, treatment options, such as lifestyle modifications and pharmacologic therapies, were then recommended to the patients to help alleviate their heartburn symptoms. Due to the generosity of a number of corporate sponsors, the student pharmacists were able to offer free medication samples, as well as educational pamphlets to the patients. Both events were well received by members of the community. Through

these events, the student pharmacists hope to encourage patients to live healthier lives and improve their quality of life by understanding heartburn triggers and following appropriate prevention and management strategies.

Seniors Benefit from Medication Reviews at "Meet the Pharmacist" Event By Lannie Duong

Students from Kappa Psi, Delti Phi pharmacy fraternity participated in the "Meet the Pharmacist" event on Thursday, September 21st as part of a Senior Fair Day. It was held at Cameron Family YMCA in Santee and catered to hundreds of seniors. Senior Fair Day was sponsored by the County of San Diego Aging and Independence Services, and included presentations on proper use of medication, Project CARE for seniors living alone, Vials of Life, free blood pressure checks, "Meet the Pharmacist", and even an exercise class!

The "Meet the Pharmacist" event gave seniors the opportunity to speak one-on-one with a pharmacist. Twenty pharmacists and student pharmacists were in attendance. Faculty from UCSD SSPPS included Dr. Renu Singh. Volunteer faculty included Dr. David Dirig and Dr. Jerry Hammond.

As many seniors brought in their medications to discuss, it became apparent very early on that most seniors were taking multiple medications and/or herbal products. Student pharmacists paired with pharmacists and counseled patients on appropriate medication use, indications, adherence, and drug interactions. Concerns regarding medication side effects were addressed and explained, and a personalized list was created for each patient that outlined questions that they should ask their primary care physician. One lady in her mid-70's arrived with two buckets, both filled to the brim with medication bottles. Surprisingly, she had more dietary supplements and herbal products in her buckets than prescription drugs. In helping her complete her Vials of Life medication list, we noted that she was taking over 20 medications! The open forum allowed the seniors to ask numerous questions; many were prepared and brought a list of questions, for which they were commended. Some also shared very touching stories.

The event was a great opportunity to showcase our knowledge as well as our communication skills. Student pharmacists had the chance to work with, and learn from, pharmacists in patient education for seniors. But the seniors taught us a lot too! They shared their medical and personal histories with us and described side effects that they were experiencing. Many seniors came well prepared and were knowledgeable about their medications. And interestingly, an overwhelming number were taking herbal remedies, signifying the commonplace use of dietary supplements in the lives of seniors today.

Overall, the "Meet the Pharmacist" event counseled about 75 seniors in a three hour time period. The best part of the event was the patients themselves, and the appreciation that was expressed adamantly from each and every individual.



More Student News

Kappa Psi Raises Over \$2000 for Alzheimer's

By Sanaz Farhadian

On Saturday, October 28th, members of the UCSD Chapter of Kappa Psi took part in a walk to "remember." The Memory Walk to help raise funds for Alzheimer's research was held in Balboa Park, with nearly 2000

participants. The Kappa Psi Pharmers team was comprised of Andrew Chang, Patrick Chung, Lannie Duong, Sanaz Farhadian, Julia Harder, Nina Haste, Shawna Kobayashi, Paige Pancoast, John Robertson, and Elizabeth Sarles. Many friends and family also joined us for this event. While the walk allowed us to spend time with one another and catch up, it also allowed us to do something for others. We are proud to announce that we raised over \$2200, and would like to thank all those who helped us in achieving this goal. We extend a special thank you to Lannie Duong for organizing our role in this event. We hope to continue serving our school and our community through our great brotherhood.



Students Vaccinate in the Community By Lena Meng



Participants: (From left to right) Faith Lin, Nasim Ghafour, Karla Choy, Nina Haste, Paige Pancoast, Vafa Mahboubi, Anh-thu Ha, William Wong, Lina Meng, Roy Lee, Anesia Zeller, Jennifer Lai. (Not shown: Karen Anderson, Stephanie Webb, and Cynthia Shin.)

On October 16, 2006, student pharmacists from the Skaggs School of Pharmacy and Pharmaceutical Sciences began giving flu shots at the Flu Clinic held at the UCSD Student-Run Free Medical Clinic Project. Under supervision by Sunny Smith, M.D., and Michelle Johnson, M.D., pharmacy students worked with medical students to vaccinate over 100 patients at Clinic sites at Baker Elementary School, Downtown, and Pacific Beach. Over 15 students participated.

