Alumni in the Spotlight

‘70s
DR. KENNETH ALLEN, Class of 1973, assistant professor of cariology and comprehensive care, on coauthoring an article entitled “Comparative Use of Podcasts vs. Lecture Transcripts as Learning Aids for Dental Students,” for the Journal of Dental Education.

‘80s
DR. STUART DELMAN, Class of 1981, on being featured in a New York State Dental Association News article about finding an antidote to professional stress in photography.


‘90s
DR. PETER GLAVAS, Class of 1997, clinical assistant professor of prosthodontics, on becoming program director of the general practice dental residency program at Staten Island University Hospital.

DR. MANUEL JOHN MATOS, Class of 1995, on being elected president of the Union County, New Jersey Dental Society.

DR. PATRICIA L. SURMONOWSKI, Class of 1991, on being installed as president of the New York County Dental Society.

‘00s
DR. MICHAEL APA, Class of 2003, on being featured in a story about aesthetic dentistry in Harper’s Bazaar.

DR. RONALD J. SAFFAR, Class of 2002, on being elected president of the Hudson County, New Jersey Dental Society.

DR. VINCENT J. CALAMIA, Class of 2011, on winning the Empire State Academy of Cosmetic Dentistry’s Student Clinician Award.

DR. JOSEPHINE CHANG, Class of 2011, on being interviewed by Fox News about NYUCD’s dental care program for survivors of torture.

DR. MICHAEL FLORMAN, PG Orthodontics Class of 2004, on coauthoring an article entitled “Diagnosing Early Interceptive Orthodontic Problems” for Dental Economics.

DR. MICHAEL WILSON, ’05, on being quoted in an article about Medicaid payments for dentists in the Syracuse, New York, Post-Standard.

In Remembrance
Dr. Seymour Amazon, Class of 1957
Dr. Saul Baxt Aasin, Class of 1941
Dr. Norman Cranin, Class of 1951
Dr. Marvin B. Engel, Class of 1942
Dr. Donald L. Everhart, former chair, Department of Microbiology
Dr. Eugene Hittelman, associate professor, Department of Cariology and Comprehensive Care
Dr. Anatole Karmen, Class of 1956
Dr. Steven B. Ross, Class of 1966
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In Remembrance
In the article that follows, I offer both an overview of the reasons underlying state and national interest in implementing training programs for midlevel providers and a discussion of my personal concerns and skepticism about the ultimate effectiveness of this approach in expanding access to care for the people who need it most.
This issue of Global Health Nexus takes a look at the juncture we have reached in the dental profession’s ongoing debate regarding access to dental care, and, in particular, whether the rapidly accelerating initiative—known as the dental therapist or midlevel provider movement—will actually expand access to care.

Not long ago, I was invited to give a talk celebrating the 200th anniversary of the Massachusetts General Hospital, and I used the midlevel provider movement in dentistry to explore the broader societal trends affecting the profession—including economics, demographics, public relations, and public policy. By tracking the trends from 1947 to the present and then overlaying them, some of the findings that emerged were rather remarkable and explained a lot, including the traction being gained by the dental therapist movement.

These findings spurred me to write the article, “What Just Happened?,” which immediately follows this message. In that article, I offer both an overview of the reasons underlying state and national interest in implementing training programs for midlevel providers and a discussion of my personal concerns and skepticism about the ultimate effectiveness of this approach in expanding access to care for the people who need it most.

Mine is one of several perspectives on the debate included in this issue of Global Health Nexus, which also offers opinions from several leading advocates for, and opponents of, the dental therapist movement. They are Dr. Raymond F. Gist, president of the American Dental Association (ADA); Dr. Carter Brown, a private practice general dentist who is also a South Carolina state dental society leader; Ann Battrell, RDH, MSDH, executive director of the American Dental Hygienists’ Association; and Dr. David A. Nash, William R. Willard Professor of Dental Education and professor of pediatric dentistry at the University of Kentucky College of Dentistry. Rounding out the discussion are comments by NYUCD’s Dr. Ananda Dasanayake, who was commissioned by the California Dental Association to conduct a systematic review entitled “Are Dental Procedures Performed by Auxiliaries Safe and of Comparable Quality?”; and by NYUCD’s national and international outreach leadership team, on “The Role of Dental Schools in Expanding Access to Oral Health Care.”

THE UNIVERSITY AS A CONVERSATION

Someone once described a university as an ongoing conversation—one with hundreds of people at any given time that goes on for years, and decades, even for centuries. People join the conversation and people depart from it, but the conversation continues. At first glance, a conversation seems like a pretty flimsy foundation on which to build a major institution—but nothing could be further from the truth. The intellectual engagement fostered by dialogue and debate as well as the ideas it inspires is far stronger than bricks and mortar. The power inherent in this definition of a university is evident in the antiquity of some universities—among the oldest institutions in the world. Thirty-nine continuously operating universities were founded before 1500 and even here in the United States there are universities with buildings older than the country they are located in. NYU—and its College of Dentistry—identify strongly with that tradition. We are committed to the role of a research university as a forum for discussion and inclusion of various viewpoints; or, to put it another way, to the role of a research university as a counterforce to dogmatism. Indeed, as NYU President John Sexton has
Dialogue within the university is characterized by a commitment to engage and even invite, through reasoned discourse, the most powerful challenges to one’s point of view. This requires attentiveness and mutual respect, accepting what is well founded in the criticisms offered by others, and defending one’s own position, where appropriate, against them…”

—John Sexton

written: “The embrace of the contest of ideas and tolerance of criticism does not mean a surrender of conviction. Dialogue within the university is characterized by a commitment to engage and even invite, through reasoned discourse, the most powerful challenges to one’s point of view. This requires attentiveness and mutual respect, accepting what is well founded in the criticisms offered by others, and defending one’s own position, where appropriate, against them…”

It is within this context of listening to the views of others that I want to assert that the dentist is the gold standard in delivering oral health care, for it is the dentist who brings to patient care a breadth of education and knowledge that is designed to provide higher-level treatment outcomes than those who have been trained purely as technicians. However, this belief does not preclude careful attention to the points of view of others who are striving with the best intentions to fix a system in which too many people are not receiving the dental care they need.

Other articles in this issue that I believe will also engage your interest concern innovative research, much of it collaborative, that is being conducted at NYUCD in the areas of bone biology, oral cancer pain, evolution theory, gene therapy and engineering, and the links between periodontal disease and diabetes. Regarding collaboration, I especially want to turn your attention to the opening story in News from the Colleges entitled “Groundbreaking Surgery Merges Passion, Computer Technology, and Teamwork,” which features a pioneering procedure using virtual surgery—performed by NYUCD alumnus, oral and maxillofacial and head and neck surgeon Dr. David Hirsch, in collaboration with NYU physician Dr. Jamie Levine and Dr. Larry Brecht, a maxillofacial prosthodontist, and also an NYUCD alumnus—to save the life of a young woman with a large tumor in her left jaw.

You will also meet other outstanding faculty, as well as students and staff, who are contributing on many levels to NYUCD’s increasingly diverse and robust academic environment, as well as learn about the exciting ongoing philanthropic support and international activities that are helping us to aspire to ever-higher levels of excellence.

Also in this issue, you will read about one of the great milestones of the academic year—the annual celebratory rite of passage of graduation day. It is a day that reminds us all of our reason for being and brings us back to the theme of this issue of Global Health Nexus: Devising ways to help improve the health of our society.
I want to assert that the dentist is the gold standard in delivering oral health care, for it is the dentist who brings to patient care a breadth of education and knowledge that is designed to provide higher-level treatment outcomes than those who have been trained purely as technicians. However, this belief does not preclude careful attention to the points of view of others who are striving with the best intentions to fix a system in which too many people are not receiving the dental care they need.
“I have yet to see any problem, however complicated, which, when looked at in the right way, did not become still more complicated.” This statement by Poul Anderson begins D. H. Meadows’s book entitled *Thinking in Systems*. The observation is relevant to a sometimes contentious conversation concerning the delivery of oral healthcare services in the United States. The discussion crystallizes around plans to introduce midlevel providers—dental therapists—into oral healthcare practice. The intent is to make dental care available to people who either cannot afford it or who live in places where dental care is unavailable. Because dentists have disproportionately distributed themselves within affluent suburban communities rather than less affluent rural and central urban communities, circumstances typically conspire to make dental care neither available nor affordable to those most in need.

