Dear Alumni and Friends,

As we come to the close of the 2006-2007 academic year, I am struck by the aptitude of our fine faculty. It is of utmost importance that the School of Dental Medicine upholds the high standards set by our faculty today. For they sustain the responsibility in educating our students in the past, present and future of dental medicine.

The school has a strong tradition in faculty excellence. And yet, I am delighted to find that with each passing year, our faculty has amazed me in new and unexpected ways. In the past year, our faculty has generated over $5.1 million for research, authored over 100 professional journal articles and received more than 10 national awards and honors.

Among this stunning grouping of accomplishments are several individuals who have exceeded expectations in the areas of research and leadership. These men and women are fine examples for all who are associated with the School of Dental Medicine.

- Dr. Mary Marazita, professor and chair for the Department of Oral Biology and associate dean for research, is the discoverer of one of 14 genes commonly found in persons with cleft lip and palate. Dr. Marazita continues this research in the school’s Center for Craniofacial Genetics with the purpose of someday helping patients and families affected by this disease.
- Dr. Adriana Modesto, assistant professor in the Department of Pediatric Dentistry, is the winner of the William J. Gies Award for a second consecutive year, a distinguished honor and rarity in the history of the award. Her 2006 research paper, “MSX1 and orofacial clefting with and without tooth agenesis,” furthers the case for the association of gene mutations between tooth agenesis and cleft lip and palate.
- Dr. Jean O’Donnell, assistant professor and vice chair of the Department of Restorative Dentistry/Comprehensive Care, is serving as a highly selected representative in the American Dental Education Association’s Leadership Institute through 2008. In addition to her normal duties at the school, Dr. O’Donnell will travel to several cities in the U.S. to learn about leadership in dental education.
- Dr. Charles Sfeir, assistant professor in the Department of Oral Biology, is researching the possibility of biologically regenerating dentin, bone and periodontal tissues in the Center for Craniofacial Regeneration. His laboratory has successfully signaled regeneration in vitro and is now working to apply this therapy in vivo. This work could potentially lead to a paradigm shift in restorative dentistry, periodontics and maxillofacial reconstruction.
- Dr. Alexandre Vieira, assistant professor in the Department of Oral Biology, is the founder and director of the first-known Dental Registry and DNA Repository, which will assist clinical researchers in obtaining anonymous dental records and DNA samples without need of further evaluation by the Institutional Review Board. The Dental Registry and DNA Repository opened in September of 2006. This will permit researchers well into the future to study genetic links to oral and facial disorders.
- Dr. Robert Weyant, professor and chair of the Department of Dental Public Health and Information Management, is the director of Center for Oral Health Research in Appalachia, a project studying oral health disparities in Appalachia which is supported by the National Institute of Dental and Craniofacial Research.

As we prepare for the academic year ahead, it is my pleasure to offer a heartfelt thanks to the School of Dental Medicine faculty and all who support them: to their staff, family and friends. Our school, our students and alumni all benefit from this tradition of excellence. Thank you. I look forward to many years of academic distinction ahead.

Best regards,

[Signature]

Thomas W. Braun, DMD ’73, PhD ’77
Professor and Dean
Cover story: see page 18

Pitt Dental Medicine is published semiannually by the Office of Dental Alumni Affairs and Development as a service to alumni, students and friends. Its purpose is to facilitate communication among alumni, students and friends. This publication holds itself not responsible for opinions, theories and criticisms therein contained.

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Dental Registry and DNA Repository Collects Significant Research Data

Starting in September of 2006, the staff of the first-known Dental Registry and DNA Repository began collecting DNA samples and compiling related dental records as part of a pilot test to gauge the success of the project at the School of Dental Medicine. Director of the program and assistant professor in the Department of Oral Biology, Dr. Alexandre Vieira hoped 30 percent of patients would volunteer to participate by signing a waiver and salivating into a special container designed to preserve the samples. Nearly a year later, the Dental Registry and DNA Repository has had 85 percent compliance with over 400 samples collected.

This success is the likely result of Dr. Vieira’s careful planning. In order to protect patients’ identity, the samples and dental records are assigned a bar code. From there, the sample is sent to a laboratory in the SDM where student technicians or researchers use chemicals to break down cells in the saliva and access the DNA. The DNA is then stored in locked freezers, available for future research in the genetics of caries or other oral anomalies. For instance, couples could someday be tested to determine their potential for having a baby with cleft lip and/or palate. The Dental Registry and DNA Repository also could aid in the research of oral cancer and periodontal disease.

Aside from furthering research in dental medicine, one of the major benefits of the project is the ability for researchers who have been approved by the Dental Registry and DNA Repository’s review board to access the data without further approval by the Institutional Review Board. Another benefit to researchers using the Dental Registry and DNA Repository is savings in almost $125,000 per genetics study. The cost of genetics research is considerable because of the volume of samples required for analysis.

“This incredibly facilitates future research efforts at the School of Dental Medicine,” Dr. Vieira said.

Prostate Cancer Treatment Linked with Periodontal Disease

Androgen deprivation therapy (ADT) has become a valuable weapon in the fight against prostate cancer. As enhanced screening tools detect the cancer in its earliest stages, an increasing number of men who are otherwise healthy are receiving the therapy.

However, the growing prevalence of ADT may be cause for concern. In the March issue of the Journal of Urology, researchers from the School of Dental Medicine report that prostate cancer patients receiving ADT are three times more likely to show signs of periodontal disease as patients who do not receive the therapy.

Earlier research demonstrated links between ADT and osteoporosis and other types of bone loss in men, but this work is the first to explore ADT’s relationship with periodontal disease, which itself has been connected to a variety of other conditions.

“People with periodontal disease are at greater risk for numerous negative health outcomes,” said Dr. Pouran Famili, professor and chair of the Department of Periodontics and Preventive Dentistry and lead author of the study. “If we can identify populations who are more likely to develop periodontal disease, as we have in this research, we may be able to target early interventions to groups like ADT recipients.”

In the study, 68 prostate cancer patients who were, on average, nearly 70 years old and had received ADT for an average of 18 months, received standard screenings for various symptoms of periodontal disease.

Of the study participants, 41 received ADT for an average of 18 months, and periodontal disease was evident in 80 percent of those men. Conversely, only 4 percent of the men who did not receive ADT had periodontal disease. When adjusted for other factors that also may influence the development of periodontal disease, such as age and smoking behaviors, the statistical relationship between ADT and periodontal disease remained significant, with ADT recipients three times more likely to have periodontal disease as the men who did not undergo the therapy.

“Urologists and oncologists, in particular, should heed these findings and refer their patients for periodontal screening early in the course of their ADT,” said Dr. Famili, who also noted that such a referral is standard for other at-risk populations, such as transplant patients. “As the majority of these men were quite conscientious about their oral hygiene, the need for early intervention by a dental care provider is paramount. It could prevent the need for more extensive treatment down the road.”

While this research has important implications for ADT patients and their risks for periodontal disease, it does have limitations because of its relatively small sample size and cross-sectional nature. As such, further investigations involving larger populations and longitudinal data are warranted.

This research was supported by Pitt’s Osteoporosis Prevention and Treatment Center, which receives funding from the National Institutes of Health and the General Clinical Research Center of the University of Pittsburgh Medical Center.
3Rivers Dental Symposium
October 18th
Pittsburgh Athletic Association

To register or for more info, please call 412-321-5810.

Pathways to Professions: A Career Networking Event
October 18th, 6:00 p.m.
Alumni Hall

For more information, please call 412-648-7130.

Pitt Homecoming Extravaganza and Casino Night
October 19th, 10:00 p.m.
William Pitt Union

Fireworks and Laser Show
October 19th, 9:30 p.m.
Bigelow Boulevard

Dental Dash 5K
October 20th at 7 a.m.
Frick Park

To register or for more info, please call 412-648-8910.

Homecoming Football Game
Pitt Panthers vs. Cincinnati Bearcats
Heinz Field, Time TBA

For tickets, call 1-800-643-PITT.
In recent years, several efforts have been made by foundations and institutions to determine solutions for increasing minority representation in the health professions. This focus is a result of well documented disparities in the treatment of minorities. While the civil rights era in the ‘60s and ‘70s increased awareness of diversity across all segments of society, the health care workforce continues to lack the necessary structure to support an increasingly diverse population. Minority representation in the health professions is not proportionate to the minority representation in the general population. This disparity is heightened in the dental profession with a 2006 American Dental Association report indicating almost 90 percent of responding dentists identifying themselves as non-Hispanic whites. By 2020, predictions indicate that non-Hispanic whites will decrease to 61 percent of the population, while African Americans will increase to 13 percent and other minorities including Hispanics will increase from 19 to 26 percent of the population nationally.

