

STATE OF THE SCHOOL OF DENTISTRY

University of Southern California

Dean's Report

July 31st 2006

Every year about this time we have the unique opportunity to reflect on what we together have accomplished. What have we attempted to achieve during the 2005-2006 academic year? How did we actually perform? How can we improve? What are the goals for the coming academic year? This tradition provides a process to continuously measure, assess, evaluate and advance performance improvements within the School of Dentistry of the University of Southern California. Further, as we evaluate "the School" we evaluate how we align with the goals, objectives and values of our profession and how we align with the goals, objectives and values of our University. The following provides a brief overview of the "State of the School of Dentistry 2005-2006 (and beyond)."

"Organizations learn only through individuals who learn. Individual learning does not guarantee organizational learning, but without it no organization learning occurs."

"The discipline of team learning starts with 'dialogue,' the capacity of members of a team to suspend assumptions and enter into a genuine 'thinking together.' "

"In a learning organization, leaders are designers, stewards and teachers...The leader's task is designing the learning processes whereby people throughout the organization can deal productively with the critical issues they face, and develop their mastery in the learning disciplines."

Peter Senge, 1990

For 125 years, the University of Southern California has been grounded in optimism about the future and this value is readily found in the remarkable history of our University. Throughout this period the primary *"aim has been and continues to be to produce the best and most efficient education through a full development of the moral, intellectual and physical nature of each student."* *"Learning and education is life!"* (President George Finley Bovard, 1921).

The School of Dentistry (USCSD) was founded in 1897 and graduated its first class in 1900. For more than 109 years, the school has contributed to what is thought, what is taught and what is practiced in the dental profession. Through undergraduate, predoctoral, doctoral, postdoctoral and life-long continuing professional education and learning, innovation and discovery, patient and community health and leadership this effort continues into the 21st Century.

Today, the USC School of Dentistry (USCSD) is a "learning organization," dedicated to our own ongoing learning, flexibility, comfort with change, and openness to new ideas. We are committed to improving the health of all people through education and

learning, innovation and discovery, patient and community health outreach, and leadership

USCSD continues to provide outstanding undergraduate, graduate, and postgraduate academic programs of instruction for highly qualified students leading to academic degrees in the oral health professions; extend the knowledge of oral health by encouraging and assisting faculty in the pursuit of innovations and discovery scholarship; improve the oral health of all people in Southern California; stimulate and encourage in our students those qualities of scholarship, leadership, and character that mark the true oral health professional; serve California and the nation in providing life-long learning to oral health professionals; and provide oral health leadership in the solution of community, regional, national and international complex problems.

As of July 1st 2006, USCSD consists of seven academic divisions that include all full-time as well as part-time faculty [with the completed alignment of Biokinesiology & Physical Therapy (PT), and Occupational Science & Occupational Therapy (OT)], two major centers [Center for Craniofacial Molecular Biology and the Oral Health Centers (including Redmond Center for Imaging, Center for Oral Microbiological Diagnostics, Center for Dental Technology, and the Oral Health Center)], and a number of hospital-based as well as out-patient based residency programs.

I want to take a few minutes to focus on the details of the new arrangement between the School (USCSD) and the alignment with Biokinesiology & Physical Therapy (PT) and Occupational Science & Occupational Therapy (OT).

What are these three fields of study or disciplines?

Definitions can be useful. First, in *Dentistry*, we reflect the evaluation, diagnosis, prevention and/or treatment of diseases, disorders and/or conditions of the oral cavity, maxillofacial area and/or the adjacent and associated structures and their impact on the human body. Second, in *Occupational Therapy* they focus on the prevention of disease and disability through life design as well as treatment of those who have difficulty engaging in daily activities due to chronic or acute conditions. Its focus is on maximization of healthy living and minimizing disability through a holistic approach to life design. With *Occupational Science* this is an interdisciplinary social science that focuses on the relationships of daily habits, activities and practices to health and well-being. Third, with *Physical Therapy* they focus on the diagnosis and treatment of people of all ages who have medical problems or other health-related conditions that limit their ability to move and perform functional activities in their daily lives. The closely related discipline of *Biokinesiology* represents the integrative study of the biological basis of both normal and disordered movement. This is an interdisciplinary science that focuses on understanding how the human body adapts to growth and experience as well as to injury, disease, and aging.

What was the rationale for making these changes?

With the retirement of Vice President for Health Affairs and Dean of the Independent Health Professions (IHP) Dr. Joseph Van Der Meulen, a decision was made by Provost Lloyd Armstrong and his team to eliminate the administrative unit of Independent Health Professions (OS/OT and B/PT). The two academic departments that constituted IHP then needed to become aligned with an existing school within the University. They were asked by the Provost to investigate an advantageous alignment during the 2003-2005 period of time. Through various interviews and discussions they became interested in an alignment with USCSD. In May 2005, then Provost Armstrong asked me to serve as acting director for the Independent Health Professions (2005-2006). This was confirmed by then new Provost Max Nikias. With modest subvention financial support from Provost Nikias we designed a year long strategic planning effort that engaged a professional facilitator Ms. Gina Airey and selected faculty and staff from each of the three academic programs to investigate potential opportunities for making such an alignment a realization. The resulting report was completed and formally presented to Provost Nikias and his team and included recommendations for the alignment of the three programs to be effective July 1, 2006.

The interdisciplinary faculty analysis showed that these three academic programs have a number of commonalities. Programs are each interdisciplinary with formal relationships for research, education and practice with units inside and outside of USC, locally, nationally and internationally. Each of the programs bridge theory and practice with research, graduate programs and professional practices. Collectively, the three disciplines span biomedical sciences, social sciences and humanities. The three learner-centered educational programs offer professional, graduate and continuing professional education. Dentistry and occupational therapy also offer undergraduate degrees. Each of the three programs has a history of leadership in education, practice and research for their respective fields. Programs are engaged in biomedical sciences, health promotion, health literacy, risk assessment, disease prevention and quality of life issues. They share a commitment to academic quality, clinical excellence and research innovations.