**DENTAL THERAPISTS: “WHO ARE THESE PEOPLE?”**

Neither the scope of practice nor the education of dental therapists has yet been fully defined. Many models have been proposed both domestically and abroad. However, the one thing that everyone can agree on—the very thing that virtually defines the dental therapist—is that procedures that used to be done exclusively by dentists are proposed to be done by non-dentists. Thus, the exact scope of practice, level of supervision,
and required education all remain open questions, depending on the specific model under consideration. The education of dental therapists might be as little as two years beyond high school; two years within a baccalaureate-level college degree; two years within a specialized master’s-level degree; or incorporated into an advanced-level dental hygienist program. But even when these logistical issues are resolved, introducing this new category of dental practitioner into the existing network of dental care delivery will probably be more complicated than what is anticipated by either ardent advocates or vociferous opponents.

To move the conversation forward, I suggest stipulating three assertions as unequivocally true:

1. There is a significant problem with access to dental care in the United States;
2. Children dying of dental disease because of a lack of care is utterly repugnant and unacceptable; and
3. Even if a two-tier system of dental care arises, the premise that some care is better than no care is irrefutable.

I consider all three self-evident, but the first deserves elaboration: is there really an access to care problem? The evidence is compelling but circumstantial. The price for dental treatment has increased almost threefold (corrected for inflation) since 1947, and more than doubled since 1980, all at a time when the real cost of durable goods has declined. Dentists’ incomes have outpaced inflation nearly threefold since 1990. Fewer dentists graduated in 2009 than in 1980 while, over the same period, the population of the country has increased by 78 million. For me, this evidence is dispositive: conditions are right for an access to care problem.

I am also prepared to concede three other points, though I admit that they are arguable:

4. Well-designed studies relying on impartial performance measures will demonstrate no difference in the technical quality of service delivered by dental therapists and practicing dentists;
5. Dental therapists initially practicing under the supervision of licensed dentists will not evolve over time into independent practitioners who will compete with dentists through free-standing parallel dental therapy practices; and
6. Patients—both adults and children—of every socioeconomic stratum will find care delivered by dental therapists to be entirely acceptable.

Whenever comparisons have been made in the quality of dental procedures performed by dental therapy students and dental students or between dental therapists and dentists, no difference is discerned. As dental therapy is expanded as a discipline, more studies will be conducted and will probably yield the same result. Should this surprise anyone? If a key difference in the education of dental therapists and dentists is the length of education, it’s worth asking exactly how much time is spent learning the purely technical aspects of dental procedures. The difference between the two training programs might not be all that much. When learning how to place a class II restoration, does it really matter that the dental student studied the *Iliad* versus the *Odyssey* in college? Does a background in organic chemistry or knowledge of pharmacokinetics make a difference technically? Actually, I do think breadth of education is vitally important for a doctor—but less important for a technician. My point is that a more sophisticated background in the sciences and humani-
ties will not be discernable in studies intentionally designed to assess purely technical outcomes. Why should they?

My prediction that dental therapists will not evolve over time into independent and competing dental therapy practices—at least not on a large scale despite some pressure to do so—is based on the premise that it’s already hard enough for graduating dentists to make the kind of investment needed to establish a practice. On average, it now takes about 12 years before 95% of dentists secure an equity position as sole proprietor or partner in a dental practice. Overwhelmingly, dental graduates are people whose exclusive professional ambition from the outset has been to own a dental practice. Even before beginning their dental education, dental students have the entrepreneurial disposition that led them to secure the loans needed to attend dental school and to project the adequacy of their return on investment. Dental therapy students are more likely to enter the field with the expectation of becoming employees. In fact, the entire premise of introducing this category of practitioner is that they will work in public sector clinics.

From the employment perspective, dental therapists will resemble pharmacists more than they do dentists. As a field, pharmacy is big business; i.e., it has become entirely corporatized. Unlike 50 years ago, no one seeks admission to pharmacy school with the expectation of owning their own pharmacy. Pharmacists are, prudently, risk averse when it comes to making a major and uncertain financial investment in a private pharmacy that cannot compete with the major chains. Over time, pharmacy has become less attractive to the entrepreneurial-minded and more attractive to those seeking employment in a retail pharmacy chain or institution. In other words, the field now appeals to a different demographic. It will be the same with dental therapists. Even in the emergent nurse practitioner (NP) field, the focus seems to be on generating greater opportunities
for employment than for direct proprietorship.

Dental therapists seem even less likely than denturists to establish private practices inasmuch as the latter emerge from the dental technology business, an extant and entrepreneurial cottage industry.

Regarding patients’ acceptance of dental therapist services, the matter resides entirely within the hands of practicing dentists. Should dental therapists find employment in private dental practices, dentists will gravitate toward not giving patients a choice over whether they will be treated by the practice’s dentist or its dental therapists—precisely the way they don’t give patients a choice in being treated by dental hygienists or by expanded function dental assistants. Patients, generally, both like and trust their dentists. When the dentist steps out of the operatory and the dental therapist steps into it, patients will have no objection because, implicitly, the dentist has already given the okay. Dentists for whom it’s not okay will simply not hire dental therapists.

IS ANYTHING LEFT?

Given all these concessions, is there anything left to dispute? There is. And perhaps it is the most important question of all: Will the introduction of dental therapists as midlevel dental providers in the United States actually improve access to care? This point is central inasmuch as the entire dental therapist movement is predicated exclusively on the premise that it will. If this turns out to be wrong, then the rationale for the whole enterprise fizzes. In other words, while improved access to care is one possible outcome, it is naïve to think that this is the only conceivable result. Alternative scenarios are easily envisaged—perhaps even more likely—in which access to care is not improved, especially when taking into consideration (a) the existing market-driven economic infrastructure into which dental therapists would be introduced; (b) a lack of financial means or political will within federal, state, and local governments to sustain the kind of large-scale investment in delivery systems that would be needed to make the dental therapist model a success in caring for the underserved over the long term; and (c) greater consistency and astuteness within the corporate sector for furthering long-term corporate interests by application of financial resources and exertion of political influence.

In other words, rather than dental therapists finding employment in community clinic settings, schools, and other community-oriented facilities, a setting is easily imagined in which these new categories of practitioners are hijacked—at considerably better pay—into a fully corporatized model of dental care, one unlikely to be attentive to the needs of the underserved; or, if congenial to those needs, only incidentally so. Again, pharmacy might be the model for how this scenario could materialize: Gradual consolidation of individually owned practices; an increase in start-up costs, which would mean that even fully qualified dentists would find it harder to swing the loans needed to open or buy into a practice; followed by expansion of major retail corporations into dental care delivery services when profitability rises as labor costs provided by dental therapists decline. There is ample evidence that such an outcome is entirely conceivable.

In the 1960s, both Sears and Revco (a drugstore chain since incorporated into CVS) offered dental services. Both programs were eventually phased out. It’s easy to understand why: from the corporate perspective, dentists cost too much so the profit margin is too small. From the dentist’s perspective, the pay is too low. The corporation supplies staff and facilities, but doesn’t really provide anything the dentist can’t secure on his or her own. If the dentist is willing to accept the financial risk of proprietorship, the return on the dentist’s labor is much higher.
THE ACCESS/COST DILEMMA

Right now, key stakeholders seem to support the introduction of dental therapists. Those stakeholders are immensely influential because they include not only public health dentists and many educators, legislators, the media, corporations, and dental hygienists, but also the many patients who are currently unable to secure affordable dental care. In short, a large block of the public agrees in principle with the dental therapist movement, or would if they directed their attention to it. This makes it relatively easy for promoters of the movement to capture the narrative. The means by which these stakeholders exert influence is powerful, driven by economics, demographics, public relations, and public policy. However, as dental therapists enter the workforce, the interests of these stakeholders begin to diverge.