The rationale behind increasing minority representation in the health professions is for increased access to care for minority and low-income populations as well as enhancing the cultural competence in health care overall. The School of Dental Medicine has recently participated in the Sullivan Commission Task Force on Racial and Ethnic Diversity. Within the Schools of the Health Sciences at the University of Pittsburgh. In 2004, the task force was formed in response to the Sullivan Commission on Diversity in the Healthcare Workforce’s report, Missing Persons: Minorities in the Health Professions. The Sullivan Commission was funded by the W.K. Kellogg Foundation to make “policy recommendations to bring about systemic change that will address the scarcity of minorities in our health professions.”

In Dentistry

The Sullivan Commission has concluded that racial and ethnic diversity in the health care workforce has profound implications for the U.S. health care system. Increasing diversity in the health care professions will improve health care access and quality for minority patients and assure a sound health care system for all of our nation’s citizens. It will also strengthen health care delivery systems at multiple levels, enhance educational experiences for all health professions students, promote relevant research and needed changes in health policy, and prepare our nation for the emerging and culturally dynamic health care challenges of tomorrow. From an economic point of view, increasing diversity makes good business sense. From an ethical standpoint, it serves the cause of social justice.

The School of Dental Medicine, consistent with the Schools of the Health Sciences and the University overall, is committed to cultivating a diverse body of specialists, general dentists and dental hygienists in effort to meet the changing needs of society and to increase the standard of care for the overall population.

“The School of Dental Medicine is made up of a diverse faculty exposing students to different perspectives and offering familiarity for the recruitment of future minority students,” said Dean Thomas W. Braun.

“Diversity is important to really educate our students to be future professionals in a world that is going to be quite diverse; they need to have the experience of working with other students who are quite different from them,” said Dr. Sandra Quinn, associate dean for student affairs and education and associate professor for the Graduate School of Public Health. “Often underrepresented minorities in a health profession go back to the communities to serve where they came from.” Dr. Quinn is chair of the Sullivan Commission Task Force at the University of Pittsburgh.

The task force produced a report assessing the successes and challenges in recruiting minority students and faculty within the schools of the health sciences. The group will present a report containing a strategic plan for accomplishing those goals to Dr. Arthur Levine, senior vice chancellor and dean of the schools of health sciences.

The School of Dental Medicine makes a concerted effort to recruit and retain qualified minority students. As part of the admissions process, the committee reviews Dental Aptitude Test scores as well as grade point averages and offers minority scholarships to qualified applicants.

The school’s admissions committee includes minority faculty members who assist in the recruitment of qualified underrepresented minority students and ultimately influence policymaking.

Upon arrival to the school, first professional students are welcomed to a dinner celebrating the diversity of the incoming class. The Second Annual Celebration of Diversity Dinner held on June 8th included guest speaker, Dr. Debbie Lewis (DMD ‘88) who encouraged the students to find ways to serve their community’s needs through a career in dentistry. Students from the Student National Dental Association and the Hispanic Dental Association also spoke about the importance of minority representation in dental education.
“The bottom line is that increased diversity in the medical profession will improve overall health of the nation – not just for members of the racial and ethnic minority groups who will benefit most directly, but for the entire population, because diversity brings with it a wealth of ideas; it challenges assumptions, broadens perspectives, and ultimately enables all of us to better understand and care for the people of the increasingly diverse society that we, as physicians, are called to serve.”

Dr. Arthur Levine, Senior Vice Chancellor for the Health Sciences and Dean of the School of Medicine

“We recognize diversity as an educational value, essential to the education of the whole person... We also recognize diversity as a social and economic value, because we know that our responsibilities include educating students who can and will be contributing citizens in an increasingly multiracial, multilingual, and multiethnic world.”

Mark A. Nordenberg, Chancellor

Attendees of the Second Annual Celebration of Diversity Dinner at the Concordia Club on June 8th.

Above: Students from the Hispanic Dental Association speak during the Second Annual Celebration of Diversity Dinner at the Concordia Club on June 8th.

Right: Dr. Debbie Lewis encourages students to find ways to serve the community through dentistry.

Left: Mr. Walter Ackah speaks on behalf of the Student National Dental Association.
In September, the American Dental Association’s Council on Dental Education and Licensure will present for approval proposed guidelines and a policy statement for The Use of Sedation and General Anesthesia by Dentists to ADA’s House of Delegates. According to the ADA Web site, the purpose of updating the guidelines is to align ADA documents with the guidelines of other medical and dental anesthesiology documents, while supporting the role of the dentist in administering anesthesia. The ADA guidelines were last updated in 2005, not to mention numerous revisions regulating the administration of anesthesia by state each year.

As a case in point, the history of anesthesiology is ever-changing with new methods, technologies and medications. From the early days of ether to the latest model blood pressure cuff, the field has advanced significantly.
“Twenty years ago, something as simple as somebody having to have four third molars removed would require that person to go into the hospital the night before surgery, stay the day of surgery and be dismissed midday the day following surgery,” said Dr. Richard Bennett, DDS (Cert, PhD ‘67) emeritus professor in the Department of Dental Anesthesiology.

“Now they come in at 8 a.m., have their teeth extracted and go home at 10 a.m.”

In the United States, more patients experience anesthesia, be it local or general, at the dentist’s office than anywhere in the health care system. Numbing and sedation agents can be helpful in a variety of situations encountered in dental practice, from wisdom tooth extraction to treating anxious patients or those who have a disability that inhibits dental care in a traditional setting.

However, the beginnings of pain and anxiety control in dentistry weren’t as painless as the treatments offered today. The history of pain and anxiety control dates back to the mid-1800s with the discovery of nitrous oxide and ether. There are several individuals recognized for the discovery of anesthesia; mainly Dr. Horace Wells, Dr. William Morton (a student of Dr. Wells) and Dr. Crawford Long, a physician who used ether as early as 1842 but did not document his work. The American Dental Association credits Dr. Wells, a Connecticut dentist, as the discoverer of anesthesia with the use of nitrous oxide as an anesthetic for several extractions in his private practice in 1844. Unfortunately Dr. Wells’ self experimentation with agents such as chloroform led to his demise. He committed suicide only six years later.

Ether was among other anesthetics used in experimentation at that time. Dr. Bennett said that open drop ether was administered to patients through a mesh, metal mask resembling a tea strainer. A piece of gauze was stretched across the mask and ether was then dripped onto the gauze and absorbed for the patient to inhale its fumes.

“Ether was a fun anesthetic agent to administer, but terrible to receive,” Dr. Bennett said. Ether caused patients to exhibit certain signs demonstrating how deeply they were anesthetized. First the patient would gradually fall asleep. In the next stage, the patient would be combative, but unconscious with labored respiration. Finally, the patient would become unresponsive and respiration was machine-like.

“And that’s how you knew the patient was in the surgical depth of anesthesia,” Dr. Bennett said.

Open drop ether hasn’t been used since the 1960s. It was unfavorable because it often induced nausea and vomiting, was flammable and took as long as 20 minutes for induction.

“It tends to make you feel like you’re being overcome with a toxin and in fact, that’s exactly what’s happening,” Dr. Bennett said.

“Nowadays, drugs are administered intravenously and are effective within 17 seconds. If nausea and vomiting occur, there are drugs available to eliminate that discomfort.” Dr. Bennett also noted that there are no flammable anesthetic agents on the market today as compared to agents used through the ‘70s.

“In the ‘60s and ‘70s, almost everything we used was explosive, so we had to take special precautions because something as simple as a static spark could set off an explosion that would blow the whole operating room apart.”

Another distinguishing factor between early anesthesia and that of today is the variety of drugs available on the market. As a result, anesthesiologists now have increased control in selecting the best approach on an individualized basis. Previously for patients who were anxious about receiving an injection for local anesthesia, general anesthesia was the only option.

“Now that’s not the case, we have a middle ground,” Dr. Bennett said. Intravenous sedation alters the patient’s state of mind, allowing the anesthesiologist to proceed with the local anesthetic injection.

New techniques have been developed, combining multiple drugs to produce various effects of sedation. When the various drugs are combined appropriately, all of the objectives of general anesthesia can be met. By using small doses of multiple drugs to sedate patients rather than using a large dose of a singular anesthetic agent, potential toxicity and side effects are decreased.

Today automatic blood pressure cuffs as well as other automatic devices for monitoring everything from the amount of anesthetic agent inhaled and exhaled to the amount of oxygen in the bloodstream have become standard practice. Despite the benefits of the latest techniques and technologies available today, Dr. Bennett is unyielding in his belief that the most important monitor is an attentive anesthesiologist.

“Equipment can have false negatives and false positives. They have alarms on them that can go off inappropriately,” he said. “There are a lot of factors to be considered.”
History of the School of Dental Medicine Department of Dental Anesthesiology

In 1949, the University of Pittsburgh School of Dental Medicine was the first known educational institution to establish an anesthesiology residency for dentists under the direction of Dr. Leonard Monheim (DDS ’33). Dr. Monheim also was staff anesthesiologist and chief of dental services at Presbyterian Hospital. During his time at the School of Dental Medicine, he trained numerous dental anesthesiologists.