So, what does this so-called “alignment” become?

Under the alignment, the departments of OS/OT and B/PT become the divisions of OS/OT and B/PT at USCSD. The former department chairs are named associate deans and chairs of their respective divisions. Each program will continue to pursue its independent academic agenda. The alignment holds promise for contributing innovative practice models. Facilities, staff and faculty positions directly associated with the operations of the three programs remain the same. None of the currently enrolled students will be affected by the change. The budgets of the three programs will remain unchanged and all will be administered through USCSD.

Does this approach have a precedent in the United States? Does it “make sense” in terms of the many recommendations from the Institute of Medicine (IOM) “Dental Education at the Crossroads” (1995) and numerous recent IOM studies and

reports on the future of academic health professional education, research and health and wellness?

The alignment of these three disciplines is only the second of its kind in the U.S. (the first being the NYU's school of dentistry with its school of nursing). The alignment here at USC will promote the IOM's five key competencies for 21st Century health professionals: patient-centered care; working in interdisciplinary teams; employing evidence-based practice; applying quality improvements; and using informatics. Further, the faculty strategic process identified opportunities for research and community service collaborations that include long-term health of practice professionals (e.g. ergonomics), leveraging community service programs for targeted student education and client care related to health promotion, wellness and development for infants (e.g. feeding disorders in infants), children, mothers and families (e.g. numerous rehabilitation issues, life style issues for an aging population, and temporomandibular joint disorders), integrative healthcare delivery model and randomized clinical trials, health disparities research related to the significance of health care relationships and encounters, integrative problem-based and clinic-based education to address chronic health problems, enhancing current federally funded research for translational, clinical and Lifestyle Redesign® with interdisciplinary cores, and addressing major populations with special needs.

What are the next steps as related to administrative arrangements?

The process that preceded the Provost's approval concluded that it would be mutually beneficial for the three programs to be aligned. The chairs of OS/OT and B/PT become associate deans of the divisions of OS/OT and B/PT in the dental school's administrative structure. Facilities, staff and faculty positions directly associated with the operations of the three programs would remain the same. Budgets will remain unchanged, and the three will be managed through USCSD. In May 2006, the Board of Councilors, faculty and staffs from all three programs were provided orientations for the anticipated alignment by through a series of presentations from me, Dr. James Gordon (B/PT) and Dr. Neville-Jan and/or Florence Clark (OS/OT). Further operational details and the opportunities from collaborations will develop in the coming months. One such collaboration is to use technology to enhance learning and this project has already received funding from USC's Technology-Enhanced Learning Incentive Program. Other opportunities include enhancement of the Center for Infant Feeding Disorders led by Dr. Jack Thurman who also collaborates with Dr. Chuck Shuler, and a new Center for Wellness that is being developed by several faculty from each academic program.

Do we also share "core competencies" in our professional degree programs?

Dentistry faculty created 24 competencies for the doctoral dental program apply to the pediatric, adolescent, adult, geriatric and medically compromised patients. These were crafted from 1998-2000 prior to the April 2001 accreditation by the Commission on Dental Education. Since that time USCSD is pledged to provide a competency-based DDS Program with defined and measured competencies. These fall under the following general headings: general professional competencies; practice management;

comprehensive patient assessment and diagnosis; comprehensive treatment planning; comprehensive treatment; medical and dental emergencies, pain and/or anxiety control. National rankings are not made for Dentistry by US News & World Report.

For Occupational Science & Occupational Therapy (OS/OT) the program provides masters level students with the basic competencies for entry level practice as direct care providers, managers, consultants, researchers, and advocates for the profession and consumer. Students learn foundational knowledge related to the development of the profession and occupational science. They learn basic skills and principles related to screening and evaluation, treatment planning and implementation, life design methods, health care delivery contexts, research, management, and core values and ethical responsibilities. Because disease and disability impact all age groups, knowledge of human development and activity across the age span is a key competency. Ranked #1 in the nation according to US News & World Report.

For Biokinesiology & Physical Therapy (PT) there are a total of 23 practice expectations (re: competencies) and these are defined in three main categories: Professional Practice, Patient/Client Management, and Practice Management. Practice expectations are a description of behaviors, skills, or knowledge that defines the expected performance of the physical therapist. When taken in aggregate, they describe the performance of the graduate upon entry into the practice of physical therapy. Ranked #1 in the nation according to US News & World Report.

How does this alignment increase the size or population of USCSD?

Presently, the USCSD Dental Community is less than 1,600 people. These include faculty (full-time 116; part-time 479), staff (full-time 292; part-time 19), students (Fall 2005) [DDS 631; BSDH 70; postdoctoral specialty programs 119 (includes combined programs—12 MD and 19 MS); MS 3; PhD 21]; Continuing Education: 34 courses and 3,668 enrollees from 36 states and 18 countries; Living alumni 9,761; Facilities: University Park Campus Norris Dental Science Center & Oral Health Centers, Health Sciences Campus Center for Craniofacial Molecular Biology; Mobile Clinics – 6 vehicles; 18 operatories; Affiliated hospitals/clinics 15 sites.

Occupational Science & Occupational Therapy includes faculty (full-time 24; part-time 11; 2 joint appt.), staff (full-time 8; part-time 7), students (Fall 2005) (BS 43; MA 170; OTD 30; PhD 29); and living alumni 3,000; Facilities: University Park Campus with the Center for Occupation and Lifestyle Redesign; Health Sciences Campus with the Center for Health Professions, USC Faculty Practice: USC University Hospital and Affiliated hospitals/clinics: 520 throughout the United States.