Second-year pharmacy student Lannie Duong felt that "giving flu vaccinations to the public was definitely a confidence builder, and it also gave us a chance to practice our Spanish at the Clinic. It was gratifying to see how much the patients appreciated our time and concern for their health."

Students Vaccinate in the Community, Continued

The Flu Clinic was the first opportunity for student pharmacists to immunize patients in the community after completing the Immunization Delivery Training Course in May 2006. Pharmacy involvement was developed through Operation Immunization, a project under the American Pharmacists Association (APhA). Former and current project advisors Brookie Best, Pharm.D. and Sarah Lorentz, Pharm.D., and former project chair and current second year student, Lina Meng, created a new protocol to allow student pharmacists to give immunizations at the Free Clinic.Prior to this event, Operation Immunization had a busy year focusing on Hepatitis B Vaccine awareness and health recommendations for travelers. Last spring, students were involved in teaching patients at the Free Clinic about Hepatitis B, and referring highrisk patients to seek Clinic services. In May, they set up an advising booth on the UCSD campus for undergraduates with summer travel plans. Student pharmacists counseled undergraduates on appropriate vaccines and over-thecounter medications for students traveling to places like Malawi, Thailand, and Costa Rica.

With more pharmacists and pharmacy students certified to give immunizations, countless opportunities open up for the Skaggs School to positively impact members of the San Diego community.





Third year pharmacy student, Anesia Zeller, and first year medical student, Theresa Chu giving flu shots at the Free Clinic site at Baker Elementary School



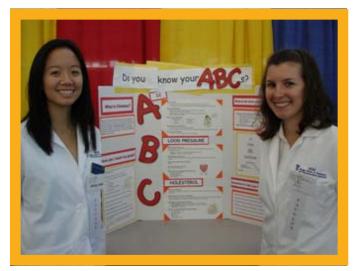
Nina Haste, in her first year of pharmacy school, giving advice on immunizations and general health topics to an undergraduate.

SSPPS Students Educating People with Diabetes at the Annual Taking Control of Your Diabetes (TCOYD) Conference and Health Fair

By Rachel Sperling & Candis M. Morello

Diabetes is one of the greatest health threats in the United States today and the number of people with this metabolic disorder is reaching epidemic proportions. An estimated 20.8 million Americans suffer from

diabetes – a number equal in size to the population of Texas – and over 200,000 die each year from causes related to this disease. While these numbers may seem large, the number of people afflicted with diabetes is projected to more than double by 2050. Students of pharmacy schools across the nation are taking action against this growing problem through Operation Diabetes, a project under the auspices of American Pharmacist Association-Academy of Students of Pharmacy (APhA-ASP). Providing educational tools and free screenings, student pharmacists are able to increase public understanding of the risk factors, complications, and treatments of diabetes. Ultimately, the organization aims to help prevent diabetes in people who are at risk and help those already living with this disease to take



Andrea Kwan and Colette Brown



Left to Right: Eric Cooper, Laura Lafranchise, Megan chynoweth, Rachel Sperling, Dr. Candis Morello, Heather Gao, Maz Askari, Andrea Kwan, Colette Brown and Therasa Kim

control of their own health. For the 2006-2007 academic year at UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS) Rachel Sperling, a first year student pharmacist, is chairing our Operation Diabetes project under the mentorship and guidance of faculty member, Candis Morello, Pharm.D., CDE.

On Saturday, November 18, 2006 the UCSD SSPPS chapter of Operation Diabetes held its first event by reaching out to people with diabetes in the San Diego community. Ten student pharmacists set up an educational poster session at the TCOYD Conference and Health Fair, a statewide event held

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Taking Control of Your Diabetes (TCOYD) Conference and Health Fair, Continued

annually at the San Diego Convention Center attended by thousands of people with diabetes and their family members. The posters were available to people who attended the "Ask A Pharmacist Brown Bag Session" co-chaired by Drs. Gerald Graf and Candis Morello and staffed by several local pharmacists who specialize in

diabetes. The session gave participants an opportunity to discuss their medications with a pharmacist one-on-one. With the exception of Yunnie Song, our 4th year student pharmacist advisor, all other student pharmacist volunteers were 1st years including Rachel Sperling, Megan Chynoweth, Naz Askari, Heather Gao, Colette Brown, Therasa Kim, Eric Cooper, Laura Lafranchise, and Andrea Kwan. Under the supervision of a pharmacist, students fielded questions on topics ranging from A1C testing to insulin to new non-insulin medications. They also demonstrated how to use the new insulin inhaler (Exubera®) and the new incretin mimetic pen device (Byetta®). Overall, student pharmacists provided counseling to 20-25 people, including people with diabetes, family members, and several healthcare workers. Hopefully this event and others like it will help educate people about diabetes and stem the tide of the diabetes epidemic.



