

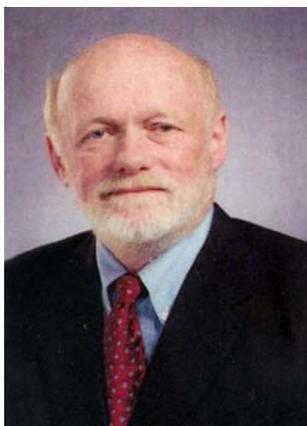


FROM THE DEAN'S DESK

ORIGINS OF PHARMACY AND PHARMACEUTICAL SCIENCES AT THE UNIVERSITY OF CALIFORNIA, SAN DIEGO

By Dr. Palmer Taylor, Dean

With evolution a common subject in scientific journals and popular press, I thought in a series for the Dean's Office, I might document how pharmacy education emerged and evolved in San Diego. The



Founding Dean,
Dr. Palmer Taylor

initial imprint was an agreement in 1973 between Dr. Jere Goyan as Dean at UCSF School of Pharmacy and Dr. Jack Moxley, then Dean of the School of Medicine at UCSD, whereby 16-20 students from UCSF were proposed to complete their entire fourth year of clinical experiences at UCSD. The centerpiece venue for training would be the University Hospital in Hillcrest, but diversity of clinical education experiences required the

use of many sites. Beginning in 1975, Dr. David Adler, followed by Drs. Tony Manoguerra and Bob Weibert in 1977, because early faculty members instrumental in starting the clinical training program that included the Pharm.D. and postgraduate residency programs. We continue to have the good fortune of relying on their expertise in developing the pharmacy education at UCSD, and Tony and David now hold associate dean and professorial positions at UCSD.

In the 1980's, it became apparent that San Diego was fertile ground for pharmacy education. The rapid emergence of the School of Medicine to a leadership and pre-eminent position in research and training among the many medical schools started in the late 1960's and early 70's, the success of the UCSF pharmacy program at UCSD, and the development of business interests in biotechnology all boded well for starting a pharmacy school at UCSD.

San Diego was then the largest metropolitan area in the United States without a school or college of pharmacy.

Pharmacy practice with our border location, an elderly and recent immigrant population, and an abundance of specialty health care facilities presented unusual challenges and opportunities. Moreover, several pharmaceutical companies with principal locations in the East or Japan were investigating the possibility of establishing a Pacific Rim "beachhead". The UCSF program located 500 miles to the north could not be expected to carry the entire pharmacy education responsibility for the University of California. In the Master Plan for higher education in the State of California, doctoral education was a responsibility of the University of California system. Accordingly UCSD was the only state-supported institution well positioned to take on this responsibility. The



Skaggs School of Pharmacy and
Pharmaceutical Sciences

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From the Dean's Desk Continued



The beginnings of the new school of pharmacy

UCSD Master Plan of 1988 included the vision of a second health sciences school, a school of pharmacy.

The early planning looked to areas “pharmaceutical” in the community to complement and enhance with an educational component. The early planners asked how a small school within a growing research-intensive university could have the greatest impact and community value. The value of the University of California to its citizenry not only stems from training of students at the baccalaureate, professional and graduate-doctoral levels, but also as an economic well spring for developing new technologies, seeding new companies and encouraging capital investment from the discoveries in research. Accordingly, it seemed obvious that a school of pharmacy at UCSD should be engaged in this arena from an academic and training perspective. Our small classes enabled us to integrate curricular activities with the School of Medicine and develop elective and research programs across the campus. UCSD’s entry into pharmacy education required that we develop a clear pharmacy identity on campus, since pharmacy schools are separately accredited and pharmacy practice carries distinct internship, residency and licensure requirements.

It is not often that a new professional school has developed on a research-intensive campus without training in the discipline being a national priority. With near continuous budgetary constraints, universities can only justify establishing new disciplines or schools during

periods of economic expansion. In short, timing is important and that window of opportunity must stay open for several years in order to gain traction and satisfy a multi-step approval process.