Biokinesiology & Physical Therapy (PT) includes faculty (full-time 38; adjunct 54; 5 joint appts.), staff (full-time 34; part-time 2), and students (Fall 2005) (DPT or Doctor of Physical Therapy 258; residents 6; MS 6; PhD 26; 14 part-time, post-professional DPT); Continuing Education: 22 courses; 15-70 enrollees per course from 8 states in the U.S; Living alumni: 1,700; Facilities: University Park Campus with USC PT

Associates and Health Sciences Campus with the Center for the Health Professions; USC PT Associates; USC University Hospital and affiliated hospitals/clinics 700 in 40 states and DC.

I must emphasize that we should also understand that the departments of OS/OT and B/PT and their now becoming two new divisions is designed to retain their independence as well as the independence of USCSD. This fundamental principle is why we are using the preposition *at* the School of Dentistry. The former department chairs now become associate deans and chairs of their respective divisions at USCSD. While each program will continue to pursue its independent academic agenda, the alignment offers very exciting new and innovative opportunities to create novel practice models and many clinical research collaborations. Staff and faculty positions directly associated with the operation of the three programs remain the same. All three academic programs will continue to occupy their current space. The budgets of the three programs will remain unchanged and will be administered through USCSD. Currently enrolled students will not be affected by this alignment. The dean of USCSD will provide leadership for all academic components within and aligned with our School.

Following this brief commentary for the new alignment, I wish to now provide an outline of the performance of USCSD during 2005-2006, and provide our goals and objectives for 2006-2007. The narrative and outline provide exemplars and is not intended to be definitive. Due to limited time and space, all outstanding contributions by faculty and staff could not be included. I also include performances from OT and PT as appropriate since they are “at” USCSD.” Briefly, the “State of the School of Dentistry is very good” and with your efforts we will continue to work towards “great.”

What are some of the measurable improvements or enhancements that were made in the undergraduate programs over the past year?

- This year, 98% of the graduating dental hygiene baccalaureate students who took the Western Regional Board Exam passed. This was the highest aggregate score among all schools participating in this Board exam.
- Enrollments in the undergraduate nonprofessional courses offered by the Division of Occupational Science increased by 10%.

What new undergraduate programs have been started?

In collaboration with the School of Engineering, Department of Bioengineering, we offered a new course entitled “Craniofacial Biotechnology” taught by faculty drawn from the School of Dentistry. This was designed as a “pilot effort” with 18 engineering students (January – April, 2006), and we have planned that this will be followed by a new “minor” in the baccalaureate program of bioengineering. Engineering students who complete this minor will be even better prepared to pursue dental school, medical school, graduate school or biomedical/dental industry careers. This has been enthusiastically approved by the new Dean of Engineering.

What existing undergraduate programs have been revised, invigorated or discontinued?

- New programs around health promotion vis-à-vis tobacco cessation counseling have been implemented between Dentistry (Dental Hygiene) and Pharmacy
- New opportunities for dental hygiene students to have international experiences have been designed and implemented
- New processes and streamlined procedures have been put into place to expedite admissions of baccalaureate OT majors into graduate programs

What have you done to increase student retention, on-time graduation rates, learning outcomes or output measures, and other changes for the new academic year for undergraduate programs?

- Student retention rates and on-time graduation rates in our baccalaureate programs remain at the historically high levels
- Increased advisement and rotation opportunities serve as enhancements for student performance
- Career counseling and opportunities after graduation remain very positive, especially for dental hygiene at the baccalaureate level and occupational science at the Master's degree level

What goals / plans do you have for the new academic year that directly effect undergraduate programs such as dental hygiene (these also effect the DDS and Residency Programs)?

- USCSD will engage in preparations for formal accreditation by the Commission on Dental Education with a site visit scheduled for April 2008; from 2006-2007 a formal "self-study" is required and this is followed by electronic submission of materials in the fall 2007.
- To best position USCSD for accreditation as well as continued academic performance improvements, I have appointed Dr. Mahvash Navazesh to be the next Associate Dean for Academic Affairs; Mahvash will lead the school-wide "self-study."
- In addition, I also appointed Dr. Robert Keim to be the Assistant Dean for Program Accountability and Educational Research, Ms. Eileen Suffet to be the Assistant Dean for Outcomes Assessment and Curriculum Management, and Ms Sandra Bolivar to be the Assistant Dean for Admissions, Minority and Student Life; these talented people will influence the quality and performance of all academic programs.
- What is taught and how it is taught is very significant for all health professional educators. During the coming year, Dr. Arnold Tiber and a faculty team will critically examine curriculum, sequencing of content and pre-clinical and clinical "learning experiences" and recommend opportunities for improvement.
- We will complete all University-specified requirements for approvals required for the new "minor" in Bioengineering as a collaborative effort between Dentistry &

Engineering. Dr. Reyes Enciso has done a superb job in getting this “pilot” started.

- We are planning an expedited BS/MA degree program for OT as well as Dental Hygiene.

What measurable improvements or enhancements has your school made over the past year in professional (e.g. DDS Program), residencies and graduate programs?