After Dr. Monheim’s death in 1970, he was succeeded by one of his own dental anesthesiology residents, Dr. Richard Bennett (Cert, Ph.D. ’67) who also earned a Ph.D. in pharmacology. Dr. Bennett was appointed to fill Dr. Monheim’s position as director of the Dental Anesthesiology Residency Program in the Department of Oral Surgery and Dental Anesthesiology as well as the other positions at Presbyterian Hospital. Also that year, Dr. W. Harry Archer retired as head of the Department of Oral Surgery and Dental Anesthesiology.

Shortly after Dr. Monheim’s death, the Dental Anesthesiology Residency Program was under review by the School of Medicine.

According to Dr. Bennett, physicians and dentists were opposed in the value of the field of dental anesthesiology.

“Physicians didn’t want dentists in the field at all,” said Dr. Bennett. “The physicians thought that dentists would try to compete for positions in hospitals.” Dr. Bennett proposed the School of Dental Medicine alter its offerings by tailoring the program to train educators of dental anesthesiology, hoping to enhance the standard of care by expanding the field of pain and anxiety control in dentistry.

The Department of Dental Anesthesiology was formed as a separate entity with Dr. Bennett as chair and the residency program was altered to accept one dental anesthesiology resident per year to be trained as an educator. Dr. Bennett also created a new course elective to teach first professional students how to administer intravenous sedation.

In addition to students’ regular dental education, they receive one weekly two-hour lecture and commit to a half day of clinical service in the Department of Dental Anesthesiology’s clinic each week,” Dr. Bennett said. The department has educated hundreds of dentists in the administration of intravenous sedation as a result of that elective.

Dr. Bennett retired as chair of the department in June of 2006 and is now emeritus faculty. He is succeeded by Dr. Paul Moore (DDS ’73, MDS ’73, Ph.D. ’77, MPH ’99). The department has expanded to include four full-time faculty members including assistant professors Drs. Sean Boynes and Michael Cuddy and associate professor Dr. Joseph Giovanitti, who also is the director of anesthesia services for patients with special needs.

“The demand for outpatient dental anesthesia services is constantly increasing,” said Dr. Moore. “The department, the school, and the profession are under pressure to broaden their mission to address more sophisticated maxillofacial and plastic surgery and placement of dental implants as well as expanding access to care for special needs populations, including disabled, geriatric and medically compromised patients.”

In broadening the scope of dental anesthesiology, the department also has increased opportunities for clinical research. Some recent research projects include reversing local anesthesia, clinical trials for articaine, the latest local anesthetic on the market, and precedex, a not-yet-released sedative which has decreased effects on the respiratory and cardiovascular systems.

“We’ve been on the cutting edge for a long time,” said Dr. Moore. “We’re working today to expand the skills and competencies of our first professional students and residents in terms of managing medical emergencies because we’re working with more and more medically compromised persons.”

Dr. Moore said he is pleased to see the department grow and added that alumni who visit the school after completing graduate programs always express amazement at the level of education in dental anesthesia offered by the School of Dental Medicine.

“The whole history and culture that Dr. Monheim developed still remains.”

Dr. Paul Moore
Veterinary Dentistry

Thirteen years ago, Dr. David Regine (DMD ’80) and his assistant Ms. Tina Collavo volunteered their scuba diving skills to clean the shark tank at the Pittsburgh Zoo. It wasn’t long before a zookeeper noticed an elephant named Savanna having problems with a tusk and asked Dr. Regine to take a look. The tusk’s pulp was infected and caused the elephant irritation and pain. Dr. Regine performed a pulpotomy on Savanna. However her tusk was so severely infected that it was ultimately determined that it should be removed in order for Savanna to be able to resume normal activity. Dr. Regine assisted in the procedure and developed a fondness for treating the oral needs of wild animals.

He has had the pleasure of watching Savanna grow and even give birth. His volunteerism at the zoo has allowed Dr. Regine to witness the birth and growth of many other animals.

“One animal led to the next,” said Dr. Regine. “It’s been fun.” However, practicing dentistry with a variety of animals ranging from beavers to Kodiak bears has certainly had its challenges. One of the main obstacles in treating such a variety of animals is the lack of adequate equipment. Dr. Regine, like other animal dentists, has had to use his imagination to imitate dental hand instruments appropriate for varying sizes of teeth. His most recent patient at the zoo was a polar bear named Koda who had chipped his right mandibular canine and required a root canal. In order to begin treatment on Koda’s 7-inch tooth, Dr. Regine decided to visit a hardware store to see if he could find something that could serve as a filling device. He found a flushing rod in the plumbing section that he later used to pack the bear’s pulpal cavity.

Dr. Regine said that veterinarians are trained to extract teeth. However, many zoos rely on volunteer dentists to provide other dental care in the interest of saving animals’ teeth for optimal function. When Dr. Regine finds viable pulp in an animal’s tooth, he often performs a pulpotomy.

“That procedure works well on animals, because their capability to heal is much better than that of humans,” Dr. Regine said. When Dr. Regine gets a call from the zoo for an animal in need of care, his first action is to research the tooth morphology of the given animal.

Because not all animal teeth have the same conical shape as the human tooth, the approach to dental treatment varies for each species. For instance, the feline canine tooth has a bulbous root for increased strength and anchorage. In the case of an
Left: Dr. David Regine performs a root canal on a two-year old, 550 pound polar bear named Koda located at the Pittsburgh Zoo. Below: Koda is intubated for the one-hour, 45-minute procedure.

Left: Dr. Regine’s hands provide a sense of scale for Koda’s 7-inch tooth. The exposed canine is approximately 3 inches in length.

Photos courtesy of Paul A Selvaggio
infected tooth with a bulbous root, extraction is not possible without surgery.

In one instance, Dr. Regine called an oral surgeon to assist in the case of a beaver he thought surely would have been euthanized without dental treatment. Dr. Regine said they performed three major procedures on the beaver who was suffering from an abscessed jaw. To complicate matters, the beaver’s upper incisors grew so long the animal couldn’t close his mouth without biting into his lower jaw as beavers’ lower teeth grow continuously.

“He’s there today, alive and well,” Dr. Regine said. He follows up with the beaver from time to time to check the length of his teeth. However, check ups are not common for Dr. Regine’s non-human patients because they require anesthetization for him to be able to look into the mouth. Dr. Regine relies on the zoo keepers to monitor the animal’s oral health by observation of eating habits, temperament and unusual behavior.

“The keepers know their animals well,” he said. Dr. Regine is often asked how he knew an animal needed dental treatment and his response is always the same.

“The keeper told me.”

Dr. Regine and Ms. Collavo have built many relationships with zookeepers at the zoo and make their rounds when they are on call there.

“It’s strange to be working on an animal, but it’s like another patient in a way. When you’re looking to repair that tooth you can apply the same principals you’d apply to humans.” One of the main differences between animals and humans is the number and size of accessory canals.

“At times it is difficult to fill the canals,” said Dr. Regine. While treating the Kodiak bear, Dr. Regine adapted the vertical warm condensation technique in which he packs the bear’s pulpal cavity with gutta percha from top to bottom. Considering the time constraint of anesthesia which is administered by a veterinarian, this technique is more efficient than the more common lateral condensation.

During the time that Koda was sedated, Dr. Regine said many people working at the zoo took advantage of the rare opportunity to collect paw prints and blood and urine samples.

“There were fourteen people working with Koda that day.” Koda was too large to be treated in the zoo’s clinic, so he was treated on site. As in the case of larger bears and elephants, treatment usually takes place in the habitat because the animal is contained and otherwise too large to transport elsewhere.

“It’s different from working with a patient in a chair because you can’t maintain the typical dental position,” said Dr. Regine. “Sometimes you’re on your head or lying on the floor.”

Dr. Regine has been practicing dentistry since 1980 and owns and maintains offices in Hickory and Bridgeville, Pa. When asked to treat an animal at the zoo, Dr. Regine will typically block out a half day. In the case of an emergency at the zoo, Dr. Regine has had to reschedule patients. He said his patients are understanding and often enjoy learning about the latest animal’s dental procedure. Dr. Regine keeps a photo album of the animals he has treated to show children who visit his offices. He has recently been invited to visit local schools to speak about his experience treating Koda and other animals.

Over the last decade, Dr. Regine said he has been building a network of contacts with other dentists who volunteer dental treatment at zoos across the nation. His hope is to someday organize and publish a list of contacts for dentists to share their experiences with one another.
The future of dental hygiene is optimistic. Dental hygienists across the country are lobbying for support of the curricular development of a Master’s degree-level dental hygiene program as proposed by the American Dental Hygienists Association (ADHA). After receiving positive acknowledgement by the American Dental Association and United States President George Bush, the ADHA will be presenting a model for the advanced dental hygiene practitioner (ADHP) during its 2007 annual session in June.