To develop a school in the University of California system not only requires demonstrating the need at all levels of academic endeavor, but also support from the UC-system wide Senate, the Office of the President, the Regents, individual campus leaders and an abiding commitment of faculty. During the development period UCSD was fortunate to have our two former chancellors become successive presidents of the UC system. Chancellors Richard Atkinson and Robert Dynes had first hand experience in the scientific and industrial community in the San Diego area and could envision the fit of pharmacy and the greater sphere of pharmaceutical sciences into the academic and community milieu. Even with such support, the approval process is a long one that started as an Advisory Committee in 1994 and

Planning Committee in 1996 at the School of Medicine level, chaired by Palmer Taylor. Here faculty saw the benefits of Health Sciences developing coordinated education for two professional schools. Since UCSD had served as the major training site for UCSF students for their advanced practice experiences outside of San Francisco, coordination with their plans was necessary and various organizational scenarios were considered extending from one UC pharmacy school at two sites to developing two independent schools in the UC system. At that time UCSF was also in the throes of an unsuccessful clinical amalgamation with Stanford Medical School. With new subsequent leadership in pharmacy at UCSF, interest and cooperation were extended to their



The new school is growing fast

sister campus to the south. With small classes at UCSD entering their fourth year, we are still able to maintain a mutually beneficial joint campus arrangement with a fourth year student contingent from UCSF continuing to be trained at UCSD sites.

Faculty governance in the University of California requires Academic Senate approval for programmatic changes, and this starts with its many subcommittees. One by one committee approvals were accorded

From the Dean's Desk Continued

eventually recording a final vote by our Campus Senate. From there the process again repeats itself at the level of the University-wide Senate and its subcommittees. In time approval was granted by the Senate, the Office of the President and then most importantly the Regents in late 2000. These approvals enabled UCSD to develop a budget and begin academic planning.

Training required an academic site to house the students and faculty. Although the UC Regents are vested with the authority to approve academic programs, the Legislature and Governor control the capital budget. Approval for the building then required its inclusion on the State of California reauthorization. Support was developed from the community, our local legislators and others within the state advancing pharmacy education. Building approval meant that the State was now vested in this endeavor, and the essential financial planning hurdles were traversed.

Similar challenges were seen on the academic side as well. UCSD faculty committees could see the value of the new school given the community need and the expanding biotechnology-pharmaceutical activity in San Diego. However, many inquired as to what would be the

areas of emphasis and an overall mission. More importantly, Senate members wanted to see a school interdigitating and highly interactive with the campus and one where we could extract the benefits of the UCSD Bonner plan, yet develop an organization where the new School of Pharmacy had a discrete identity. An abiding campus interest in the academic planning and continuing commitment to securing approvals and seed funding was led by Dr. Richard Attiyeh, in his capacity as Dean for Graduate Studies and Vice Chancellor for Research, and by Dr. Ruth Covell, as Associate Dean for Policy and Planning in the School of Medicine. Already one could see some of the unique features of UCSD pharmacy emerging: classes with medical students, common curricular requirements and grading with medical student courses, cooperative research programs extending from Scripps Institution of Oceanography, across the general Campus and the School of Medicine to the San Diego Supercomputer Center. A tradition of common clinical training in UCSD Healthcare and its affiliated sites was established through the UCSF faculty in the San Diego program. Such steps structured by cooperation between academic units are rarely seen in schools and colleges of pharmacy across the nation, yet,

perhaps because of provincial interest, what has been improbable elsewhere is integral to the UCSD tradition.

Faculty joining the UCSD School of Medicine in the late 1960's and early 70's prior to the graduation of the first class were part of a loose curricular plan with only a few established faculty and many volunteers. Yet this group not only provided a quality educational experience, but of equal importance, they were the role models for the early students that entered clinical practices, academia and research endeavors. In pharmacy, one could see this same *esprit de corps* that occurred in the School of Medicine founding 35 years earlier. As wonderfully captured in Nancy Scott Anderson's 1993 book, *The Improbable Venture: A History of the University of California, San Diego*, a general campus was spawned from the marine science of an oceanographic institution in the La Jolla cove. In turn, the general campus on the mesa seeded the strong basic science across Gilman Drive in the School of Medicine. A growing and adolescent general campus and its younger sibling, the School of Medicine, were now positioned to legitimize the "s" on Health Sciences with the start of a second professional school and the matriculation of our charter class in 2002.

What is detailed above is only stage one in the process, for our successes and outcomes can only be fully assessed after graduation of our first class. Our founding faculty, the charter class, the two that follow, and our 60 students recently matriculated to the Skaggs School of Pharmacy and Pharmaceutical Sciences will also share in the rich experiences of establishing an academic program. These experiences will be detailed in the second part of the series.

TO BE CONTINUED



It won't be long now

SCHOLARSHIPS and the FUTURE of SKAGGS SPPS

Written by Jennifer Harris
Senior Writer, Health Sciences Development

Only three years since its inception, the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences (Skaggs SPPS) has attracted and organized a stellar faculty, implemented an innovative curriculum, and invited support from the San Diego community. Given this momentum and the construction of the new pharmaceutical sciences building, the Skaggs SPPS is now appealing to the best and brightest students in the nation.