- The professional degree programs (Dentistry, PT and OT) involve recruitment and retention of very talented students and faculty, curriculum that is contemporary, sequenced to be developmentally appropriate and coupled or aligned with sequenced pre-clinical and clinical experiences and rotations in hospital and out-patient clinic facilities; each of these have been improved through increased academically-qualified applicant pools, faculty recruitments, faculty development programs, increased community-based programs, improvements in the information technology infrastructure, increased faculty to student ratios in clinic settings, and increased local as well as international clinic learning opportunities.
- We have literally doubled the number of days that our predoctoral DDS students spend in “service learning” rotations, from 25 days in the senior year (2003) to 50 days (as of class graduating on May 2006).
- We have significantly increased the number of under-represented minority (URM) students enrolled at USCSD. In the fall 2003 we admitted 4 URM students to the DDS Program whereas we admitted 16 URM students into the Class 2010. The increase is due to faculty and staff recruitment efforts, a novel “post-baccalaureate” program, and an increase in scholarship funds for URM students.
- Applicant pool for the Doctor of Physical Therapy (DPT) increased by 20%.
- The faculty of PT engaged in a major revision of their third year curriculum of the DPT Program.

What new programs have been started?

- We have created several new selective for dental students such as “CAD-CAM Dentistry” and “Oral Health Center Dental Student Externships”
- We have completed negotiations for several new international dental school/university collaborations including the National Taiwan University, National Korean University, Showa University, Niigata University and Moscow University (for example, dental students from Showa University are spending two weeks at USCSD in August 2006 and two USCSD faculty are lecturing at Showa University in November 2006)

What existing programs have been revised, invigorated or discontinued?

- We have increased the number of in-house faculty development programs to increase faculty competencies and calibrations related to PBL learner-centered

- education, National Board Part 1 & 2 examinations, clinical procedures related to the new WREB examination, and many patient management activities.
- We have revised the curriculum in the Craniofacial Biology Graduate Program (CBY) to align with the PIBBS curriculum on the Health Sciences Campus.
 - We have reduced the number of residents in the AEGD program from 12 to 6 per year in order to gain increased clinic space for faculty practice/retention opportunities
 - We have increase the number of pediatric dentistry residents by two and formed a new agreement with Childrens Hospital-Orange County with a new funded HRSA federal grant that supports this expansion
 - A postdoctoral program has been started in OT
 - The Advanced Doctor of Physical Therapy program has been phased-out.

What have you done to increase student retention, on-time graduation rates, learning outcomes or output measures, and other changes for the new academic year in the professional degree programs?

- Although retention rates remain extremely high, we are increasing communication efforts that better connect students and residents with University-wide services
- We are funded by the California Endowment with a four-year grant designed to increase the number of underrepresented minorities in dentistry, to increase cultural competencies of health professionals, and to reduce health disparities in Los Angeles County (and beyond)
- We have worked to increase the applicant pool of academically qualified students from 1,400 applicants for USCSD in 2000 to 2,600 for 2006 (increased GPA and DAT scores and minority representations)
- We have increased the faculty to student ratio so that we have clinical faculty for every 5-8 learning clinicians in most of our clinic venues.
- A great deal of dental education is related to patients and their diseases and disorders. We have increased our patient pool from 42,000 in 2000 to 75,000 in 2006 (total people per year).
- Historically (1985-present), on-time graduation rates for the USCSD DDS Program have been approximately 73% completion on the May date of graduation, almost 80% by the end of June, and 90% + thereafter; our goal is to have all senior students graduate on time with completed competencies. This is being addressed through several strategies including major curriculum revisions, changes in sequencing of learning content and experiences, and changes in assessment and evaluations.
- Another measure of academic success is the number of students who pursue advanced education after professional school; the graduating 2006 DDS class had 33% accepted to dental post-graduate advanced dental education and dental specialty training around the nation (this is the highest ever for USCSD; from 1985-2000 the percent of graduates who were accepted into specialty programs averaged 7% per year)
- PhD graduated from the CBY Program gain postdoctoral positions in excellent laboratories around the nation and internationally (for example, CBY graduates

- hold positions at the NIH, Chairs of Departments in major universities, and as well-known and active scientists)
- As dean, I invited and charged members of our USCSD Board of Councilors to form a *Task Force* (known as the Dr. Jerry McClellan team including Drs. Allman, Ascheris, Sameni, McClellan, Harmatz, Blair, and Schwarz) to assess and make recommendations for the DDS Program with particular emphasis upon student preclinical and clinical education related to National Board Part 2 examination performance, improved utilization of clinic resources, and “graduation on-time” goals. Their *McClellan Report* was shared with my leadership team in May 2006 and a number of changes have already been implemented.

What are the major goals for the professional programs for the new academic year (2006-2007)?

- Associate Dean for Academic Affairs Dr. Mahvash Navazesh and her team of Assistant Deans will lead a major “self-study” for the coming year as required by the Commission on Dental Education
- Dr. Arnold Tiber will lead a school-wide curriculum revision effort to update, revise and focus
- Dr. Steve Allison, new Associate Dean for Operational Management and his team will lead a school-wide strategic planning process
- Dr. Dennis Mangan, recently recruited from the NIH, will serve as my new Associate Dean for Innovation & Discovery (“research”) and will lead a school-wide effort to increase funded translational and clinical research working with USCSD faculty as well as other USC faculty. Dennis will work closely with our seven Division Chairs, Associate Deans, and Development to broker with federal agencies, foundations and select industry partners.
- Dr. Sig Abelson, new Associate Dean for Intramural Faculty Practices will work closely with directors of various faculty clinical centers to optimize performance, efficiencies and financial growth. He will work closely with Michel Magne, for example, with the first year of the completed Center for Dental Technology as well as with Drs. Jorgen Slots and Dr. James Mah.
- A new fundraising campaign designed to support construction/renovations for research infrastructure, continuing oral health professional education facilities, and faculty/staff/student community facilities; this includes an “extension” or new building adjacent to the Norris Dental Science Building and major renovation of the fourth floor of the Norris. This goal is also aligned with recruitment of new corporate partners such as Patterson Company, GC International, Dentsply, Phillips, and Nobel Biocare, Straumann, and 3i dental implant companies (and others).