For instance, is the intent to improve access to care or to maintain the current inadequate access to care but at a lower cost? This question differentiates the interests of the public health sector from the governmental sector. To improve access to care would mean that increased funding of community-based and school-based clinics would be required—the primary employment sites for dental therapists. But this will increase costs, not decrease them. At present, there is little evidence that federal, state, or local governments are looking to spend more on oral health care. On the contrary, government seeks to spend less. Given the choice of staffing a community clinic with two dentists and four dental therapists or one dentist and five dental therapists, the second alternative would be cheaper. If about the same number of patients could be treated, government will gradually gravitate to the cost-saving option. The problem is that this will not improve access to care. It will only decrease the cost of inadequate access.

Will dental therapists function only within school- or community-based clinics? Among the models proposed, some include private practice options. In this arrangement, therapists would work within dentists’ private offices, treating both underserved patients and private paying patients—50% of the dental therapist’s practice (not the office’s) would qualify as underserved. The guarantor assuring that the private payer mix doesn’t creep upward to the financial benefit of the therapist and the office will be a legislative mandate. The problem is that legislative mandates are amended by the

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THE FATAL EMBRACE

The impact of introducing dental therapists into the highly privatized model of dental care in the United States is simply unpredictable. Will the US experience replicate that of other nations? The key determinant of success will be how these new practitioners are embraced by the economic system into which they are introduced. The verisimilitude of populations, economies, and healthcare systems is probably more important in attempting such extrapolation than are the strictly dental dimensions of the question. For instance, teaching a high school graduate in Sri Lanka to perform dental procedures in two years may not be all that different from doing the same thing for US high school graduates. On the other hand, receiving such trainees into an established national healthcare system versus the nearly entirely privatized artisanal industry of dental practice as it exists in the United States could make an enormous difference in eventual outcome.

Compare introduction of dental therapists in New Zealand more than 80 years ago with their introduction in Australia about 40 years ago. The New Zealand model has been pointed to as an unqualified success. According to an article by David Nash, there are over 610 dental therapists who:

provide care for the country’s 850,000 children. Ninety-seven percent of New Zealand’s children are cared for by dental therapists who are assigned to every elementary and middle school…at the end of a given school year, essentially none of New Zealand’s children in the School Dental Service [have] untreated tooth decay.

But transplanting the model elsewhere involves a lot more than simply the availability of dental therapists. In
the New Zealand–Australia comparison, some important differences might be the relative size of the two populations, differences in the economy, and the nature of the overall healthcare system.

New Zealand has a population of just over four million and a single dental school. When the dental therapist program was initiated there in the 1920s, the country was a welfare state with a highly regulated, protected, and subsidized economy—conditions that continued for more than 60 years thereafter and included free education and free health care. Introducing dental therapists into such a system could be relatively straightforward. In contrast, Australia has a population more than five times larger, requiring establishment of a more formalized operational bureaucracy. In addition, dental therapists were introduced in Australia when the country was moving toward major economic liberalization and deregulation—a more public-private blend. The current healthcare system in Australia intermingles governmental and private health plans, falling somewhere between a subsidized dental system and the nearly fully privatized system of the United States.

A recent report on oral health care in the Australian state of New South Wales identifies significant waiting lists for access to public oral health care, young children having minimal access to public oral health care, and a need for dramatic improvement in performance and accountability. Rural and remote communities have increasing need yet enjoy limited access to public oral health care. The same is true for many ethnic and indigenous communities having poor oral health and limited access to care. Admittedly, the situation would probably be much worse without dental therapists; but the take-home message is not that; rather, it’s about the system. The lesson is that the results obtained in New Zealand are not perfectly replicable based on the introduction of midlevel providers alone. In Australia it was unrealistic to expect dental therapists to make much of a difference if other elements of the system did not support change in ways that went far beyond the

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**Figure 1. Live Births in the United States**

![Chart showing live births in the United States from 1950 to 2015.](chart.png)
Figure 2. US Dental School Applicant and First-Year Enrollment Trends 1955-2007

- **Introduction and training of the providers themselves.**

Finally, even purportedly good results in New Zealand may not be everything they’ve been cracked up to be: A March 6, 2011, article in the *New Zealand Herald* entitled “NZ children’s dental health still among worst” states:

The dental health of young children continues to be among the worst in the developed world, figures reveal. Forty-four per cent of 5-year-olds have at least one decayed, missing or filled tooth, a school dental services report has found. The Government has spent $417 million on the problem since 2007 but the figures have shown little improvement. In 2000, 48 per cent of 5-year-olds had cavities, and the figure has not dropped below 43 per cent since. New Zealand rates are worse than the UK, US and Australia.

*NEVER ATTRIBUTE TO MALICE...*

There’s no question that efforts to introduce midlevel providers in the United States in the 1950s and 1970s gained little traction, whereas, introducing them in the 2000s in Alaska and Minnesota has gained a lot of traction. While it’s fair to say that organized dentistry has pretty consistently opposed the dental therapist movement, I don’t think it’s fair to impugn dentists’ motives. Consider the effort to introduce both dental nurses and advanced practice dental hygienists by the Forsyth Dental Center in Massachusetts in the 1950s and 1970s, respectively. The history of these innovative programs has been detailed by David Nash. In 1949, the Massachusetts legislature authorized Forsyth to implement a pilot program that included two years of training to prepare and restore carious lesions under the supervision of a dentist:

The reaction and response of organized dentistry was swift and strong. The ADA House of Delegates passed multiple resolutions: ‘deploiring’ the program; expressing the view that any such program concerning the development of ‘sub-level’ personnel, whether for
experimental purposes or otherwise, be planned and developed only with the knowledge, consent, and cooperation of organized dentistry; and stating that a teaching program designed to equip and train personnel to treat children’s teeth cannot be given in a less rigorous course or in a shorter time than that approved for the education of dentists...Faced with increasing pressure from organized dentistry in Massachusetts and nationally...Massachusetts Governor Paul Dever signed a bill in July 1950 rescinding the enabling legislation that had been passed the year before.

In 1970, the story was repeated; however, now the intent was to expand the function of Forsyth dental hygiene students to include restorative procedures for children, including administering local anesthesia, preparing and placing Class I, II, and V amalgams as well as Class III and V composites. According to Nash, though the program proceeded well between 1970 and 1973, demonstrating “advanced training in restorative care for children could be accomplished in the ‘traditional two year dental hygiene curriculum by adding two summer sessions and condensing and combining some courses,’ the Massachusetts Board of Dental Examiners determined that the pilot project was a direct violation of the Dental Practice Act of Massachusetts, leading the attorney general to force the closure of the Forsyth experiment in June 1974.”

The account is accurate but incomplete. In isolation, organized dentistry and the state dental board come across very badly both in 1949 and 1970. The implication is that organized dentistry had the ulterior motive of protecting its own interest rather than the public’s. But consider the context: What else was happening at the same time? In the late 1940s and 1950s, organized dentistry became the major advocate for fluoridating community water supplies, for fluoridated dentifrice and, later, endorsed the use of sugar-free confections and soft drinks. The profession was praised on the grounds that its stated positions on these issues could lead to its own demise, or at least to a significant drop in the need for dentists. It’s hard to accept that these same individuals were totally self-serving on the matter of expanded auxiliaries and totally self-sacrificing on the eradication of dental caries. An alternative explanation is that organized dentistry really did believe that they were protecting the public’s interest and that less qualified practitioners really did represent an unwarranted risk. At least in the 1950s, organized dentistry’s conclusions might be questioned, but not its motives.