For students today however, the cost of a pharmaceutical education is rapidly increasing. Pharmacy graduates as a result are entering the field in a large amount of debt. Because scholarship funding can greatly influence a student's decision-making process, the Skaggs SPPS has it positioned as one of its highest philanthropic priorities. In a critical effort to prevent debt from determining a pharmacy student's career path, the Skaggs SPPS is working diligently to build scholarship reserves.

"Scholarships," according to Associate Dean, Anthony Manoguerra, Pharm.D., "are important for several reasons, "One is that the cost of education for students has increased dramatically over the last few years. For pharmacy students, tuition is up to \$20,000 a year. Secondly, we don't have alumni, or a group of successful professionals or entrepreneurs who have a previous attachment to the school that we can go to for scholarships. And so getting scholarships has been a challenge."

Expecting to graduate its first class in June 2006, the Skaggs SPPS is primed to confront this challenge. Manoguerra believes it is critical to ease this burden of debt for pharmacy students. Financial constraint, he believes, should not determine a student's career path. He says, "It is the Skaggs SPPS's mission to graduate students who will push the boundaries of the profession, who will assume "non-traditional" roles for pharmacists, who will develop new ways to improve drug therapy in a variety of settings: in the community, in the hospital, in academia, or in the pharmaceutical industry."

"We are concerned," he says, "if their debt-loads mount, students are going to make decisions based on the kind of salaries they are offered, rather than where they think their best future lies."

After analyzing the Class of 2007 and their projected debt-load upon graduation, Manoguerra found the numbers alarming. Factoring in undergraduate loans for incoming pharmacy students and the load accumulated over the first two years of their pharmaceutical education, the Skaggs SPPS found their students destined to accrue an average of \$110,000 in debt.

Carol Hartupee, Financial Aid Director for Health Sciences, says pharmacy students borrow an average of \$17,000 per person/per year in unsubsidized loans. This combined with \$8,500 in subsidized loans, and some alternative loans, scarcely covers tuition—not to mention the cost of living in San Diego. "Unless we find scholarship funding for these students, they will continue to rely heavily on the rapidly increasing (interest accruing) unsubsidized loans," Hartupee says.

Though the numbers are disconcerting, the situation is steadily improving. In the same 2005-2006 school year, 54 Skaggs SPPS students received scholarship awards. Among those awarded, student pharmacist and Class of 2008 President, Robert Mancini, reaffirms the need for scholarship:

"Scholarships," he says, "are crucial. As pharmacy students we hear about new and innovative job



Associate Dean, Anthony Manoguerra, Pharm.D.
& scholarship recipient,
Robert Mancini at the 2005 MEDS Event

opportunities daily. We yearn to expand our horizons—to experience all that our profession has to offer, but at the same time, we fear debt will deter some of these options for us."

Mancini, recipient of the Skaggs Foundation Scholarship award, recently participated in an appreciation reception for students from the UCSD School of Medicine and the Skaggs SPPS. In a speech to faculty, staff, and donors he expounds on the importance of scholarship, "Scholarship allows pharmacy students to get involved. Instead of spending extra days figuring out our finances for the weeks or months ahead, instead of worrying day in and day out about debt, we can actually take the time to understand what pharmacy is all about; we can

participate in community service projects, and we can learn to serve our profession, to nurture it and expand it.”

Mancini is just one of many students who find the pharmacy profession rich with opportunity. In choosing to pursue his pharmaceutical education at UCSD, Mancini says, “More than any school in the United States, the Skaggs School of Pharmacy and Pharmaceutical Sciences promotes interaction with colleagues in the medical sciences.”

The Skaggs SPPS has made it a mission to breed the pharmacist of the future—a pharmacist who understands that collaborations will help transform the face of medicine. Scholarship packages, a key component to this mission, will offer pharmacy students like Mancini the opportunity to transcend the boundaries of the pharmacy profession—to leap into the future. With recent support from The Skaggs Institute for Research, Allergan Foundation, National Association of Chain Drug Stores, JM Long Foundation, Loving Arms Hospice Foundation, the San Diego Society of Health System Pharmacists, Amgen, Ralphs, among many others, Skaggs SPPS is progressively building a legacy that will carry the Skaggs SPPS model into the future.

Albertsons/Sav-On,
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California Society of Health-System Pharmacists Names 2005 Student Leadership Award Winners

“California Pharmacy schools have chosen six students to receive the CSHP Student Leadership Award. Faculty from each school chooses a student who is exemplary in leadership roles and academia.

The purpose of the award is to encourage and recognize pharmacy students’ involvement in and contributions to CSHP and the profession of pharmacy, which may include, but should not be limited to, leadership roles.”