What measurable improvements or enhancements have your school made in attracting value-added new and racially and gender diverse value-added research faculty, and nurturing young or mid-career existing faculty?

- All search committees follow university instructions to “cast the net widely” and seek a culturally diverse set of candidates (e.g. Drs. Kim Austin, Veronica Greene, Margo Domingo, Fernando Verdugo, Piedad Suarez, Santosh Kumar, and Sundaresan, Saravanan Ram).
- We are recruiting a highly talented new faculty member in collaboration between USCSD and the Department of Bioengineering of the School of Engineering (in progress).
- We conducted a day-long workshop on “Enhancing Culturally Competent Care” for faculty presented by Drs. Jane Forrest, Cheryl Resnik and Jody Cormack.
- We have successfully recruited a few research-oriented faculty including David McKemy (joint appointment with LAS), Janet Oldak, Michael Paine, Ilan Rotstein, Pascal Magne, Bill Costerton (joint appointment with Engineering and CHLA), Anh Le, Pragna Patel (joint appointment with Keck Medical School), and most recently Songtao Shi from the NIH and these faculty enhance our capacity to increase federally-funded, peer-reviewed grant support.
- Trend analysis from 2001-2005 demonstrates that scholarship/research USCSD faculty activities increased school-wide from 31 (2001) to 60 (2005). Interdisciplinary research within USC increased from 7 projects (2001) to 20 projects (2005). Publications from USCSD faculty during this same period of analysis increased from 281 (2001) to 422 (2005).
- Trend analysis from 2001-2005 demonstrates that faculty engaged community outreach projects increased from 43 (2001) to 118 (2005) and also reflect a significant increase in agency/foundation support for reducing oral health disparities.
- The new “Dean’s Leadership Forum” provides weekly sessions, three hours each, that engage select faculty, staff and students (12-14 per class) to develop leadership approaches within university environs (most recent January thru April 2006 (next offering in Fall 2006).
- Active participation in the California Endowment-supported “Pipeline Project” that is designed to increase underrepresented minorities in the oral health professions (e.g. post-baccalaureate program, networking efforts between faculty-faculty and faculty-student)

How are we aligned with the University of Southern California?

- *Learner-centered education* is a major goal for the University. Since 1995, USCSD has been working to develop not only what is to be learned but to also discover improved ways of learning such as case-based and problem-based learning. As of 2005, we graduated our first all-PBL dental class. Since 2001 (year of recruiting all DDS students into the PBL Signature Program), our students have placed in the top quintile on Part 1 National Board Examinations.
- *Globalization* is another major goal of the University. Since our origins in 1897, the School of Dentistry has provided education and research training for international clinical scholars from around the world. Since 1964, our School was the first in the nation to invite foreign educated dentists to gain further qualifications through a two-year DDS Program at USCSD. This program has

- been enormously successful. We also have multiple institutional agreements with dental schools in Japan, Korea, Taiwan, Thailand, Mexico, Saudi Arabia and most recently Russia. Further, we have a minimum of 5-6 international postdoctoral fellows engaged in basic and translational research at CCMB every year. We also provide numerous international CE courses and CE courses that draw participants from more than 18 different nations including Australia, Austria, Canada, Denmark, France, Germany, Great Britain, Hong Kong, Israel, Istanbul, Jamaica, Japan, Korea, Mexico, The Netherlands, Singapore, Turkey, Switzerland, and Taiwan. Our various Dental Specialty Residency Programs also participate in numerous international education and research activities (e.g. Paris, France; Seoul, Korea; Leon and Mexico City, Mexico; Riyadh, Saudi Arabia).
- *Research of significant to society is the third major goal of the University.* Our faculty, staff and students/residents/graduate students are engaged in numerous research projects within the School, with colleagues in other departments and schools at USC, and with colleagues at other domestic as well as international universities, foundations and federal agencies. Major research themes of importance to society include craniofacial birth defects, oral infection and immunity related to oral diseases and systemic diseases, head and neck cancers, head and neck trauma and injury, chronic facial pain, improved care for stroke rehabilitation, life style redesign with aging, and a number of studies designed to improve health promotion and health literacy, risk assessment, disease prevention, diagnostics, therapeutics and biomaterials, and health outcomes research. In addition, many of our faculty serve on committees to advise the Provost and his team on research such as trans-USC initiatives (e.g. Nanobiotechnology, Molecular Genetics, Neurosciences, Health Disparities, etc.), the new Biotechnology Park adjacent to the Health Sciences Campus, and innovations to improve University-wide infrastructure for research.

How do we evaluate our fiscal discipline and management?

A fundamental requirement for all schools/the college/institutes at USC is to balance the books at the end of each year and we continue to meet this standard. The Departments of Biokinesiology & Physical Therapy as well as Occupational Science & Occupational Therapy have been in very good financial condition for a number of years and have had surplus generated for future investments. Since I became dean in August 2000 of USCSD we have had a few years with “surplus” that was reinvested for desired academic improvements. From a different perspective, we have been attempting to reduce “tuition-dependency” as a primary source of revenues by various focused investments through alternative forms of revenue centers such as our CE Programs and our various Oral Health Centers. To achieve this in part required some venture capital. For us at the time this meant that it was necessary to borrow funds for start-up. Our budget performance, therefore, also requires debt service for a number of years. In addition, we continue to increase federally-sponsored research coupled with indirect cost recovery, research support from foundations and industry, select partnerships with industry, and fundraising efforts with our alumni, friends of USCSD and beyond.