According to the ADHA, the proposed ADHP is in the second phase of development. A revised draft curriculum has been developed including a vision statement, background information, domains and competencies. An ADHA task force has reviewed feedback from members and will further revise the draft prior to presenting it at the annual session.

The proposed ADHP is the result of several recommendations made to advance the profession and to address the oral health disparities across the nation. Other items in ADHA’s pipeline for improvement are a baccalaureate degree-level entry point into the profession and an expanded scope of practice. Because the traditional method of providing dental hygiene services in a dental practice is not sufficiently meeting the oral health needs of the country, the ADHA encourages a dental hygiene component in public health centers, nursing homes and public schools. In order to support the growth of the profession, the ADHA proposes establishing a baccalaureate degree as a minimum requirement to practice dental hygiene. In addition, many states have approved local anesthesia administration by dental hygienists. Each state’s requirements vary from having direct supervision to examinations.

In 2004, a group of ADHA members met to establish goals for the future of dental hygiene. The report that resulted, Dental Hygiene: Focus on Advancing the Profession, included a statement of warning that without the development of an ADHP, other allied health professionals will assume the responsibility of meeting the diverse oral health care needs of the public, especially the underserved.
“This is one of the plausible solutions we offer as a response to the unmet needs in oral health. ADHPs can extend dental care to many communities that don’t have dentists,” said Ms. Margaret Green (DHY ’68), president of the ADHA.

Responsibilities of the ADHP would include advanced preventive therapies, diagnosis, restorative treatment and appropriate referrals. Much like the nurse practitioner, the ADHP would take on additional responsibility by offering some of the treatment normally provided by the physician or dentist. Specifically, the ADHP could restore small carious lesions.

Over the years, the dental hygiene profession has expanded in numerous ways and the School of Dental Medicine’s Dental Hygiene Program has adapted to and continues to plan for the future of dental hygiene.

“We’re really very well positioned here at the University of Pittsburgh, because we have a dental school and a dental hygiene degree completion program,” said Ms. Angelina Riccelli, director of the Dental Hygiene Program. “Once we know what the [ADHP] curriculum entails, we could potentially offer a Master’s degree in dental hygiene.”

Currently there are several U.S. universities offering Master’s degrees in dental hygiene education. Ms. Riccelli said she attended a dental hygiene summit in 2006 including directors of dental hygiene programs across the country and members of the American Dental Education Association.

“We brainstormed how to increase the knowledge base for dental hygienists, dental assistants and dental technologists,” Ms. Riccelli said. “Unless we increase the knowledge base, the profession will never have autonomy.” She stressed that the perception of dental hygienists as technicians is misleading. Dental hygienists are capable of more than scraping calculus, giving fluoride treatments and taking radiographs. With an increasing number of immunocompromised patients, there is a heightened responsibility to be knowledgeable and skilled in meeting the patient’s oral and medical needs. Ms. Riccelli added that dental hygienists need to have critical thinking skills in educating patients about prevention of caries and periodontal disease.

While the role of dental hygienists differs greatly from state to state, the School of Dental Medicine trains dental hygiene students to be prepared for careers nationwide. For instance, forty states allow dental hygienists to administer local anesthesia. Each of the forty states has different requirements and levels of anesthesia administration permissible by dental hygienists. The School of Dental Medicine is one of only two schools to offer a baccalaureate degree in dental hygiene and the certificate program is the only dental hygiene program in Pennsylvania affiliated with a major university.

The graduating dental hygiene class of 2007, pictured above, is made up of 30 young women and men, many of whom plan to return to the SDM for completion of their Bachelor’s degree. With new possibilities in dental hygiene education on the horizon, the graduates have many exciting opportunities ahead.
The Student Research Group (SRG) at the School of Dental Medicine has been in existence since 1984. However, the group’s activity has varied from year to year to fit the needs of its changing members. Over the last three years, the group has had a resurgence of activity under the direction of the latest SRG presidents, Dr. Reza Naderi and current president, Mr. Amit Kamat. Their common goal was to make research more accessible to their fellow classmates. By use of the school’s intranet, the two created a virtual home to serve the group’s elections, discussions and notices of upcoming events.

Today, the SRG is 25 members strong with nearly half of its members also belonging to the American Association of Dental Research. The group, through the school’s Office of Research, organizes the school’s Grand Round Lecture Series and the newly formed Journal Club which reviews research papers relating to first professional students’ clinical experiences.

When Dr. Naderi first came to the SDM, he wanted to learn more about research and joined the Student Research Group. Dr. Naderi came to the school with a Master’s degree in public health from the University of Texas Health Science Center. He wanted to learn more about research and was elected as president of the group during his second year at the school.

One of Dr. Naderi’s first goals as president was to resurrect the school’s Grand Round Lecture Series. With the support of Dean Thomas W. Braun and Dr. Mary Marazita, professor and associate dean for research, Dr. Naderi held the first lecture of the latest series in 2004.

Since then, the SRG has organized over a dozen lectures including two guest speakers to present clinical research topics, Dr. Jasim Albandar, vice chairman for the Department of Periodontology at Temple University School of Dentistry; and Dr. Kevin Donly, professor and chair of the Department of Pediatric Dentistry at The University of Texas Health Science Center. Faculty members involved with SRG make recommendations on guest speakers and assist by initiating contact with the invited guest speakers. Mr. Kamit also created an online form on the SRG page to allow first professional students to submit speaker and topic requests. The SRG officers meet to review the different recommendations and requests and select speakers based on student feedback.

“Students want to hear more clinical presentations,” said Mr. Kamit. “They want to learn about topics that they’re just beginning to gain hands-on experience with.”

The guest lectures attracted large groups including first professional students, staff, faculty and alumni. “Faculty members also appreciate the exposure to clinical research. The series is certainly open for the whole dental community to participate,” Dr. Marazita said. SRG officers take attendance at lectures and use surveys to gauge the interest of the audience.

The Office of Research also administers the Dean’s Summer Research Program in which incoming students participate during the summer prior to their first semester.

“The Dean’s Summer Research Program was an innovative idea to get students involved in research before they begin dental school,” said Dr. Marazita. “The program has been in existence for four years now and most of the students who have participated in that initial summer have continued to work on their original projects or different projects throughout their dental school career.”

Mr. Kamit came to the school in June of 2004 as part of the Dean’s Summer Research Program. His project, A Novel Lysine-Derived Polyurethane Tissue Adhesive, inspired Mr. Kamit to become more involved in research as a student and he joined the SRG during his second year. Mr. Kamit is currently active in the Journal Club, under the direction of Dr. Adriana Modesto (please see the profile on Dr. Modesto on page 22). The newly formed club meets over the lunch hour two times a month to review research papers that apply to the students’ clinical work. “With students actively volunteering to read a research paper outside of their regular schoolwork—that really says something,” Mr. Kamit said. The participating students take turns reading, reviewing and presenting the papers during lunch meetings where the research is critiqued.

“Students need to be able to analyze the effectiveness of a paper,” said Dr. Naderi. “Dr. Modesto encourages us to read the papers with a critical eye.”

Dr. Marazita said, “With the enthusiasm of students like Reza, the students are getting more interested in and excited about research. Hopefully that will have long-term benefits as well.” With the general lack of clinical researchers in dentistry, Dr. Marazita said she is hoping to interest dental students in pursuing an academic career, in which research is an important component.
Student Research Profiles

Using a reconfigured thermal ink jet printer, post doctoral fellow Dr. Puiyan Lee prints layers of DNA, protein and cells on a collagen-coated surface with the ultimate goal of forming a biological tooth. Dr. Lee is currently working on the publication of a research paper demonstrating the capability to build two-dimensional scaffolds through the expression of green fluorescent protein. This novel tissue engineering therapy uses an HP thermal-based printer to spatially control the deposition of cells, proteins and a gene delivery system made of NanoCap-pDNA, a nano-sized particle comprised of calcium phosphate precipitated in the presence of plasmid DNA. Dr. Lee’s future plans for the project involve adapting the printing process to an XYZ stage with the capability of moving side to side and up and down, therefore enabling printing in 3-D. Dr. Lee is from Hong Kong and graduated from the University of Pittsburgh in 2001 with her Bachelor’s degree in chemistry.

Prior to graduating in May, Dr. Brittney Franklin, spent her free time during her last two years as a first professional student in Dr. Mary Marazita’s lab. Dr. Marazita is professor and chair for the Department of Oral Biology and associate dean for research at the School of Dental Medicine. Dr. Franklin analyzed fingerprint for unusual patterns as part of a study on the association of brain lateralization with clefting. This research built on her previous experience conducting statistical analysis of handedness and its correlation to clefting. The purpose of using such phenotypes as handedness and unusual finger prints is to home in on genes that could be related to non-syndromic cleft lip and/or palate. Dr. Franklin is an orthodontics resident at Temple University and she said she hopes to one day continue research in possible treatment options for persons with cleft lip and/or palate.