Rachel Sperling and Laura Lafranchise

Thank You Thank You Thank You Than You Thank

The Skaggs School of Pharmacy and Pharmaceutical Sciences would like to thank the following organizations for their continued support and generous donations to our Pharmacy Practice Course.



UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences 2006 Poster Session Photos by Brandon Mutrux

SSPPS News

American Association of Colleges of Pharmacy 2006 Annual Meeting

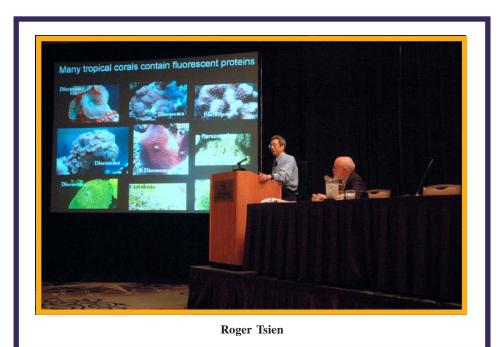
By CharlesDaniels

The UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences was the host school for over 1,200 members and guests attending the American Association of Colleges Pharmacy 2006 Annual Meeting, July 8-12, in San Diego. **Dean Palmer Taylor** helped open the meeting.

The Sheraton Harbor Island was the venue for the meeting. treating attendees to great views of downtown and the water. The AACP Board of Directors held their opening reception at the UCSD Birch Aquarium overlooking La Jolla Cove. A special session on Medicines from the Sea, featured SSPPS faculty members William Gerwick, Bradley Moore, William Fenical, and Tadeusz Molinski and was held in the new Pharmaceutical Sciences Building. In addition a special science plenary session on the drug discovery theme, Exploring New Frontiers in Drug

Discovery featured the work of UCSD faculty member **Roger Tsien**, and others.

Registrants enjoyed four days of fine weather and outstanding sessions. The location and outstanding program contributed to the largest attendance in AACP history. Next year's AACP Annual Meeting will be in Orlando.





SSPPS Students Participate in Health Professions

Training in Clinical Research

By David Adler

Culminating a summer of focused clinical research activity, the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS) and the School of Medicine (SOM) held a poster session presenting the research efforts of pharmacy and medical students. Fifty-five individual posters were presented in the Leichtag Center on November 16 for students, faculty and guests to view and discuss.

This was the first year that the SSPPS participated in the SOM NIH T-32 Clinical Research Training Grant in the Health Professions in collaboration with principle investigator, Dr. Carolyn Kelly. Posters resulting from another interdisciplinary training grant with Dr. Shu Chien in Bioengineering, and other short term research projects through SIRA, and Dr. Mia Savoia's training grant were also presented.

Last Spring, SSPPS students interested in clinical research identified faculty mentors and prepared applications summarizing a proposal for a 12-week research project. Following faculty review, seven 1st and 2nd year student proposals were recommended for funding and students began their research activity in late June.

Students participating, their projects and mentors were:

Eva Barker - Correlation of adherence and HIV-1 Viral Load Response Using a Validated Self Report Adherence Tool to Assess Adherence With Contemporary Anti-retroviral Regimens in Anti-retroviral Treatment Experienced Patients. Mentors: Craig Ballard, Brad Colwell, Chris Mathews.

Eileen Brigid - *Population Pharmacokinetics of Ritonavir-Boosted Atazanavir in Plasma and Cerebrospinal Fluid* Mentor: Brookie Best, and co-authors Scott Letendre, Diane Holland, Janis Durelle, Jennifer Marquie-Beck, Ronald Ellis, Edmund V. Capparelli

Ivy Beck - Pharmacokinetic Evaluation of Weight-band Dosing Strategy of Anti-retroviral Agents in Simulated Pediatric HIV Populations. Mentor: Edmund Capparelli

Xiaoying Quan - A Comparison of Ritonavir Adherence in ACTG 366 as estimated by Population



Left to Right: Craig Ballard, Erica Winter and Brad Colwell

Pharmacokinetics and by a Patient Questionnaire. Mentor James Lane, coauthor Edmund Capparelli.