Two areas in particular should be highlighted for USCSD. First, our student and resident clinical revenues will exceed projections by over \$700,000. This is due to several factors including the leadership of Dr. Michael Mulvehill and his clinic affairs team, more effective use of technology in our billing and collection efforts, increased student and resident quality performance as well as productivity, and the increased use of software to track both clinical and financial aspects of the clinical experience. Second, our Continuing Education Program has exceeded all expectations. Over the past four years, revenues have increased from \$236,928 to \$1, 470,796. For each of the past three years, CE revenues have outpaced expectations. This year, revenues exceeded projections by almost \$200,000. In 2005, we increased our revenue from CE tuition to \$1.2 million dollars, compared to \$770,000 in 2004. This represents an increase of 56% over the previous year. This expansion has been due to the intentional and aggressive efforts of Dr. Ilan Rotstein and his superb team in CE.

While this year heralds some decided successes, there are also areas in need of improvement. Our tuition revenues for this year will not meet projections due, in part, to over ambitious projections. Our challenge in the future is to project these revenues both conservatively and even more accurately.

Our faculty practice revenue centers have not as yet reached our investment expectations. Our major faculty practice at the Oral Health Center, with a very robust patient pool and clinic productivity, continues to struggle under the weight of its debt burden. We also have an ongoing difficulty with collections. The collections issue is within our control and Dr. Sig Abelson and his teams have developed some techniques to reduce our Accounts Receivable. We are enlisting the help of Ms. Suzanne Adolphson, who has been so successful in increasing the collections for our student and resident clinics. Our new Center for Dental Technology will open in September and so far has not as yet realized our goals; a design and construction delay has limited the success.

School-wide expenses for this fiscal year (2005-2006) have remained in control for most areas.

Describe key initiatives your organization implemented to improve both operational effectiveness and efficiency?

- We have recruited Dr. Steve Allison as the new Associate Dean for Organizational Management. Steve will enhance our capacity to define goals that are measurable and to closely monitor and track processes and activities and results over short periods of time. Steve will also lead the school-wide efforts for a revised strategic plan (2007-2012).
- We will increase training for all faculty or staff supervisors to increase better communications, better evaluations and better performance evaluations.
- Our Office of Development has been historically understaffed and we have recruited several additional and highly talented people to address Class Reunion function (Kim Youngdale) and Foundation & Corporate relations (Calen Boutilier).

- We have recruited Dr. Dennis Mangan as the new Associate Dean for Innovation and Discovery. Dennis will focus on increasing federally-sponsored as well as non-federally sponsored research activities at USCSD.
- We have recruited Dr. Sig Abelson as the new Associate Dean for Associate Dean for Intramural Faculty Practices to provide the essential leadership and management for these multiple faculty-based clinical practices (i.e. Redmond Imaging Center, Center for Dental Technology, Oral Microbiological Laboratory, and the Oral Health Center).
- Over the past six years, we continually revamped and revised our methods of financial accountability. With continued controls over spending we are better positioned to meet our goals.

Have we developed programs that might be shared with other academic units?

- We developed an on-line annual faculty evaluation process that has been presented to Associate Provost Martin Levine and the Associate Deans of Academic Affairs at USC.
- Our Faculty Evaluation System, tied in with our Outcomes Assessment Programs, has also been shared with Vice Provost, Marty Levine (contacts include Dr. Chuck Shuler and Mr. Larry Eisenberg).
- Our Quality Assurance Program made major advances and this is due to Mrs. Marina Jiminez and Dr. Mike Muvehill.
- The introduction of comprehensive informatics for all aspects of dental education and patient practice using Axium has provided enormous experience that we would like to share with other interested units at USC.
- Our CE Program led by Dr. Ilan Rotstein is an exemplar of excellence and we would like to share the planning, marketing, on-line registration process, and general management principles with other units interested in developing CE programs at USC.

What are new revenue sources for USCSD?

- Continuing Education has greatly expanded as a revenue center and will continue to expand with new courses, innovations for “hands-on” courses, and also will introduce “Distant Learning Courses” during the 2006-2007 year. This resource will be shared with OT and PT faculty.
- The Lifestyle Design programs from OT will continue to expand through CE activities. This resource will also be shared between units.
- We will plan the new “minor” for Bioengineering with our colleagues in the School of Engineering and this should provide new tuition revenues and new corporate sponsors.
- The new Center for Dental Technology under the leadership of Michel Magne and his team will significantly increase revenues during 2006-2007. This Center will function for education, research and patient laboratory care. We assert that this will be the preeminent dental technology research facility in the United States.