Ms. Anna Akhtar, second-year first professional student, began her involvement with research at the school while completing her undergraduate work in biological sciences at the University’s School of Arts and Sciences. Her mentor, Dr. Deborah Polk, assistant professor in the Department of Dental Public Health and Information Management, guided Ms. Akhtar in reading about gingival crevicular fluid and blood, interleukins and TNFa and their potential effect on periodontal disease. As a participant in the Dean’s Summer Research Program, Ms. Akhtar wrote a procedure for a research project based on her reading. The project is currently being executed by first professional students who are rotating through the school’s dental clinics. Currently, Ms. Akhtar is assisting in a research project directed by Dr. Adriana Modesto, assistant professor in the Department of Pediatric Dentistry. This project will study the genetics of caries.

Mr. Nicholas Callahan, first-year first professional student, came to the school as a participant in the Dean’s Summer Research Program where he quickly learned about relationships between genetics and dental anomalies. Under the direction of his mentor, Dr. Alexandre Vieira, assistant professor in the Department of Oral Biology, Mr. Callahan used DNA samples from both persons with missing teeth and persons with a complete dentition. His project, Further Evidence on the Association Between TGFA and Tooth Agenesis, was designed to support previous studies demonstrating that genes commonly found to be related to cleft palate are also related to tooth agenesis. Mr. Callahan presented a poster about his project at the AADR general session in New Orleans, La. in March of 2007.
Diversity in dentistry is not about appealing to the politically correct or about posing a great photo for public relations. It is much more than creating good feelings among a broad group of people with a common goal.

There is a need for diversity in all health care and in dentistry in particular, much like the need for diversity in the business sector. With our country’s rapidly changing demographics, change must also occur in our approach to health care. Unfortunately, the dental profession is faced with many unique challenges. There are fewer dental graduates entering the profession today and the demographics of active dentists are not in proportion with minority populations.

This issue of access to care is the result of several natural socioeconomic factors: dentists tend to operate private practices in affluent areas or in their hometowns; minority persons in low-income areas place lower priority on oral health because they are uninsured or uneducated about the importance of oral health; and research has shown that minority persons are more comfortable seeking care from dentists of the same ethnicity especially in the case of non-native English speakers. These are just a few of the many barriers between minority populations and oral health.

Dental education is one part of the solution to diversity in dentistry. Even so, there are nationwide shortages in dental faculty, government funding for dental education has waned over the past few years and the idea of loan repayment is daunting enough for any student. These challenges are not insurmountable, but it is important to consider such adversity and take action accordingly.

Many young minority students view a career in dentistry as unach- evable. The School of Dental Medicine and organizations like Southwestern Pennsylvania Area Health Education Center are working together to educate high school students about careers in dentistry.

It is the goal of the University and the School of Dental Medicine to support a diverse student body and many measures have been taken to recruit and keep highly qualified minority students. The School of Dental Medicine also supports a diverse and highly qualified faculty with the overall goal of enhancing cultural competency and access to care in the dental community.

Dr. Bernard Costello was appointed as an associate professor in the Department of Oral and Maxillofacial Surgery.

Dr. Jean O’Donnell was appointed as vice chair of the Department of Restorative Dentistry and Comprehensive Care. Dr. O’Donnell also is participating in the 2007-2008 American Dental Education Association Leadership Institute.

Dr. Peter H. Guevara was appointed as assistant professor in the Department of Prosthodontics and as director of the new General Practice Residency Program at UPMC Montefiore.

Dr. Steven Kukunas was appointed as interim chair of the Department of Prosthodontics.

Dr. Adriana Modesto is the recipient of the 2007 William J. Gies Award presented by the American Association of Dental Research/International Association of Dental Research.

Dr. Mark Mooney was appointed as vice chair of the Department of Oral Biology.

Dr. Deborah Polk, assistant professor in the Department of Dental Public Health and Information Management, was recently elected as a first-year North American director of the Behavioral Sciences and Health Services Research Group of the International Association of Dental Research.

Dr. Steven Wendell, research assistant professor in the Department of Oral Biology and assistant director of postdoctoral development in the Office of Academic Career Development, was honored with Pitt’s 2007 Postdoctoral Association Alumni Award for his contributions to the association.

Dr. Hussein Zaki retired from his professorship in the Department of Prosthodontics and was appointed professor emeritus.
The Thirteenth Annual T. F. Bowser Memorial Lecture challenged attendees to adopt new approaches to meeting the oral health needs of the increasing geriatric population. Dr. Gregory Folse presented Treating Geriatric Patients: What You Need to Know. His presentation focused on a two-week time span during December of 2006 when Dr. Folse conducted a study through his mobile geriatric dental practice based in La Fayette, La. His collection of photos and video demonstrated the severity of need existing within the geriatric population.

Dr. Folse made a case for the cause of this underserved population: Medicaid does not cover oral health after the age of 21; the elderly choose to neglect their oral health as their finances become more limited; dental hygiene is not a priority in many nursing homes; nutritional supplements used by the elderly often contain high amounts of sugar; and transportation to and from appointments outside the home is often a challenge.

Along with his compelling stories of patients in La Fayette, Dr. Folse offered some of his techniques in comforting patients and alternative approaches for funding and practice set-up as well as techniques for taking impressions for dentures. For example, Dr. Folse recommends applying the impression tray by pressing upward from front to back so as to avoid causing geriatric patients to gag. He used a video demonstration of this method. Dr. Folse also introduced a technique for better alignment of the top and bottom dentures by studying the plane of the lips as compared to the plane of the eyes. He would then adjust the fit of the dentures accordingly.

In addition to his mobile geriatric dental practice, Dr. Folse speaks about the treatment of this population nationally and internationally. He also has lobbied for oral health care for the aged, blind and disabled and was the co-author of the Special Care Dentistry Act which was introduced in congress in 2005.

Dr. Folse’s commitment to treating the oral health needs of geriatric patients was clear. He said he takes as much time as he needs to treat his patients and talks with them and their families about oral health and his treatment procedures. One of his recommendations in making patients comfortable is to engage them in conversation while lowering his posture so that his eyes are below the eye-level of the patient. He emphasized the importance of building trust in patients because the majority of the underserved population is skeptical about receiving treatment.

Dr. Folse is a 1989 graduate of the Louisiana State University School of Dentistry and completed the Geriatric Dental Fellowship Program at Baylor College of Dentistry in 1999. He is currently working with the U.S. House and Senate, U.S. Senate Special Aging Committee, Centers for Medicare and Medicaid Services, the American Dental Association, and Special Care Dentistry to improve national oral healthcare access and infrastructure for aged, blind and disabled adults.
Seventh Annual
Dean’s Scholarship Ball

Mrs. Eleanor Kondis and Dr. Stephen Kondis.

Ms. Lisa Babh, Dean Thomas W. Braun and Ms. Mallory Troynacki

Provost and Senior Vice Chancellor James Maher and Dr. Ellsworth Bowser

Ms. Angelina Riccelli and Ms. Madeline Dudas

Dr. Marla Harbay and Mr. Andrew Thompson

Dr. Daniel Pituch, Dr. Mary Ann Davis and Dean Thomas W. Braun

Dr. Kelly Bolden and Mr. Todd Williams

Mr. Donald and Dr. Yvonne Zier dance during the reception.

Dr. Daniel Pituch and Mr. William Hillgrove

Dean Thomas W. Braun, Mrs. Liz Braun, Mrs. Mildred Trice and Dr. William Trice

Dr. Linda Himmelburger, Dr. R. Donald Hoffman and Dr. Jack Hankle
On April 14th, the School of Dental Medicine celebrated the success of the Seventh Annual Dean’s Scholarship Ball. It was a success in many ways; as a fundraiser and as a glamorous gathering of students, faculty, alumni and friends of the school.

There was excitement in the air as Dean Thomas W. Braun approached the podium in The Duquesne Club’s grand ballroom. This year’s ball had a newly expanded committee and a new location. The ambiance of The Duquesne Club heightened the significance of the evening ahead.

Dean Braun welcomed the guests and shared recent accomplishments of the school, its faculty and students. When the dean proudly announced that over $140,000 in scholarships had been raised over the last year, the crowd applauded with excitement. Over the last seven years, the ball has repeatedly succeeded previous fundraising goals. In addition, this year’s guest list pushed the boundaries of The Duquesne Club’s ballroom. With 280 people in attendance, the club’s red room, which is adjacent to the grand ballroom, was suited with 12 additional tables to accommodate the sold-out event.

Mr. William Hillgrove, the emcee, playfully jested at the arrangement of the seating between the grand ballroom and the red room and asked the scholarship recipients to take a bow in both rooms. The guests laughed and enjoyed other stories from the jovial Mr. Hillgrove.