Ashley Rosenquist -. *Developing a Protocol* for the Initial Evaluation of HIV/AIDS medication therapy management service pilot program in California. Mentor: Jan Hirsch.

Elizabeth Sarles - *CYP2B6-516 Genetic* Variants Impact the Pharmacokinetics of Nevirapine and Clinical Responses in HIV-1 Infected Children Receiving HAART. Mentor: Edmund Capparelli and co-authors

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Training in Clinical Research, Continued

Akihiko Saitoh, Elizabeth Sarles, Francesca Aweeka, Andrea Kovacs, Sandra Burchett, Andrew Wiznia, Sharon Nachman, Terence Fenton, and Stephen Spector

Erica Winter - Correlation of Adherence and HIV-1 Viral Load Response Using a Validated Self Report Adherence Tool to Assess Adherence with Contemporary Antiretroviral Regimens in Antiretroviral Therapy Naïve Patients. Mentors: Craig Ballard, Brad Colwell, Chris Mathews.

The goal of the UCSD NIH T-32 Clinical Research Training Program – one of 10 awarded nationally – is to provide multidisciplinary, broad based and integrated educational and practical clinical research experiences in support of the NIH "Roadmap Initiative."

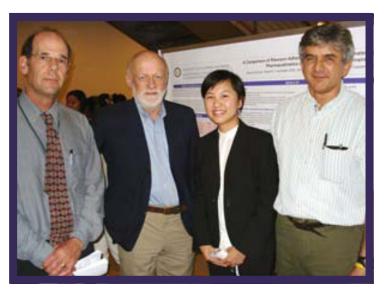
The NIH Roadmap initiatives have established a series of awards that make it easier for scientists to conduct interdisciplinary research and to train individuals to facilitate bench-to-bedside research. Among the several major programs NIH supports is the Predoctoral Clinical Research Training



Left to Right: Erica Winter, Ashley Rosenquist and Eva Barker

Program for the health professions. This program is designed to provide efficient entry of interested students into clinical research careers.

The interdisciplinary program at UCSD has added a research training element to the multidisciplinary, pre-clinical education and clinical teaching experiences shared by pharmacy and medical students. It also serves to highlight UCSD developments in translational research through the College of Integrated Life Sciences (COILS) and the



Left to Right: James Lane,, Palmer Taylor, Xiaoying Quan and Edmund Capparelli

Clinical Investigation Institute (CII), providing students with insights to broader applications and opportunities.

This clinical research program provides two types of research experiences: A short-term (12-week) clinical research and research methodologies program, and a one-year program that incorporates a comprehensive clinical research curriculum covering methods, epidemiology, biostatistics, data management, outcomes measures, and research ethics. The year-long program interfaces with the UCSD Masters Program in Advanced Studies in Clinical Research. As this was the inaugural year for the grant, efforts were made to encourage the development of short-term projects – "priming the pump" in anticipation that some students may elect

Training in Clinical Research, Continued

to consider the year-long program in the future and/or as an expansion of their initial proposals. Both experiences also provide the opportunity for students to fulfill UCSD's independent study research project requirement for completion of the degree in pharmacy.



Sue McGuinness presenting award to Ivy Beck

This initial year has demonstrated the breadth of student and mentor interests and a menu of clinical pharmaceutical sciences research opportunities. Students experienced hypothesis development, study design, IRB proposal development, data acquisition and management, laboratory and computational analysis, pharmacokinetic modeling, abstract development and poster design and presentation.

Several pharmacy student research abstracts have or will be submitted for scientific and professional meetings in 2007. Elizabeth Sarles's abstract, "CYP2B6-516 Genetic Variants Impact the Pharmacokinetics of Nevirapine and Clinical Responses in HIV-1 Infected Children Receiving HAART," was recently accepted for

presentation at the 14th Conference on Retroviruses and Opportunistic Infections (CROI).

Representing the UCSD Biomedical Sciences Library, Sue McGuinness, Alice Witkowski and Karen Heskett announced the Biomedical Sciences Library Award to pharmacy student, Ivy Beck and medical student, Ryan Abbott for the best use of scientific literature in a scientific poster.

This research opportunity will continue next year, and information regarding the application process will be available in early 2007.