The 1970s scenario is more complex. That organized dentistry strongly opposed the Forsyth experiment with advanced practice dental hygienists is not in doubt, but consider the context. Figure 1 shows live births in the United States from 1950 projected to 2015. Most noticeable is an enormous drop in births centered on the mid-1970s. This is known as the baby bust, and was the predictable latent period attendant to the birth synchronization produced by World War II and revealed as an antecedent baby boom. Perhaps the effect was further compounded by the introduction of new methods of contraception and legalization of abortion. Nevertheless, the decrease in births was felt by dental practitioners in the form of open slots in their appointment books. The first to feel the effect were pediatric dentists. As more general dentists stopped referring children to pediatric specialists, a realistic question arose by the early 1980s over whether a specialty for children’s dentistry was even needed.

The next group of specialists to feel the effect was orthodontists. At one point, nearly one-third of orthodontic billings were made by general dentists. It was this drop in demand among adolescents that initiated a major movement toward adult orthodontics—previously relatively uncommon. Oral surgeons were next on the hit list. As fewer young adults were in need of removal of wisdom teeth, oral surgeons were encouraged to practice the newly defined “full scope” of the specialty and oral surgery became oral and maxillofacial surgery. Next, look at the anticipated production of new dentists as experienced by practitioners of the 1970s and 1980s (Figure 2). While births were at an all-time low, dental schools were at an all-time high in churning out new dentists. The baby bust came precisely 20–25 years after the baby boom—when the baby boomers would attend dental school. Contributing further to the greater number of individuals seeking to attend dental school was the Viet Nam war, which drove even more 22–26-year-olds into dental school as a means of securing an exemption from mandatory military service.

From a practicing dentist’s standpoint, business
was at an all-time low and new dentists were at an all-time high and would be for the foreseeable future. Further, credible claims were being made that the drop in patients emerged not from fewer births, but from long-predicted and permanent changes in disease patterns because of fluoridation effects. Organized dentistry in concert with universities mobilized to cut the production of dentists. Thus, seven dental schools closed outright. Schools that had previously shortened their educational programs from four to three years now returned to a full four-year curriculum, while decreasing class size and diminishing the throughput of students within dental educational institutions. The net capacity of the dental educational system dropped by about one-third overall. The perception at the time that there were too many dentists was an entirely thoughtful and defensible position. Temporally, it coincides precisely with the effort of the Forsyth Dental Center to expand services by auxiliaries when it made absolutely no sense to do so. In fact, as recently as 2005, a University of California Health Sciences report argued that “the supply [of dentists] appears to be adequate.” Thus, credible authority envisaged no absolute shortage of dentists, only a maldistribution—a problem potentially solvable through incentives to promote better distribution as opposed to inventing new categories of practitioners.

Thus, I am very reticent to criticize the profession or to question its motives. One who has studied for eight or more years for the privilege of treating human beings may find it a little difficult to move blithely into a realm where high school graduates have the same privilege. It does seem reasonable to ask whether the dignity accorded the human person and the privilege of providing direct patient care can be adequately imprinted through a purely technical education. Advocates for change take on a great burden to assure that their worthy intentions are achieved and that no harm is done—as do those in opposition.

“A list of references appears in the online version of this article at http://www.nyu.edu/dental/nexus/index.html.”
Breaking Down Barriers to Oral Health for All Americans: The Role of Workforce

By Raymond F. Gist, DDS

President, American Dental Association

ADA American Dental Association®

America’s leading advocate for oral health
In recent years a variety of stakeholders have proposed new models for expanding the delivery of oral health care, based largely on their interpretation of the size, location, and composition of the dental workforce.

Certainly, an adequate dental workforce, located where it is needed and sufficiently funded to carry out its mission, is critical to improving the nation’s oral health. This includes having sufficient numbers and types of allied personnel available to support the dentists who ultimately are responsible for diagnosing, planning treatment, and delivering those services that only they, as doctors of oral health, are appropriately educated and trained to perform.

ADA policies on workforce are too numerous to mention here, but they all derive from basic principles.

- All Americans deserve access to oral health care provided by fully educated and trained dentists and the teams that support them.
- While innovative use of existing and some new dental team members shows great promise, only dentists should diagnose disease, develop treatment plans, and perform surgical/irreversible procedures.
- Dentists, in cooperation with appropriate governing bodies, should determine the scope of practice of allied dental personnel with an eye to (1) which functions and procedures can be delegated, (2) what degree of supervision is appropriate for those procedures and personnel, and (3) which cannot be delegated to someone who lacks the knowledge and skill of a dentist.
- Everyone who provides oral health care must have completed appropriate education and training, and must meet any additional criteria needed to assure competence within the scope of practice approved by authorized licensing bodies.

A consistent refrain among supporters of so-called midlevel practitioners is that there are not enough dentists to care for a major influx of indigent patients. They further argue that baby-boom dentists will retire in such numbers as to further diminish what they maintain is an already inadequate dentist population. In fact, studies conducted by the ADA and the American Dental Education Association (ADEA) indicate that the number of dental schools and graduates will increase steadily through 2030 and that the number of professionally active dentists also will increase from its current level of approximately 180,000 to as many as 200,000 over the same period. The real problem is where the dentists are in relation to underserved populations. Access disparities can be greatly reduced by finding new ways of getting dentists to the people and getting people to the dentists.

The National Health Service Corps, the Indian Health Service, and the loose network of Federally Qualified Health Centers use various combinations of incentives to place dentists in underserved areas, most focusing on student loan repayment. Some states also offer tax incentives or scaled reimbursement for practitioners working in underserved areas or providing care under public assistance programs such as Medicaid. Some dental programs join forces with schools or social service entities to provide transportation and other support services to help patients keep appointments.

Even under chronic funding constriction, imaginative people have maximized available resources and leveraged natural allies to dramatically improve the abilities of existing programs and systems to deliver care where it is most needed.

Administrative and reimbursement reforms to the Medicaid dental
programs in Michigan (Healthy Kids Dental), Tennessee (TennCare), and Alabama (Smile Alabama!) have substantially increased dentist participation and patient utilization. In Brattleboro, Vermont, Head Start, the state health department, school officials, and hospital administrators collaboratively established a fee-for-service, for-profit dental center to address the needs of the underserved in a rural community.

All of these initiatives wrought significant, positive change through relatively minor funding increases combined with improvements in administration. They did so with little or no change in the population of dentists. Unfortunately, unlike Brattleboro’s small-scale program, none of the statewide systems provide care to adults in any meaningful way.

Multiple groups have offered new workforce models intended to provide clinical services—including surgery—to underserved populations. Their proponents cite various dental therapist programs in other countries, in which non-dentists perform such surgical procedures as extractions, restorations, and even pulpotomies. But the midlevel programs in these countries differ so dramatically in scope of practice, populations served, and degree of dentist supervision that referring to them en masse is misleading at best.

These models share, however, some basic flaws. They overload midlevel providers with more responsibility than they should be expected to bear. Their proponents consistently refer to certain procedures, including extractions, as “simple,” saying that of course more complex cases will be referred to dentists. However, we believe that midlevel providers’ training—some models call for as little as 18 months—cannot adequately prepare them to distinguish between “simple” and “complex” cases. We further question a midlevel’s ability to distinguish between teeth that cannot be saved and should be extracted from those that could be saved by restorative methods beyond the midlevel’s training. For these and other reasons, the ADA opposes unequivocally models that call for non-dentists to perform surgical/irreversible procedures, often with little or no direct supervision by fully trained dentists.