The 2007 recipients of the Dean’s Scholarship are Ms. Lisa Babb and Ms. Mallory Troynacki. Ms. Babb is a graduate of the University of Pittsburgh with a Bachelor’s degree in biological sciences. During her undergraduate studies, Lisa consistently ranked on the Dean’s Honors List. She volunteered at the Collegiate YMCA and Family House and served as treasurer and social committee chair of Chi Omega, ambassador for the University through Pitt Pathfinders and assisted with the annual move-in day for incoming University students. Ms. Babb also is a member of the Phi Eta Sigma Freshman Honor Society and the Lambda Sigma Honor Society.

Ms. Troynacki applied for early admission to the school as a junior biology major at the University of Pittsburgh. Ms. Troynacki has had the privilege of familiarizing herself with dentistry through summer work at her father’s dental practice in Wilkes-Barre, Pa. Her father, Dr. David Troyacki, is a graduate of the class of 1985. Mallory’s brother, David Jr., is currently a second-year student in the First Professional Program. During her undergraduate studies, Ms. Troyacki achieved a nearly perfect 4.0 grade point average. She also is a member of the student affiliates to the American Chemical Society and the Red Cross Club.

Also honored that evening were the 2007 Distinguished Alumni Award recipients: Distinguished Alumnus – Advanced Education Program recipient Dr. John Molinari (PhD ’70); Distinguished Alumna – Dental Medicine recipient Dr. Judith Davenport (DMD ’79); Distinguished Alumna – Dental Hygiene recipient Mrs. Madeline Dudas (RDH ‘64); and an additional Award of Appreciation was bestowed on Dr. Raymond H. Primas Jr. (DMD ’47).
The Second Annual Dental Hygiene Alumni Scholarship Tea and Continuing Education Course were held at The Twentieth Century Club on May 23rd. The event benefits the Dental Hygiene Scholarship Fund while offering continuing education to alumni and friends. A luncheon was served followed by coffee, tea, petite fours and pastries. The event is planned as a light get-together with the intent of raising scholarship funding. However the lectures were substantial, earning participants five continuing education credits. Dr. John Molinari (PhD ’70) presented Emerging Infection Control Challenges and Recommendations: 2007 and Occupational Respiratory Infectious Diseases: Aerosols, Spatter, and Precautions. Dr. Molinari has published over 300 scientific articles, text chapters, and abstracts in the areas of microbiology and immunology as well as co-authored Practical Infection Control in Dentistry. He is well-known on the lecture circuit both nationally and internationally for presentations on infectious disease and asepsis. In addition, he serves as project coordinator for the governmental Health Resources Services Administration Task Force on AIDS and Dental Education, as chairman of the American Dental Association Curriculum Advisory Committee on Bloodborne Infectious Diseases and as a consultant to the Centers for Disease Control and Prevention in the areas of infectious disease and infection control.

Dr. Molinari reflected on the immense changes that have taken place in infection control during the last few decades. However, he urged continued vigilance in infection control as its benefits are easily taken for granted and risks return with lack of compliance.

“The continuing education course was very well-received. Dr. Molinari received glowing remarks on the surveys and the
attendees loved The Twentieth Century Club,” said Ms. Angelina Riccelli, director of the Dental Hygiene Program.

Since the inception of the Dental Hygiene Scholarship Tea in 2006, the school has raised over $40,000 for the Dental Hygiene Scholarship Fund. Corporate sponsors of this year’s event include Procter & Gamble, Premier and Dentsply.

“It is so important to provide scholarships to our dental hygiene students,” said Ms. Riccelli. “We have many deserving students who could benefit from this new fund.”
Dr. Adriana Modesto

Dr. Modesto is the recipient of the William J. Gies Award for a second consecutive year

Dr. Adriana Modesto, assistant professor in the Department of Pediatric Dentistry, attempts to hide a modest smile when asked how it feels to be the recipient of the William J. Gies Award for the second consecutive year. The award was presented by the American Association of Dental Research and the International Association of Dental Research for her paper titled *MSX1 and orofacial clefting with and without tooth agenesis*. Despite the rarity of winning the award not only twice but two years in a row, Dr. Modesto is not savoring the moment, but planning for future research and inspiring her students to do the same.

“I’m happy, but I still need to do so many things,” said Dr. Modesto. “That’s not the end (of research) for me.” Dr. Modesto first became involved in genetic research after completing her post-doctoral training in oral microbiology at the University of Iowa. She wanted to learn more about microbiology and genetics and began additional post-doctorate training in Dr. Andrew Lidral’s research lab where she worked in craniofacial developmental genetics. Dr. Lidral had tested different chromosomal regions in a group of families from Ohio and found the MSX1 gene to be associated with isolated cleft lip and/or palate.

“We believed that the occurrence of both cleft lip and/or palate and tooth agenesis in some individuals is caused by the same genetic mutation,” said Dr. Modesto. “Therefore, we hypothesized that mutations in MSX1 are causal for orofacial clefting with or without tooth agenesis.” They tested the hypothesis by performing a mutation search in families with dental anomalies recruited from Children’s Hospital in Columbus, Oh. The participating families were of the same ethnicity so that a case-control comparison could be made with another group of families from the University of Iowa Craniofacial Anomalies Research Center.

“In our study, we found that MSX1 variants mark specific genetic factors that are contributing to different phenotypes,” Dr. Modesto said. One specific nucleotide variant (101C>G) in the MSX1 gene was found to be more frequent in individuals with both orofacial clefting and tooth agenesis than in the control group. In contrast, another variant (*6C>T) was more common in individuals with isolated clefting than in the control group.

“This provides evidence that future investigations should phenotypically distinguish clefting associated with tooth agenesis from clefting alone,” she concluded.

Since joining the faculty in August of 2005, Dr. Modesto has divided her time between clinical instruction in the Department of Pediatric Dentistry and research in the Department of Oral Biology. This unique arrangement allows Dr. Modesto to help first professional students explore research relating to their clinical coursework. She recently formed the Journal Club in which first professional students discuss research papers that are pertinent to the topics they’re currently learning about in the clinic. The Journal Club meets with Dr. Modesto over the lunch hour on every-other Tuesday to review a paper presented by two first professional students.

“Yesterday, we reviewed an article about the use of the explorer in the diagnosis of caries. We were questioning whether this is an acceptable method,” Dr. Modesto said. “Next time, we will look at an article covering third molar extractions.”

Another project that Dr. Modesto is involved with is the Genetics of Caries in Pittsburgh project. She and husband, Dr. Alexandre Vieira, assistant professor in the Department of Oral Biology, are collaborating to determine if certain genes are responsible for caries. Dr. Modesto is the primary mentor in the clinical area and Dr. Vieira is the primary mentor in the basic sciences area. They will each be mentoring first professional students researching the genetics of caries.

Dr. Modesto said it is difficult to make the transition between the basic sciences and the clinic. Because her background includes clinical work and dentistry and research in the basic sciences, Dr. Modesto said she can help first professional students to translate the different thought processes of clinicians and researchers.

“When you are working in the clinic you are totally focused on your hands and your patients at that moment,” said Dr. Modesto. “When you are writing a grant or a research paper, it is more of a continuous thought process over time.” Her position suits her ideally as she prefers a continuous thought process over time.” Her position suits her ideally as she prefers a continuous thought process over time. Her position suits her ideally as she prefers a continuous thought process over time.

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“When you are working in the clinic you are totally focused on your hands and your patients at that moment,” said Dr. Modesto. “When you are writing a grant or a research paper, it is more of a continuous thought process over time.” Her position suits her ideally as she prefers a balance between spending time in the clinic and the laboratory. Dr. Modesto said appreciates the support from departmental chairs Dr. Deborah Studen-Pavlovich and Dr. Mary Marazita.
Dr. O’Donnell to Participate in the ADEA Leadership Institute

Dr. Jean O’Donnell, assistant professor and vice chair of the Department of Restorative Dentistry/Comprehensive Care, will be participating in the 2007-08 American Dental Education Association (ADEA) Leadership Institute taking place in four phases in several cities across the country.

Dr. O’Donnell was thrilled when she learned of her acceptance into the institute by a phone call from Dean Thomas W. Braun. She said she is looking forward to learning about legislation in dental education and about the interrelationships between schools and universities.

“It’s about becoming better educated about how things work in a large institution,” said Dr. O’Donnell. “I tend to be very focused on the dental school, it’s easy to think that this is the big picture, but this is such a small part of the larger University and so the changes that we want to make here (at the school) are not in isolation, they need to be in accordance with the University as a whole as well as our mission.” Dr. O’Donnell said she feels it is important for leaders to collaborate and to reinforce a structure that supports change as people move away or retire.

Dr. O’Donnell was selected to attend the ADEA Leadership Institute as one of 21 of the nation’s most promising dental faculty. The institute will focus on personal and interpersonal competencies for leadership, legislation, administrative competencies for leadership and faculty development. The orientation and reception initiating the institute took place during the ADEA Annual Session in New Orleans, La on March 19, 2007. Dr. O’Donnell also will travel to Stowe, Vt., Washington, D.C. and Dallas, Texas during the four phases of the institute.