- Faculty Drs. Glen Clark, Nan Mulligan, and Reyes Enciso from USCSD and faculty Wee Ling Wong and Luciano Nocera from Engineering have initiated a fascinating educational technology project to enhance PBL using game theory and other multimedia informatics and technology.
- Dr. Jennifer Holtzman completed her MPH degree, provided leadership for our Neighborhood Mobile Clinics that serve the community with dental sealants, served as President of the Dental Faculty Association (DFA), and worked closely with Dr. Michele Kipke to submit a competitive K-award application to the NIH.
- Dentistry faculty were awarded *new* research grants during 2005-2006 and they include Yang Chai, Bill Costerton, Reyes Enciso, Ahn Le, Nan Mulligan, Chuck Shuler, Mal Snead, and Margarita Zeichner-David
- Trend analysis from 2001-2005 demonstrates that scholarship/research USCSD faculty activities increased school-wide from 31 (2001) to 60 (2005). Interdisciplinary research within USC increased from 7 projects (2001) to 20 projects (2005). Publications from USCSD faculty during this same period of analysis increased from 281 (2001) to 422 peer-reviewed papers (2005).
- Trend analysis from 2001-2005 demonstrates that faculty engaged community outreach projects increased from 43 (2001) to 118 (2005) and also reflect a significant increase in agency/foundation support for reducing oral health disparities.
- Forty-four Dentistry faculty members served as reviewers for scientific domestic and international journals during 2005-2006. Four faculty serve as editors of major journals.
- USCSD faculty Drs. Duke Yamashita, Ted Tanabe and Thomas Auyong were elected to the Board of Directors of the Southern California Academy of Oral and Maxillofacial Surgery.
- Florence Clark, Ph.D., OTR/L, FAOTA was elected the Vice-President of the American Occupational Therapy Association. She was also the 2005 Ruth Zemke Lecturer in Occupational Science at the 4th Annual Research Conference of the Society for the Study of Occupation: United States.
- Mahjabeen Aftab, OTR/L received her credential as a Certified Lymphedema Therapist from the Lymphology Association of North America (LANA).
- Linda Fazio, Ph.D., OTR/L, FAOTA is the Chair of the Commission on Education for the American Occupational Therapy Association and was an invited guest at the 10th Anniversary Meeting of the European Network of Occupational Therapy in Higher Education in Vienna.
- Mary Lawlor, Sc.D., OTR/L, FAOTA and Cheryl Mattingly, Ph.D. have been awarded a new four-year, \$2.5 million grant by the NCMRR for a longitudinal, urban, ethnographic study titled Boundary Crossing: Promoting Cultural Competence.
- Ann Neville-Jan, Ph.D., OTR/L, FAOTA authored the article “The Problem with Prevention: The Case of Spina Bifida,” published in the October 2005 issue of The American Journal of Occupational Therapy, and is co-PI of the recently funded study, Effectiveness of Bowel and Bladder Techniques in Children with Spina Bifida.

- Deborah Pitts, MBA, OTR/L, CPRP completed her terms as the Chairperson of the American Occupational Therapy Association Mental Health Special Interest Section and the Chairperson of the Development Panel for Board Certification in Mental Health.
- Katie Salles-Jordan, OTD, OTR/L has been named Director of the USC Occupational Therapy Faculty Practice.
- Jaynee Taguchi-Meyer, MA, OTR/L organized two international student fieldwork experiences in Romania and Ghana.
- Ruth Zemke, Ph.D., OTR, FAOTA was 8th Annual Mary Ann Epstein Memorial Lecturer at Rancho Los Amigos National Rehabilitation Center, presenting “From Origins to Outcomes: Occupation in Our Daily Life” and was the annual Visiting Scholar at the University of Western Ontario in Canada where she presented on “Occupation, Time and Space” as the Barbara Posthuma Sexton Lecturer.
- Jackie Mardrossian, MA, COTA, ROH, received the USC July Staff Monthly Recognition Award, is a member of the Executive Board of the USC Staff Assembly, and is the Education Chair of the California Occupational Therapy Association.
- In June, Dr. Carolee Winstein received the APTA’s Marian Williams for Research in Physical Therapy, which recognizes an individual who has made significant contributions to physical therapy through excellence in research. Also in June, Dr. Winstein delivered the Maley Lecture at the APTA annual meeting. This lectureship honors an individual who has made a significant contribution to the physical therapy profession in an area of clinical practice. She also gave the Senior Scholar Lecturer in the Motor Control and Learning Program for the North American Society for the Psychology of Sport and Physical Activity (NASPSA), in June of 2006.
- Dr. Christopher Powers received the APTA’s Lucy Blair Service Award, which acknowledges and honors members of the Association whose contributions to the Association as a whole, at both the Association level and the component level, have been of exceptional value. Dr. Powes was also elected Fellow of the American College of Sports Medicine.
- George Salem, PhD, Associate Professor of Biokinesiology and Physical Therapy was the recipient of an interdisciplinary grant from the James H. Zumberge Research Innovation Fund. The \$50,000 award is for the study entitled: The Influence of Fixed and Changing Environmental Stimuli on Walking and Freezing Behavior in Persons with Parkinson's disease. Co-investigators include Giselle Petzinger, MD of the Department of Neurology at the USC Keck School of Medicine and Allan Wu, MD of the UCLA Department of Neurology.
- Craig J Newsam, PT, DPT, adjunct assistant professor in the Department of Biokinesiology & Physical Therapy at USC and research physical therapist, Rancho Los Amigos National Rehabilitation Center, was awarded a 1-year, \$40,000 research grant by the Foundation for Physical Therapy for his project "Strengthening Exercises to Reduce Shoulder Pain in Persons with Tetraplegia."
- Dr. Nicolas Schweighofer, principal investigator, and Dr. Carolee Winstein, co-principal investigator, received a R03 grant from the National Institute of Child Health and Human Development to study the effects of task practice schedules for

Our investment in this area should provide a new revenue stream for USCSD within 12 – 24 months.

- Increasing our capacity for orthodontics and pediatric dentistry within the Oral Health Center will also increase revenues.

What are examples of the leadership and management accomplishments of faculty and staff?