Skaggs School of Pharmacy and Pharmaceutical Sciences student pharmacist, **Lisa Mueller** was one of the six chosen to receive this award and will be introduced at the opening session of CSHP’s annual meeting, *Seminar 2005*, being held at the Disneyland Hotel on October 20 through the 23rd.

Did You Know?

A team, composed of 4th year student **Jason Lam** and 3rd year student **Max Wang**, was the winner of the 2005 Clinical Skills Competition at the SSPPS. The Clinical Skills Competition requires students to apply the knowledge they have learned in class to specific patient situations and to develop drug therapy plans. Jason and Max will now compete in the state competition to be held October 20, 2005 at the California Society of Health System Pharmacists Seminar meeting in Anaheim. They will also compete at the national level at the American Society of Health System Pharmacists Mid-year Clinical Meeting in Las Vegas in early December.

UCSD Student Pharmacists Hold Library Walk Poster Session

By **Lindsey Bowman (SDSHP Chair of Community Affairs)**
& **Evelyn Hoevatanakul (APhA-ASP Vice President of Special Events)**

On Thursday, October 13, 2005, SDSHP and APhA-ASP sponsored an “Ask Your Pharmacist Library Walk Poster Session” as part of American Pharmacists Month. UCSD student pharmacists presented posters at the event discussing health-related topics such as treatment of the common cold, heartburn, the effects of caffeine, smoking cessation, meningitis, nutrition, and fad diets. The session was geared towards exposing the UCSD community to the presence of the UCSD Skaggs School of Pharmacy and



Pharmaceutical Sciences and to promote the importance of interacting with one’s pharmacist about health, lifestyle, and wellbeing. This event allowed many of the first year students to interact with their peers in an informal health care setting, and to begin getting acquainted with the pharmacy profession. In addition to talking to students and visitors, the student pharmacists passed out brochures that highlighted the important points of the posters as well as healthy snacks such as granola bars, juice boxes, water, decaffeinated tea, vitamin C drops, and zinc lozenges.

STUDENT NEWS: SSPPS White Coat Ceremony

Written by **Anthony Manoguerra, Pharm. D.**
Associate Dean for Student Affairs

On September 23, 2005, the faculty and staff of the Skaggs School of Pharmacy and Pharmaceutical Sciences welcomed the 60 members of the Class of 2009 to the School during the annual White Coat Ceremony. Welcoming comments were provided by **Chancellor Marye Anne Fox**, Vice-Chancellor for Health Sciences **Edward Holmes** and Dean and Associate Vice-Chancellor for Health Sciences **Palmer Taylor**. The 43 women and 17 men were cloaked in their white coats by Dean Taylor following which they were inducted into the profession of pharmacy by reciting the Oath of a Pharmacist. The keynote presentation was



Chancellor
Marye Anne Fox

provided by **Kenneth Schell, Pharm.D.**, Senior Manager in the National Compliance, Ethics and

on the excellence of the faculty teaching in the first year of the curriculum. Following the program, a reception was held for the nearly 200 people in attendance, allowing for interaction of students and their families with the faculty and staff of the School.



Stephanie Gershogol
Class of 2008
President

The Class of 2009 is the fourth class enrolled in the SSPPS and the first class composed of 60 students. They come from many areas of California and six of the students are from outside of California. All members of the class hold a bachelor's degree while 3 students have also earned master's degrees. The average overall grade point average of the class is 3.67. Forty-five



Dr. Palmer Taylor, Founding Dean
and student pharmacist
at the White Coat Ceremony

Integrity Office of Kaiser Permanente. Dr. Schell challenged the students to take advantage of the educational opportunity that is being provided to them and to "push the boundaries" of the profession. He stated that the education they will receive will allow them to function in new and developing roles in the profession, many of which have yet to be conceived. Representing the current student body was Student Pharmacist **Stephanie Gershogol**, 2004-05 President of the Class of 2008. She welcomed the new students and spoke of her experiences last year in the school and commented



Family, friends and student pharmacists
at the 2005 White Coat Ceremony

members of the class earned their undergraduate degrees from a UC campus, with all eight of the current undergraduate campuses represented. Eight students are graduates of the California State University System while 3 attended public universities outside of California and 4 attended private universities either within California or in other states.

At this time, I vow to devote my professional life to the services of all humankind through the profession of pharmacy.

I will consider the humanity and relief of human suffering

I will apply my skills to the best of my ability in providing therapy

I will maintain the highest standards of professional competence in the profession of pharmacy.

I will maintain the highest standards of ethical practice in the profession of pharmacy.

I will embrace and advocate change in the profession of pharmacy that will improve the health care.

I take these vows voluntarily with the public. I am entrusted by the

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Dr. Palmer Taylor, Founding Dean and the Class of 2009