Midlevel proponents either imply or assert that care from these providers will be less expensive than that delivered by dentists, because they will earn less than dentists. But the difference between the salary of a dentist and that of a therapist or advanced hygienist would likely be offset by a therapist’s lesser productivity compared with that of a fully trained dentist and would have a minimal effect on the overall cost of delivering care.
The ADA is piloting a new dental position, the Community Dental Health Coordinator (CDHC), that represents a completely different philosophy. Modeled on the community health worker, which has proven extraordinarily successful on the medical side, CDHCs function primarily as oral health educators and providers of limited, mainly preventive clinical services. They also help patients clear the red tape, find dentists, book appointments, and assist with critical logistical support such as securing child care, transportation, and permission to miss work in order to receive treatment. A public health system based on the surgical intervention in disease after disease has occurred is inherently flawed. Rather than focusing strictly on treating disease, the CDHC provides the education and preventive services that ultimately can contain an epidemic by preventing it.

In some communities, dental clinics, whether government funded, private, or nonprofit, may be the only resource available for dental care, and they often are overwhelmed. Many dentists who dedicate their careers to working in them do so out of a powerful sense of social responsibility. But the system cannot sustain itself relying solely on doctors who, upon completing grueling years of education and training, to say nothing of attempting to repay the cost of completing their education, choose such selfless career paths. These positions must pay competitively. Equally important, clinics must find new ways to partner with private practitioners, who can adjust to varying caseloads and confer a degree of efficiency beyond the capabilities of clinics under their current administrative and compensation structures.

Dental school clinics and off-site training programs also can be instrumental in providing needed care to patients who otherwise could not afford it. A prime example is the collaboration between the NYU College of Dentistry and Henry Schein Cares, which places dental students, faculty, residents, and hygienists in diverse clinical settings caring for disadvantaged patients. In addition to the obvious benefits of providing care to underserved populations, such programs bring students into direct contact with people whose oral health needs are profound, and teach students the real impact they can have in serving these communities.

Untreated dental disease in America is a national disgrace. What Surgeon General David Satcher famously called a “silent epidemic” of untreated oral disease owes in part to a failure to speak up. Dentists have carried the burden of advocating and caring for the underserved for decades, with only limited success. Perhaps most frustrating is that real change is within reach. The system of clinical care is essentially
in place, one that has proven to be a model for the larger sphere of health care—patient education, focused prevention, and, when needed, early intervention to restore optimal health. When brought into this system, patients are empowered to be stewards of their own health.

Innovations in the dental workforce, such as expanded function dental assistants, oral preventive assistants, and patient navigators like the Community Dental Health Coordinator, can greatly improve the system’s efficiency and capacity. But addressing workforce issues while ignoring other major determinants such as education, prevention, administration, and, most importantly finance, is the policy equivalent of digging a hole in the ocean.

That other sectors of society are becoming increasingly vocal and passionate about the need to improve America’s oral health can only help. Disagreement is natural and ultimately healthy. But attempts to end the epidemic of untreated dental disease that do not position dentists as leaders and guides are doomed to fail. The people we all want to help deserve better—everyone deserves a dentist. The 156,000 members of the American Dental Association stand ready to continue working, aided by our new allies, toward our common goal of a healthier, more productive nation.

Addressing workforce issues while ignoring other major determinants such as education, prevention, administration, and, most importantly finance, is the policy equivalent of digging a hole in the ocean.

"Addressing workforce issues while ignoring other major determinants such as education, prevention, administration, and, most importantly finance, is the policy equivalent of digging a hole in the ocean."

This article summarizes a statement issued by the American Dental Association in February 2011. The full statement is available at http://www.ada.org/EPUBS/assets/ada_workforce_position_stmt.pdf. The complete listing of current ADA policies is available at http://www.ada.org/currentpolicies.aspx.
Improving the Oral Health of the Underserved: You Can’t Cure What You Misdiagnose

By Carter Brown, DMD

Dr. Brown is a private general dentist in Greenville, South Carolina.

I was asked to share my thoughts and experiences as an individual, private practice dentist, as well as a state dental society leader, on how workforce issues affect access to oral health care for the underserved. Whenever this topic comes up, I ask, “Exactly what are we trying accomplish?” For my part, our ultimate goal should be achieving optimal oral health for everyone who seeks it.

I remain frustrated and saddened that so much time and debate and so many resources surround one proposed solution—the so-called midlevel provider—which focuses exclusively on treating disease that has already occurred. This is essentially increasing the speed at which you’re bailing a very leaky boat. It ignores the need for a comprehensive strategy that diagnoses the full extent of the driving factors. Access to clinical care is just one of many factors needed to improve oral health. Workforce is but a small part of the access factor.

The patient base in Greenville, South Carolina, runs the full spectrum, as does the local economy. We have international corporations but also abandoned textile mills and their displaced workers. During my 27 years in general practice here, I have treated patients that reflect this cross section. For the most, part patients show similar oral health requirements regardless of their economic status.

What does ‘access’ really mean? Is it the number of the degree to which patients get care, or the ease with caused us to lose sight of what we are trying
patients who receive care, the ability of patients to get care, which they can get care? I believe that a lack of clarity has to accomplish."
Some in the community seem to take the “I’m sick/walk in” attitude toward health care. Many of those advanced-oral-disease, non-patient-of-record individuals just end up at the emergency room, where their treatment costs much more than it would in a dental setting and does nothing to cure the underlying disease. This is no pathway to oral health.

Dr. Frank Bowen, director of the Volunteers in Medicine clinic in South Carolina, says their mission is shifting from acute care to wellness. Shifting to patient empowerment, responsibility, and wellness must be one of our goals. This is not a treatment-focused solution. We have a Federally Qualified Health Center with a dental clinic, as well as a very good free dental clinic. Yet we still have a segment of the population not utilizing the available care. How can adding more hole fillers convert that into health? That requires navigators and social workers, not adding treatment techs.

Dental disease is best managed by a patient-dentist relationship that facilitates treatment and minimizes recurrence of disease. This takes a long-term commitment from both patient and dentist. Until there is a sense of value for oral health, with people both seeking professional care and taking ownership of their own health, we will never see
the increase in utilization that should be a natural driver for oral health.

As a profession, we still suffer from a Rodney Dangerfield syndrome. Politicians, comedians, and other public figures routinely joke that something awful is “about as pleasant as a root canal!” Even in matters of public health, dentistry often is not taken seriously. Excessive soft drink consumption, combined with poor oral hygiene, can devastate the teeth, a condition that some dentists refer to as “Mountain Dew Mouth.” Dentists in many states have long lobbied to remove soft drink machines from schools, but it was not until obesity became a major concern that schools took action. We shouldn’t quibble when people finally get around to doing the right thing, no matter what drives them to do it, but the societal failure to value oral health is chronic and at times crippling.

Dentists are the doctors of oral health. Dentists diagnose and cure disease. We eliminate pain and infection. Our continually broadening scope of clinical training, along with salivary diagnostics and improvements in technologies such as imaging, is allowing dentists to diagnose some systemic diseases early in their development, with potentially life-saving outcomes. Most importantly, with the possible exception of vaccinations, modern dentistry evinces the most successful model of prevention in all of health care.

Unfortunately, on the policy side, oral health remains perennially short-changed, and the consequences of that neglect on the most vulnerable Americans are accordingly profound and tragic. I do not believe that surgical intervention, especially given realistic expectations of public oral health funding, will ever end the epidemic of untreated oral disease. Prevention, with oral health education as its foundation, can. You can’t drill your way to oral health.

Does the mom who gives her kids candy at the check-out line know how to keep their teeth and gums healthy? Are diabetics aware of the particular importance of monitoring and maintaining their periodontal health? How many parents know to get a baby to the dentist when her first tooth erupts? The federal government spent millions educating the nation about digital TV conversion. How much does it spend on oral health education? The government offered coupons for digital converter boxes for those who couldn’t afford one. Where are the dental care coupons?