- We were selected by the Provost to become a Distance Learning Center and we have received support for the construction of these highly specialized facilities. The point person for USCSD is Dr. Ilan Rotstein.
- We were selected to receive a technology enhanced learning (TEL) grant from the University. The key faculty members are Drs. Jane Forrest and Jacquelyn Dylla, and Mrs. Diane Melrose.
- Dr. Chuck Shuler and his colleagues played a dominant role at the International Association for Dental Research (IADR) meetings held in Australia, especially around the educational research activities related to problem-based learning in dental education.
- Dr. Mal Snead and an international interdisciplinary team were selected by the NIH with a Planning Grant to address the enormously complex problem of tooth regeneration. Snead's team were selected as one of three competing universities and invited to submit major grants for "Centers of Excellence in Regenerative Medicine."
- Dr. Yang Chai and Dr. Uttam Sinha organized the second International Head and Neck Cancer Colloquium held at USC and including participants from China, India and UCLA, USC and UC-Irvine.
- Dr. Pascal Magne led a group of faculty in biomimetic approaches to restorative dental materials. The group produced many recommendations for preclinical and clinical revisions for the DDS curriculum. In addition, Dr. Magne published a number of papers using sophisticated analysis such as finite element and fracture mechanics to assess various dental ceramics used in restorative dentistry.
- Dr. Sajid Jivraj has made numerous contributions to the improvement of our operative dentistry learning activities for the DDS Program such as faculty calibration for preclinical and clinical operative dentistry, and participation in the "Restorative Dentistry Update" offered April-July 2006.
- Dr. Elizondo (Director of the USC Union Rescue Mission Dental Program) has been named National Health Service Corps "Oral Health Ambassador" and will present a lecture at the national meetings in Washington, DC.
- Dr. Charlie Goldstein was inducted into the USC Skull & Dagger Honor Society, received the Distinguished Faculty Service Award from the USC Academic Senate, raised \$670,000 from 13 contracts for Mobile Clinics, and another \$87,000 from donors, and was the Keynote Speaker for the OKU Banquet, and presented a lecture at the national Mobile Clinics Meeting in San Diego.
- Dr. Julie Jenks became Board Certified and a Diplomate of the American Academy of Pediatric Dentistry.

- functional motor skill re-acquisition on participants who are recovering from stroke-hemiparesis. The grant is a 2 year award for \$162,750.
- Dr. Nina Bradley received a R01 grant from the National Institute of Child Health and Human Development to study the development and control of repetitive leg movements during embryonic development. The grant is a 3- year award for \$500,000.
 - Dr. Kornelia Kulig received a grant from the Osiris Corp. to study Verification of MR image acquisition and processing reliability. The grant is a 1- year award for \$11,000. Dr. Kulig also received a \$10,000 seed grant from HRA to study Lumbar paraspinal atrophy and fatigability in persons with recurrent episodes of low back pain: relationship, mechanism and an association with clinical outcomes.
 - Dr. Cheryl Resnik received the Charles Magistro Service Award from the California Chapter of the APTA.
 - Dr. Kathy Sullivan was elected President of the Neurology Section of the APTA.
 - Faculty was invited from Dentistry, OT and PT to join interdisciplinary faculty from the health professions to work towards building an improved translational and clinical science infrastructure at USC. The overall effort was led by Dr. Tom Buchanan, Associate Dean for Clinical Research at the Keck Medical School. A Planning Grant was submitted to the NIH.
 - Sarah Ives successfully earned a Certificate in Office Administration and Project Management and her team brought USCSD into 99% compliance rate in our bi-annual audits.
 - Barbara Davenport earned a Certificate in Office Administration
 - Suzanne M. Adolphson (Manager, Clinical Finance) and her team have done extremely well in improving clinic revenues and efficiencies
 - Assistance with integrating Ortho Faculty Practice into the Oral Health Center included Tina Stafford, Melissa Meru, Ana Maldonado, Chan Auth, and Jane Luna.
 - Assistance with OHC externship student learner programs included Chan Auth and Ana Maldonado
 - OHC Dental Hygienists worked diligently with dental hygiene students providing them experience in a private practice setting,
 - The creative work of Shu Li, Raquel Saez, Julie Chen and Barbara Roddy enabled the 2005-2006 revenues for Continuing Education to exceed projections by \$200,000, for a total of about \$1.5 million, reflecting a 600% increase since 2003. Thanks to Julie Chen continues to provide exceptional graphic design skills and creativity for our CE publications.
 - Raquel Saez, Lois Reid and Barbara Roddy successfully administered over 60 CE courses in 2005-2006 and also worked over 40 weekends in addition to their regular work days.
 - During the month of July 2006, Yolanda Cornelius, Yolanda Galeazzi and Joanne Williams moved thousands of charts from the 2nd floor to the Lower Level to help accommodate our future fully electronic environment. The 2nd floor will now have additional space for staff which will be utilized to assist patient scheduling.

- Almost all areas of the Clinics in the Norris Building received “Team of the Month” Awards.
- Community Health Programs at USCSD led by Dr. Nan Mulligan and her team along with Dr. Charlie Goldstein and his team provided “service-learning” dental services to more than 23,000 individuals. At various health fairs, alone, our USCSD dental students and dental hygiene students and faculty served 4,245 individuals.
- Community Health Programs offered special dental services for Give Kids a Smile Day and Special Olympics to more than 1900 children.
- USCSD is the only southern California dental school to offer First 5 Oral Health Continuing Education classes to health professionals including physicians and nurses.
- The USCSD Staff Council, representing USCSD staff leadership, initiated, planned and implemented an enormously successful Staff Appreciation Day on June 30, 2006 replete with food, rides, festivities and “Dunkin’ Deans!”
- The team of Meredith Mann, Kelley Randle and Rhonica Fussey successfully implemented both faculty and staff orientation programs.
- Paula DeWet and her assistant, Sharon, have worked tirelessly to implement the OTIS payroll system for our non-exempt staff.
- Cedric Woolfork and his team, Elmer Duran, Vanessa Jackson and Vicky Dy have ensured a successful alignment of our Occupational Science & Occupational Therapy and Biokinesiology & Physical Therapy units through their excellent and detailed financial work and welcoming of new colleagues at USCSD

And many, many more superb members of the USCSD Academic Community.

To be continued!

“You must be the change you wish to see in the world.”

Mahatma Gandhi