Her leadership during her nine years at the SDM has largely focused on curriculum. For the last three years, Dr. O’Donnell has conducted research in the curriculum of first professional students. The focus of the research is mainly on the first two years of the First Professional Program prior to students’ introduction to the clinic. Dr. O’Donnell surveys second-, third- and fourth-year students to determine areas of strength and weakness in the transition from didactic to clinical education. Dr. O’Donnell’s goal is to continue to raise the standards and expectations for students.

“I think we accept great students who are all capable of high performance.” As a result of her research, Dr. O’Donnell shared her findings with the Curriculum Committee. One of the changes prompted by her curriculum research involves the Comprehensive Care Module (CCM) that was initiated by Dr. Marnie Oakley, assistant professor and chair of the Department of Restorative Dentistry/Comprehensive Care. Since the establishment of the CCM in 2000, several modifications have been made to more closely mimic group practice. Each of the four modules has a patient care coordinator, emulating a group practice setting.

“The feedback has been very positive,” Dr. O’Donnell said. She was appointed as director of Comprehensive Care in 2005 and was recently appointed vice chair of the department in 2007.

Dr. O’Donnell’s other research commitment is smoking cessation.

“I am a former nurse and a former smoker, so I’m every smoker’s worst nightmare,” Dr. O’Donnell said. Dr. O’Donnell collaborated with faculty members from the Department of Dental Public Health to pilot a smoking cessation program in module four of the CCM.

“Many people think that patients will be angry by bringing their smoking up, but what we’ve found is if you just ask them if they’re interested they’ll let you know. If they’re not interested, you just say ok, if you ever are, let us help you.” Dr. O’Donnell said it is important for smokers to know that they have resources available to them.

Dr. O’Donnell is chair of the Faculty Development Committee and the Student Promotions Committee. When asked how she would manage her time with the addition of the ADEA Leadership Institute, she said it’s nice to have the support from her department.

“Dr. Oakley had gone through the institute before and she knows the demands there. There’s really a lot of support, so it’s just a different way of organizing and reprioritizing.

Dr. O’Donnell is no stranger to a busy lifestyle. She entered dental school at the age of 30 after a career in nursing, was married one month later and had all three of her children while a first professional student. Today she spends much of her free time attending her children’s sporting events. Other hobbies of Dr. O’Donnell’s include membership in a book club and a walking group.

Dr. O’Donnell is currently living in Sewickley, Pa.
It is with great honor and pride that I write this first address as the newly elected president of the Pitt Dental Alumni Association. Our past presidents have provided a great foundation on which I hope to continue to build a strong association between our students and alumni.

We are fortunate to have one of the best dental schools in the country. However, much has changed since our days at Salk Hall and I hope to share a few of the exciting things that have taken place in recent years. I hope to provide an opportunity for the graduates to visit the dental school and see our 21st Century classrooms in action. In this way, we can rekindle this sense of pride in everyone who has furthered their dental education at the school. The University of Pittsburgh School of Dental Medicine has done so much for us, and I believe it’s time to give something back to the University and the school.

As co-chair of the Dean’s Scholarship Ball Committee, I am very pleased to announce that it was the most successful ball yet. The committee was comprised of both members of the Dental Alumni Association Board and members of the past Dean’s Scholarship Ball Committee and we all worked very hard to make it a success. This is an opportunity to support aspiring dental students while being a part of a high class affair. Next year’s ball should be even better, so make sure you are part of it.

I’d like to congratulate Dr. Judith Davenport (DMD ’79), the 2007 recipient of the Distinguished Alumna Award for Dental Medicine and Dr. John Molinari (DMD ’70), the 2007 recipient of the Distinguished Alumnus Award for Advanced Education. These individuals have made significant accomplishments in dentistry and bring great credit to our school. It also is my pleasure to congratulate Dr. Raymond H. Primas (DMD ’47) who was honored at the ball with an award of appreciation. Dr. Primas’ work in dentistry and public health spans across the United States and throughout several African countries.

Our school has much to celebrate. Please show your support by getting involved.

Mary Ann Davis (DMD ’78)
President

It is that time again to reflect on the impact that alumni can have on the Dental Hygiene Program and the profession. During the past year dental hygiene alumni, faculty and students have participated in Give Kids a Smile Day, the Special Smiles tent at the summer Special Olympics, the Dental Dash, and Sealant Saturday through the Western Pennsylvania Dental Hygiene Association. Many alumni have attended continuing education courses here at the University of Pittsburgh and Western Pennsylvania Dental Hygiene Association-sponsored events. Such events are a great opportunity to extend our professional network. As alumni, our visibility is important to the status of the dental hygiene profession. Please participate both as alumni and as members of your professional organization.

During the Seventh Annual Dean’s Scholarship Ball in April, the presentation of the Distinguished Alumni Awards took place and the honoree for dental hygiene was Ms. Madeline Dudas (RDH ’64), a member of the first-ever dental hygiene class of 1964. Ms. Dudas worked as a dental hygienist for the Quaker Valley School District in Pennsylvania for over seven years and served as a dental hygiene consultant for the Pennsylvania Health Department for over 22 years. Today she volunteers with the Monessen Heritage Museum and works one day a week at her husband, Dr. Martin Dudas’s orthodontic practice. The current dental hygiene class presidents also were in attendance to support Ms. Dudas as she received her award.

For dental hygiene alumni looking to participate in a scholarship event directly benefiting dental hygiene students, the annual tea is the place to be. The Second Annual Dental Hygiene Alumni Scholarship Continuing Education Course and Tea took place on May 23 at The Twentieth Century Club and was a huge success. Dr. John Molinari presented lectures about the latest in infection control and occupational respiratory infectious diseases. The tea was once again delightful and proceeds for this event benefit the Dental Hygiene Scholarship Fund.

Thank you to all alumni who are actively involved in our association. It is such a pleasure working with and representing dental hygiene alumni.

Judith Gallagher (RDH ’72, MEd, DHY ’78)
Vice President, Dental Hygiene
Ms. Christine Wallisch, fourth-year dental student and organizer of GKASD held on March 23rd at the School of Dental Medicine.

Mr. John Auolio, fourth-year dental student helps a 4-year old patient to feel more comfortable about his dental exam and treatment.

Ms. Wallisch presents a goodie bag to one of her patients at GKASD. More than 80 uninsured children received over $8,000 in treatment that day.

Dr. Mary Ann Davis (DMD ’78), president of the Dental Alumni Association and organizer of Children’s Healthy Smile at The Children’s Museum.

Over February 8th, 9th, and 10th, a total of 353 children were screened as a part of Children’s Healthy Smile 2007.

Local dentists, dental hygienists and Pitt dental and dental hygiene students volunteered to provide dental screenings and oral health education.

Made possible by the School of Dental Medicine’s Department of Pediatric Dentistry

Made possible by the Children’s Museum and the Dental Society of Western Pennsylvania
 Alumni Update Form

Please send us information about your career advancements, papers presented, honors received, appointments, and further education. We will include your news in future issues of Pitt Dental Medicine as space permits. Please indicate names, dates and location. Photos are welcome. Also note changes of address, phone or e-mail.

Name: ____________________________________________

Degree(s) and year(s) of graduation:____________________________

Home address: ________________________________________________

___________________________________________________________

Home phone: ________________________________

Business address: ____________________________________________

___________________________________________________________

Business phone: ________________________________

Preferred e-mail: ____________________________________________

Preferred fax: ____________________________________________

Position(s): ________________________________________________

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News (Please attach additional sheet, if needed):

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*Don’t forget to register at the alumni section of www.dental.pitt.edu to make sure the University of Pittsburgh and the School of Dental Medicine have your most current contact information.

Alumni Updates

Joel A. Casar (DMD ’72) was named secretary/treasurer of the new Nevada Section of the American College of Dentists.

William K. Collett (DDS ’56) and his wife, Barbara, celebrated 50 years of marriage in June of 2006. Dr. Collett is a professor emeritus at the University of Florida College of Dentistry.

William L. Hoch (DMD ’81) was awarded a fellowship in the Midwest Implant Institute at its annual symposium in February of 2007.

Terry Hopper (DMD ’97) opened a new dental office in Austell, Ga. in March of 2007.

Jefferson J. Jones (DDS ’64) was honored with the Health Legacy of Cleveland Award during a scholarship dinner held on April 29th in Mayfield Heights, Oh. Dr. Jones is the associate professor/chair of the Department of Endodontics at Case Western Reserve University School of Dentistry.

Richard A. Kiman (DDS ’43) served on the continuing education seminar committee of the 2006 Greater New York Dental Convention at the Jacob K. Javits Convention Center. Dr. Kiman has served on various committees for 10 consecutive years.

Stuart N. Kline (DDS ’55) received the American Association of Oral and Maxillofacial Surgeons’ Donald B. Osbon Award for an Outstanding Educator. He’s a professor emeritus of surgery at the University of Miami Miller School of Medicine.