Access Library Resources from Anywhere Sue McGuinness, Pharmacy Librarian

Are you traveling over the Winter break? Remember, you do not have to be without your favorite electronic journal or database while you are away! UCSD faculty, staff and students can connect to our proxy server and access the Libraries' licensed resources from any location that has Internet access. Many have commented on the convenience of being able to obtain high-quality information from their homes, whether they are on call at their clinic, preparing teaching materials, studying late at night, or just catching up on their reading. If you set up proxy access on your laptop, you can even access UCSD library resources from your out-of-town conferences. One physician who recently connected to our licensed resources from an off-campus office said, "Proxy access changed my life!"

All you need is your UCSD network user name and password, and a few minutes to configure your web browser to connect to the UCSD network. If you are not sure what your network user name and password is, contact Academic Computing Services Network Operations at 858-534-1857 or userserv@ucsd.edu. Instruction on configuring your web browser can be found online at <u>http://www-no.ucsd.edu/documentation/squid/</u>. The proxy server enables users to access web-based resources, such as electronic journals and most databases. If you use resources that are not web based, such as SciFinder Scholar, you can connect to the UCSD network through the virtual private network (VPN) service. For more information on the VPN, see <u>http://www-ono.ucsd.edu/documentation/vpn/</u>

Farmacy Funnies



Peanuts Review

A pharmacist goes to a nursing home to review an elderly customer. As he is sitting there, he notices a bowl of peanuts beside her bed and takes one. As they talk, he can't help himself and eats one after another.

By the time they are through talking, the bowl is empty.

He says, "Ma'am, I'm sorry, but I seem to have eaten all of your peanuts."

That's okay," she says. "They would have just sat there. Without my teeth, all I can do is suck the chocolate off and put them back."

A chemist walks into a pharmacy and asks the pharmacist, "Do you have any acetylsalicylic acid?" "You mean aspirin?" asked the pharmacist.

"That's it, I can never remember that word."

THE WEDDING

Jacob, age 92, and Rebecca, aged 89, are all excited about their desision to get married. They go for a stroll to discuss the wedding and on the way they pass a pharmacy. Jacob suggests they go in.

He addresses the pharmacist, "We're about to get married. Do you sell heart medication?"



Pharmacist: "Of course we do." Jacob: "How about medicine for circulation?"

Pharmacist: "All kinds." Jacob: "Medication for rheumatism, scoliosis?"

Pharmacist: "Definitely" Jacob: "How about Viagra?" Pharmacist: "Of course"

Jacob: "Medicine for memory problems, arthritis, jaundice?" Pharmacist: "Yes, a large variety."

Jacob: "What about vitamins, sleeping pills, agarol, antidotes for Parkinson's disease?" Pharmacist: "Absolutely."

Jacob: "You sell wheelchairs and walkers?" Pharmacist: "All speeds and sizes" Jacob says to the pharmacist: "We'd like to register for our wedding gifts here please."

Welcome!

A Warm Welcome to our New and Reappointed Voluntary/Non-Salaried Clinical Faculty!

(Appointments & Reappointments 1/1/06 - 12/1/06)

Re-Appointments

Philip Anderson, Pharm.D. Kevin Box, Pharm.D. David Dirig, Ph.D. William Greenberg, Pharm.D. Jerome Greene, B.S. David Haller, Pharm.D. Charles James, Pharm.D. James Lane, Pharm.D. Sarah Lorentz, Pharm.D. Providence Morris, Pharm.D. Victoria Serrano, Pharm.D. Raffi Simonian, Pharm.D.



New Appointments

Linda Awdishu, Pharm.D. Brad Colwell, Pharm.D. James Copeland, Pharm.D. Ashley Dalton, Pharm.D. Marie DeRisi, Pharm.D. Sheryl Doung, Pharm.D. Debbie Duwe, Pharm.D. Burt Finkelstein, Pharm.D. Darlene Fujimoto, Pharm.D. **Douglas Humber, Pharm.D.** Margo Karriker, Pharm.D. Phong Ly, Pharm.D. Craig Park, Pharm.D. Susan Raber, Pharm.D. **Robert Schoenhaus, Pharm.D.** Kerry Schwarz, Pharm.D. Nilofar Shah, Pharm.D. Shanna Stetz, Pharm.D. Ed Tsu, Pharm.D. Christopher Woo, Pharm.D. Susan Zimmerer, Pharm.D.