This pervasive, societal failure to understand, value, and act on the importance of oral health is a far more meaningful factor than workforce. I base this on years of experience as an advocate for better oral health in South Carolina, a state with historically strong rates of dentist participation in Medicaid.

Here are some key findings from a five-year assessment of 5,732 children in 73 schools done by the state Department of Health using standards developed by the Association of State and Territorial Dental directors: Children enrolled in Medicaid were 32 percent more likely to have “caries experience” than those not enrolled. However, children in the Medicaid group showed no significant difference in untreated caries from those in the general population. The same held true for the treatment urgency summary. Rates were the same as those for the privately insured population. And children enrolled in Medicaid were more than 35 percent more likely to have sealants than non-enrolled children. The
study concluded that “parent involvement and transportation” were the big drivers of utilization of care, not the availability of dentists, and not income level.

This is not to say that workforce isn’t a significant factor, one that can positively affect the oral health of the underserved. Ten years ago, the South Carolina Dental Association received a Robert Wood Johnson Foundation grant to test patient navigators. We targeted counties with few dentists and low utilization. The navigators were from the target communities and knew who needed care. They helped patients make and keep appointments and follow-up appointments when indicated. With very little money and very little training time, utilization rates increased to match those of surrounding counties.

We now provide training for school nurses and have created a new position, the Community Oral Health Coordinator. The issue was not the availability of dentists. Multiple factors—chiefly logistical and administrative barriers and lack of oral health literacy—were creating oral health crises in pockets of the state. The introduction of these simple and low-cost innovations helped these communities lift themselves up to a better state of oral health.

South Carolina’s Rural Dental Incentive plan helps repay student loans for dentists who locate in designated areas and treat Medicaid patients for three years. Most of the participating dentists have stayed beyond that three-year commitment.

We started a free clinic using senior dental students on a rotation to provide free, comprehensive care. We use a technical college’s hygiene department and space at the free medical clinic. Supplies are donated and local dentists donate their time as adjunct faculty. A mobile dental unit donated by a hospital allows us to travel to nursing homes and other locations. We plan to add a hospital rotation to help with pre-surgery oral health issues and collaborate on oral systemic research with diabetic patients. Medical University of South Carolina (MUSC) College of Dental Medicine Dean Jack Sanders, DMD, says these programs help the students “grow their hearts” for community commitment.

The key is not the number of dentists; it is treatment capacity. The decades-old ratio of 1:2,000 is out of date. The Health Resources and Services Administration standard is now 1:5,000. Advances in technology and practice efficiency, along with increases in both the number and scope of practice of auxiliaries within the dental team, have increased the oral health system’s capacity to deliver care. Microeconomics 101 tells us not to increase capacity until we maximize our existing production. In a March 2011 national survey by the Academy of General Dentistry, more than 50 percent of the dentists said they could take on as many as 11 percent to 25 percent more patients with the capacity they already have.

“This is not to say that workforce isn’t a significant factor, one that can positively affect the oral health of the underserved. Ten years ago, the South Carolina Dental Association received a Robert Wood Johnson Foundation grant to test patient navigators. We targeted counties with few dentists and low utilization. The navigators were from the target communities and knew who needed care. They helped patients make and keep appointments and follow-up appointments when indicated. With very little money and very little training time, utilization rates increased to match those of surrounding counties.”
If there is not a shortage of dentists, then why doesn’t everyone get care? Without insurance, cost can be a barrier. If you need help making appointments, just finding a dentist can be a barrier. If you lack basic oral hygiene, disease is almost inevitable. If you feel stigmatized by oral disease, you’re a lot less likely to seek help. If you can’t get a ride to the dentist, or time off from work, or find someone to watch the kids, you can’t get care. Increasing workforce size does nothing to address those basic needs. Most of the factors separating patients—or more accurately, people who should be patients—from dentists are not in our control. The real barriers to care, or drivers for utilization for care, reside in the realms of education, social services, societal and cultural norms, ancillary needs such as transportation or child care, a systemic failure to value oral health, and, ultimately, the financial commitment to overcome these barriers.

Canada and New Zealand have learned the hard (and expensive) way that therapist programs oriented almost exclusively toward restorative procedures did not reduce the caries rate. Without educating patients, instilling a sense of the value of oral health, implementing widespread prevention programs, providing the ancillary support that people need to participate in the oral health system and—sorry, folks—coming up with the funding needed to make all of that happen, all the therapists in the world will not create health. Think again about obesity. Would anyone in his right mind suggest that the way to control that epidemic is to train non-physicians to perform liposuction?

Remember that our goal is the best possible oral health for as many people as possible. We need to quit arguing about whether therapists might hurt patients or what the definition of access is. Existing, available services are underutilized for multiple reasons. Focusing only on untreated disease leads, I believe erroneously, to the conclusion that we need more people to fill and pull more teeth. We need better information for our diagnosis. Midlevel providers have after decades failed to improve the oral health of the underserved populations or save money in the very countries that their advocates hold up as shining successes that should be replicated here.

Positive workforce ideas like patient navigators, programs that train school nurses and physicians to assess risk and refer to dentists, and expanded function auxiliaries are all proven successes. They promote oral health by empowering people to take care of themselves. They bring people into a proven system based at its heart on the doctor-patient relationship, and are very cost effective.

We have made significant progress in South Carolina. Much work remains. The biggest barrier of all is the need for societal recognition of the value of oral health and that oral health is achievable for all those who seek it. Creating a second tier of care is a treatment plan based on a faulty diagnosis. You cannot cure what you misdiagnose.
The House of Delegates of the American Dental Hygienists’ Association (ADHA), in a visionary effort to address the severe oral health disparities plaguing millions across the United States, at its 81st annual session in 2004, adopted three key resolutions designed to impact the oral health of the public. Among these resolutions was a call for the creation of an Advanced Dental Hygiene Practitioner (ADHP).

ADHA’s vision for the ADHP is a master’s-level educated, licensed oral healthcare provider who will leverage the existing dental hygiene workforce to have an even greater impact on the delivery of oral health care to those in need.

In the medical field, healthcare providers such as nurse practitioners and physician assistants have proven effective and successful in working with physicians to expand medical care in a multitude of healthcare settings. The concept of midlevel providers in oral health is not new. Currently, more than 40 countries, including Canada, New Zealand, Australia, and the United Kingdom, allow midlevel practitioners to practice in oral health.

The ADHP is intended to serve in a capacity similar to that of the nurse practitioner—as a new member of the oral healthcare team who could provide an additional point of entry into the oral healthcare system for those who do not currently have access to routine dental care.

A 2007 survey conducted by the National Association of Community Health Centers found that restorative and preventive services were the top two needed oral health services as identified by the Federally Qualified Health Centers (FQHCs). The report also noted that among non-physicians, the dentists comprise the highest rate of provider vacancies in FQHCs. At the national level, a report by the Pew Center on the States proclaims that 49 million Americans live in areas federally designated as having a shortage of providers.

ADHPs will be educated in health promotion and disease prevention, provision of primary care, case and practice management, quality assurance, and ethics, a course of study which will provide a comprehensive approach to the delivery of oral healthcare services. ADHPs will bring increasing numbers of patients into the oral healthcare pipeline and make necessary referrals to dentists and other healthcare professionals, serving to strengthen the crucial link between the oral health, medical, and community networks.

ADHPs are anticipated to provide a full range of preventive services in addition to select restorative services with limited prescriptive authority to
ADHA’s vision for the ADHP is a master’s-level educated, licensed oral healthcare provider who will leverage the existing dental hygiene workforce to have an even greater impact on the delivery of oral health care to those in need.

As envisioned, the ADHP will be a licensed dental hygienist educated at the master’s degree level, the general academic standard for other advanced practice healthcare providers.