Roy Lanz (DDS ’72) was recently recognized for volunteer service in Jamaica by the American Dental Association Committee on International Programs and Development.

Robert Laurenzano (DDS ’72) was recently named dental director for United Dental Healthcare and president of the American Association of Dental Consultants. He also wrote a letter published in the My View section of the ADA News in March of 2007 and an editorial in the June issue of Academy of General Dentistry Impact.

Ernest J. Mantini (DMD ’83) was selected as the recipient of the 2007 Pitt Alumni Association Volunteer Excellence Award.

Marc Samuels (DMD ’69) was appointed as director of Allegheny General Hospital’s Division of Dental Medicine, General Practice Residency Program. He sold his private practice to Dr. Frank Timme- meyer (DMD ’00).

Paul A. Scarlata (DMD ’61) and his wife volunteered for Operation Blessing for one week in New Orleans, a rewarding experience and a definite need existed and continues to exist.

Louise Tupta Veselicky (MEd ’81, MDS ’91) was recently appointed interim dean of the School of Dentistry at West Virginia University.
DISTINGUISHED ALUMNI
GUIDELINES

The University of Pittsburgh School of Dental Medicine Distinguished Alumni Awards may be presented in each of the following categories: Distinguished Alumnus-Dental Medicine; Distinguished Alumnus-Dental Hygiene; and Distinguished Alumnus-Advanced Education Program, to individuals who have excelled in one or more of the following areas:

1. One whose contribution of time and effort to the University of Pittsburgh School of Dental Medicine has been exceptionally significant, beyond that which would normally have been expected.
2. One whose significant attainments and high professional standards have been of such character as to have materially aided and advanced the art and science of dentistry.
3. One whose public life and activities have been of such a nature as to reflect great credit upon the profession and the School of Dental Medicine.
4. One who has contributed to original research in the dental profession.

1. A one-page biographical sketch of each candidate must accompany the nomination sent to the chairpersons of the awards committee.
2. In the event that the Awards Committee decides in any year that no nominee has attained the above stated criteria, it shall so report.
3. No member of the Awards Committee shall be considered eligible.
4. The deadline for submission of nominations shall be January 1.
5. The recipient of the Award shall be notified as soon as possible but no later than 60 days before the presentation.
6. The Dean, or a designee, shall make the presentation of these awards at the School of Dental Medicine Homecoming Weekend.
7. Recipients shall be the guests of the Dental Alumni Association at the School of Dental Medicine Alumni Homecoming Weekend (or Dean’s Scholarship Ball) during which the presentation is made.
8. The Awards Committee shall consist of six members:
   - Two Co-Chairs as indicated by the By-laws
   - A representative of the Faculty/Staff of the School
   - The President of the Dental Alumni Association
   - A previous recipient of the Award
   - The Executive Director of the Alumni Association

The foregoing requirements and requests for nominees shall be outlined yearly in the Dental Alumni Association’s Publication.

Approved by the Executive Committee November 21, 1997.
Approved by the Board of Directors December 1, 1997.
Effective Date: January 1, 1998
Graduates rise to sing the alma mater.

Dr. Richard Gradisek, immediate past president of the Dental Alumni Association, speaks to the graduating class of 2007.

Dr. Richard Bauer and his family.

Dr. Chadwyck Bradley and his mother.

Dr. Daniel Rautkus, grand marshal, and Dr. Kenneth Etzel, associate dean for student services and admissions.

Ms. Ashley Senczy, 2007 dental medicine validictorian.

Ms. Jennifer Stevens, 2007 dental hygiene class president.

Dr. Kelly Bolden, 2007 dental medicine class president.

The Diploma Ceremony and Alumni Reception were held on May 19th at 1 p.m. in Heinz Hall. From the engaging speeches to the gorgeous summer weather, the event boasted an air of excitement. Eighteen residents, 88 first professional and 30 dental hygiene students walked in the ceremony.

A reception sponsored by the Dental Alumni Association was held in the hall’s courtyard where many families and alumni congratulated the new graduates.
Like many men of his generation, military service was much on the mind of Dr. Harold Posner in the summer of 1941. The world was in the throes of war and Dr. Posner believed the best way he could serve his country was by pursuing his dream of becoming a dentist before joining the war effort. He was inspired to pursue dentistry by his guardian and uncle, Dr. Franklin B. Jaffe.

Motivated by his uncle, Dr. Posner sent out a handful of dental school applications and accepted the invitation to enroll in the University of Pittsburgh that fall.

Dr. Posner, a Jewish man from Queens, found the University of Pittsburgh to be welcoming and relatively unaffected by the racism that was gripping other parts of the country during the 1940s. “The University was courageous during a very difficult time,” he notes.

“It accepted me and gave me the opportunity to learn a great profession.”

After graduating in 1944, Dr. Posner was able to serve his country as an Army dentist. Dr. Posner traveled throughout the European Theater of Operation until the end of World War II, and upon returning to the U.S. in December of 1945, Dr. Posner set up a small practice in New York City. He quickly left to once again serve his country, this time at Andrews Air Force base during the Korean conflict.

Dr. Posner then settled into family life, marrying his wife Ilse within a year of being introduced by fellow Pitt graduate Dr. Ilse Jansen, ’42. Posner built a robust practice in Queens and worked there as a family dentist until his retirement in 1977.

After retiring, Dr. Posner and his wife relocated to Miami, Fla. where he had helped establish the Greenbriar Nursing Home nearly a decade earlier. “The nursing home turned out to be a great investment and we were able to sell it in 1982,” he recalls. “In all,” Dr. Posner says, “I’ve been fairly successful.”

His success has allowed him to give back to the University that provided his training so many years ago. Drs. Harold and Ilse Posner have made a generous donation to the University of Pittsburgh in the form of a charitable remainder trust. Their gift will be used to create an endowed professorship in the First Professional Program at the School of Dental Medicine. The professorship will stand as a tribute to Dr. Franklin B. Jaffe, the man who raised Dr. Posner and inspired his passion for dentistry.

The IRA Charitable Rollover provision (of the Pension Protection Act of 2006) is scheduled to expire at the end of 2007. This provision permits an owner of an individual retirement account (IRA) or Roth IRA to make a tax-free charitable gift of up to $100,000 directly from the IRA to the School of Dental Medicine (SDM). The IRA owner must be at least 70 years of age at the time of the transfer and the check must be sent directly to the eligible charity from the plan administrator. A charitable gift under this provision will count toward an individual’s annual required minimum distribution.

Example: Dr. Smith, age 74, has an IRA and he would like to make a gift of $50,000 (from his required minimum distribution this year) to the SDM. He must contact his IRA plan administrator and complete the necessary paperwork to transfer that amount directly from his IRA to the SDM. The plan administrator will notify Dr. Smith when the transfer has taken place. Because Dr. Smith made his gift according to the requirements of the IRA Charitable Rollover provision, he will be able to transfer $50,000 without having the amount added to his taxable income.

(Note that he also will not claim this as a charitable deduction.)

Benefits to you: Making a charitable IRA gift under this provision can be accomplished very simply...and without undesirable tax effects. You can support the School of Dental Medicine while you are around to witness the benefits of your generosity.

For more like information, please contact Mr. Paul Casey at 412-383-7544 or pbc8@pitt.edu.
## Alumni Calendar

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<th>Date</th>
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<td><strong>August 27</strong></td>
<td>General Assembly, White Coat Ceremony, Scaife Hall, Auditoriums 5 &amp; 6, 3 – 5 p.m.</td>
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<td><strong>September 28</strong></td>
<td>ADA Reception, Hilton San Francisco, 5 – 7 p.m.</td>
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<td><strong>October 5</strong></td>
<td>Dental Alumni Association Executive Committee Meeting, Room 403, 12:00 noon</td>
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<td><strong>October 18</strong></td>
<td>3Rivers Dental Symposium, Pittsburgh Athletic Association, 8:00 a.m. -- 5:00 p.m.</td>
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<td>Legacy Laureates Panel Discussion, Posvar Hall, 2:00 – 5:00 p.m.</td>
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<td>Pathways to Professions: A Career Networking Event, Alumni Hall, 6 -- 8 p.m.</td>
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<td><strong>October 19</strong></td>
<td>University of Pittsburgh, Homecoming Extravaganza, Casino Night, William Pitt Union, 10:00 p.m.</td>
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<td><strong>October 20</strong></td>
<td>Dental Dash 5K Run, Frick Park, 7 a.m.</td>
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<td>Panther Pre-Game Tent, 2 hours before kickoff, Old Lot D area</td>
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<td>Homecoming football game, Pitt Panthers vs. Cincinnati Bearcats, Heinz Field, Time TBA</td>
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<td><strong>October 29</strong></td>
<td>Dental Alumni Association Board of Directors Meeting, Room 457. 6:00 p.m.</td>
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