ADHPs will provide care in a variety of public health settings—schools, clinics, and long-term care facilities among others—to a diverse patient population. ADHPs will be well placed to work collaboratively with dentists and other members of the oral health team through the use of teledentistry (the use of information technology and telecommunications for dental consultation, education, and public awareness) and other technology. The ADHP model has been acknowledged as a meaningful and substantive response to the call of the US Surgeon General to increase access to oral healthcare services for the nation’s underserved.

RECENT DEVELOPMENTS AND CURRENT ADHP STATUS

In March 2008, the Board of Trustees of ADHA adopted the Competencies for the Advanced Dental Hygiene Practitioner. The adoption of ADHP policies by the ADHA House of Delegates and adoption of ADHP Competencies by the ADHA Board of Trustees were the first steps in establishing the framework for advanced practice dental hygiene. Concurrently, the first advanced practice dental hygiene educational program began to be developed by Metropolitan State University in Minnesota, based, in part, upon ADHA’s approved ADHP Competencies.

In 2009, Minnesota was the first state to pass legislation into law to create two new types of dental healthcare providers. This ground-breaking legislation was introduced
ADHPs will bring increasing numbers of patients into the dentists and other healthcare professionals, serving to medical, and community networks.
by the Minnesota Safety Net Coalition and was supported by more than 60 stakeholder groups, including the Minnesota Dental Hygienists’ Association and the Minnesota State Colleges and Universities (MnSCU). The MnSCU system includes Metropolitan State University.

The outcome of the Minnesota legislation was the establishment of two new oral healthcare providers: a Dental Therapist (DT) and an Advanced Dental Therapist (ADT). The Dental Therapist language essentially outlines practice for a provider whose scope of practice would include some basic preventive services, limited restorative services, and extractions of primary teeth. Most services offered by Dental Therapists will require the presence of a dentist. In order to become licensed, Dental Therapists will have to graduate from an approved bachelor’s or master’s degree program.

The other new provider, the Advanced Dental Therapist, is a master’s-level educated provider who will be licensed to practice under a more advanced scope of practice. Advanced Dental Therapists will evaluate, assess, and treat plan, perform nonsurgical extractions of permanent teeth, and administer all the services of a Dental Therapist. ADTs will also be able to provide, dispense, and administer analgesics, anti-inflammatory agents, and antibiotics. Like Dental Therapists, Advanced Dental Therapists will work with a supervising dentist; however, ADTs will not require on-site supervision because they will administer care via a collaborative management agreement that sets forth standing orders for the administration of care.

Metropolitan State University requires that enrollees in its master’s program already be licensed to practice as dental hygienists. Graduates from the Metropolitan State University program will have dual licensure as an ADT and a dental hygienist and will be able to administer a wide range of preventive and restorative services. The first class of Advanced Dental Therapists graduated from the Metropolitan State University System in June 2011. At this time, eight state legislatures are currently investigating similar advanced practice dental hygiene or combined Dental Hygiene/Dental Therapy providers.

Recognizing that the national debate on new oral health workforce models will continue to evolve along with the multitude of other strategically important issues related to access to care, the ADHA is open to examining and discussing developing workforce models that can build upon the preventive and therapeutic knowledge and skill sets of dental hygienists.

**HOW WILL THE ADHP AND SIMILAR MODELS EXPAND ACCESS?**

While new oral health workforce models are receiving a great deal of national attention, there are a multitude of strategies that will need to be in place in order to address the oral health access issues in the United States. Any new workforce model will require research evaluations and studies of the quality of practicing providers in the field. To date, only the dental health aide therapist (DHAT), a model based on dental therapists practicing in Alaskan tribal areas, has been formally evaluated.

In the fall of 2010, an evaluation on the use of DHATs in Alaska was released by the W.K. Kellogg Foundation. ADHA leadership was encouraged that the Kellogg research indicated that the DHAT model is successful in bringing high-quality, cost-effective dental care to those in tribal Alaska. The evaluation also found that restorative services, which were previously administered only by dentists but are now offered under the scope of DHAT, can be successfully taught to midlevel providers.

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**oral healthcare pipeline and make necessary referrals to strengthen the crucial link between the oral health,**
Clearly, additional evaluation will be necessary with any model that is implemented to determine effectiveness, but this process has been complicated by recent events in Washington. As a part of the Affordable Health Care Act signed into law in 2010, a federal grant program (the Alternative Dental Health Care Provider Demonstration Grants) was designed and established to pilot-test emerging models of oral healthcare delivery. The grant program recognizes the need for innovations to be made in oral healthcare delivery to bring quality care to those who are currently underserved. The program would provide funding for up to 15 grantees testing new dental workforce models, including those that use entry-level dental hygienists, advanced practice dental hygienists, and dental therapists. In the recent budget negotiations, in spite of broad support from more than 60 stakeholder organizations, a provision was included to prohibit funding for the grants in fiscal year 2011. ADHA remains hopeful that these programs will be funded in future budgets.

Several factors are inherent in the design of an advanced practice dental hygiene model that would indicate a positive effect on access to care. Among these factors are:

- **A Ready Workforce to Implement the Model**
  The projected growth in the dental hygiene workforce remains robust. The Bureau of Labor Statistics forecasts 36 percent growth in the profession by 2018. With over 150,000 dental hygienists in the US, 325 entry-level dental hygiene education programs, 57 degree completion programs, and 20 master’s degree programs, the dental hygiene profession is an ample workforce that is educationally prepared and licensed to meet the preventive needs of underserved populations.

- **Taking a Lesson from Medicine**
  The ADHP model as designed provides the public with a licensed provider who has received an accredited education at the master’s level. Further, this model is based upon the nurse practitioner concept, which has been highly successful in medicine. The public, regulators, and legislators are all familiar and comfortable with this type of model, which will prove invaluable in bringing patients who lack care into the oral healthcare system and creating the legislation necessary to implement the model.

- **Economic Advantages**
  In a recent presentation at the Special Care Dentistry Association Annual Meeting, Michael Helgeson, DDS, made a presentation entitled “New Oral Health Workforce—Serving People with Special Needs.” Dr. Helgeson provided data from an analysis conducted by Apple Tree Dental in Minnesota, which looked at the cost impact of adding Minnesota’s ADTs to their workforce. When Apple Tree estimated the salary of the new provider as midway between a dental hygienist and a dentist and looked at over 65,000 specific services based on ADA categories and codes, they found that each full-time ADT will result in savings of $50,000 per year.

ADHA readily acknowledges that with 50 states and 50 different practice acts, this issue is not a “one size fits all” proposition. ADHA, on behalf of the 150,000 dental hygienists in America, is dedicated to remaining open to collaboration and flexibility on this issue. Dental hygiene wants to do its part to ensure that no American ever need go without adequate oral health care.

“ADHA leadership was encouraged that the Kellogg research indicated that the DHAT model is successful in bringing high-quality, cost-effective dental care to those in tribal Alaska.”

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A Professional Imperative: Caring for the Oral Health of America’s Children

A PROFESSIONAL IMPERATIVE

There are a number of imperatives for learned professions. However, the ultimate imperative was advanced by Abraham Flexner, the father of modern American medical education, when he said, “professions are organs contrived for the achievement of social ends rather than as bodies formed to stand together for the assertion of rights or for the protection and interests and privileges of their members. The “social end” currently at issue is ensuring that all children have access to oral health care.

The imperative advanced above is one of the six characteristics Flexner explicated, which subsequently contributed to the twentieth century understanding as to what constitutes a profession. Sociologically, a profession is a profession; that is, it is to profess—meaning to vow or promise. Thus, learned professions and professionals are understood to have promised society they will use their learning and expertise to advance societal well-being. Our profession has been granted a virtual monopoly by society to practice dentistry as a result of our vow to make the oral health of our patients and of society our primary purpose. Consequently, dentistry exists with a moral imperative—doing good. Caring for the oral health of all Americans is dentistry’s professional calling. However, this responsibility is particularly crucial in the context of caring for our nation’s children.

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THE MORAL PRIORITY OF CHILDREN

Philosophers Kopleman and Palumbo have published a thoughtful and compelling paper entitled “The U.S. Health Delivery System: Inefficient and Unfair to Children.” The paper explores the four major ethical theories of distributive or social justice: utilitarianism, egalitarianism, libertarianism, and contractarianism. The authors conclude that no matter which theoretical stance you take, all support the perspective that children should receive priority consideration in receiving health care.

Norman Daniels, professor of bioethics and population health at the Harvard School of Public Health, argues that a just society should provide basic health care to all, but redistribute health care more favorably to children. He justifies this conclusion based on the effect health care has on equality of opportunity for children, with equality of opportunity being a fundamental requirement of justice.

The opportunity to realize one’s full potential in life is markedly affected by one’s childhood. What happens in the life of a child determines whether that child will have a fair opportunity to fulfill his or her unique potential. The worthiness of a society can be evaluated in terms of its concern for and care of the health of its children. President John F. Kennedy expressed it well, “Children may be the victims of fate—they must never be the victims of neglect.” Today, many of our nation’s children are being neglected. Disparities exist between the economically advantaged and the economically disadvantaged; and many children do not have the benefit of oral health.

PROBLEMS IN CARING FOR THE ORAL HEALTH OF AMERICA’S CHILDREN

Caring for the oral health of America’s children is a multifaceted and complex problem. However, it is one for which the profession must provide leadership, in tandem with society, if our children are to grow to adulthood having experienced oral health, and with the potential for a lifetime of oral health. The current problem is documented, in part, by the following statistics:

- 80 percent of the dental disease in children is found in 20 to 25 percent of children, and these are primarily children from low-income and minority families, and there is a growing epidemic of early childhood caries.
- As a result of the expansion of the Children’s Health Insurance Program (CHIP) and the Affordable Care Act, 40 million of America’s 78.6 million children—the majority—are becoming eligible for public insurance.
- Fewer than 25 percent of America’s dentists will treat a patient with public insurance; and of those who do treat children with public insurance, only 9.5 percent bill more than $10,000/year.

In the context of healthcare reform and the current movement to expand the dental workforce, leaders in the profession representing organized dentistry continually affirm that the problem is primarily a financial one—one that (evidently) only increased Medicaid/CHIP fees can solve. A recent past president of the American Academy of Pediatric Dentistry (AAPD)

“Fewer than 25 percent of America’s dentists will treat a patient with public insurance; and of those who do treat children with public insurance, only 9.5 percent bill more than $10,000/year.”
affirmed that “there is no access to care problem [for children] where dentists are reasonably reimbursed.” This is in contrast to the evidence that an increase in professional fees paid by public insurance only marginally improves dentists’ participation. The AAPD past president went on to say: “The United States has the best model of delivering care [to children] that exists. The chair of the American Dental Association’s Council of Government Affairs commented that “… the delivery system works extremely well for Americans and should be left untouched by any reform effort.” He continued, “…the fundamental problem with access to dental care in America [is] improving funding for dental services under Medicaid.”

Dentistry is seeking a business model solution—more money in our pockets—when society clearly does not have any tolerance for devoting more money to public insurance programs. As the current budget deficit demonstrates, there is no more money. Our demand for increases in public insurance fees is in the context of us prospering economically in ways never before experienced. The average net annual income of general dentists in 2008 was $207,210 and for pediatric dentists it was $346,070. Dentists rank in the top 1–2 percent of income earners in the United States. Our professional speech and behavior seem to advocate for what is best for us as dentists, reflecting the culture of a business enterprise, rather than what is best for the oral health of children—a professional culture. While there is clearly a business dimension to managing a professional practice, professions are not primarily businesses. The late Talcott Parsons, considered the dean of modern sociology, expressed it well: “The core criterion of a full-fledged profession is that it must have means of ensuring that its competencies are put to socially responsible uses…professionals are not capitalists…and they certainly are not independent proprietors or members of proprietary groups.”

Rashi Fein, the noted Harvard health economist, expressed distress at the transformation occurring in American society. “A new language has infected the culture of health care. It is the language of the marketplace, of the tradesman, and of the cost accountant…It is a language that is dangerous.” Kenneth Arrow, emeritus professor at Stanford University, won the Nobel Prize in economics in 1972 partly due to his ability to demonstrate that health care
Society cannot pay us more money to care for our economically disadvantaged children; we dentists will accept no less. In such a quandary the profession must lead in advancing a model for an alternative delivery system that will enable our children to be cared for within the financial resources society can provide.

School-Based Pediatric Oral Health (Dental) Therapists

One such strategy is expanding the dental team to include a new member, a pediatric oral health (dental) therapist, an individual uniquely trained to provide basic primary care for children under the general supervision of a dentist. A recent report of the Pew Children’s Dental Campaign identified eight benchmarks for evaluating states’ responses to the crisis in dental health among America’s disadvantaged children. Among the benchmarks was the “authorization of a new primary dental care provider.” The reauthorization and expansion of the Children’s Health Insurance Program called for an investigation into the use of “midlevel providers” to increase access to care for children. Congress understood the importance of oral health care for children as social policy in that the dental provisions of the healthcare reform (Affordable Care Act of 2010) focus on caring for children.

Therapists have provided basic primary care for children in New Zealand in a school-based delivery system since 1923, when the first therapists (then called school dental nurses) graduated from New Zealand’s inaugural two-year training program. Since then, utilizing therapists to care for the oral health of children has spread throughout the world. Over 50 countries now count therapists as members of the dental team. New Zealand has an exemplary record of caring for its children. In a recent year, 97 percent of its children were enrolled in the School Dental Service and received their care from a therapist, and 56 percent of preschool children were seen by therapists in their neighborhood school. A 2003 report by New Zealand’s Public Health Advisory Committee indicated that at the end of a typical elementary school year, essentially all schoolchildren are free of dental caries, with
It is interesting to speculate on what the impact on the oral health of our children would be if elementary schools in America had a dental clinic, as in New Zealand, staffed by a dental therapist and dental assistant. While inadequate numbers of dentists willing to care for children with public insurance is a barrier to children’s receiving optimal dental care, parents are also a barrier. If children are to receive care we must remove the obstacles created by parents, for many of whom education and (understandable) life circumstances are such that the oral health of their children falls to a lower priority than desirable. As Dr. James Dunning, the dean of American public health dentistry, and at one time dean of the Harvard School of Dental Medicine, said over 40 years ago: “any large-scale incremental care plan for children, if it is to succeed, must be brought to them in their schools.”

Today, school-based health programs are emerging as an important dimension of the nation’s healthcare delivery system. The establishment of school-based health centers is a significant dimension of the Affordable Care Act, which is reforming our healthcare system. The National Assembly on School-Based Health Care is the nation’s leading advocacy body for overcoming the structural barriers to children receiving health care by placing health care in schools. In comparing the costs of school-based health care in New Zealand provided by therapists, with private practice office-based models staffed by dentists in the United States, evidence suggests a public-supported school-based program in the United States staffed by therapists could result in dramatic financial savings, while also providing care for the overwhelming percentage of America’s schoolchildren, as well as a significant number of preschool children.

**THE WAY FORWARD**

Historically, the profession of dentistry has distinguished itself, and has been faithful to its calling as a profession, by strongly advocating for water fluoridation to improve oral health. The time has now arrived for the profession to advocate for a delivery system that will enable all children to have access to basic oral health care. School-based care utilizing pediatric oral health (dental) therapists is a proven, cost-effective strategy to accomplish this goal. It is a strategy that will enable dentistry to address its professional imperative.

Evidence suggests a public-supported school-based program in the United States staffed by therapists could result in dramatic financial savings, while also providing care for the overwhelming percentage of America’s schoolchildren, as well as a significant number of preschool children.
The California Dental Association has commissioned a study by Dr. Ananda P. Dasanayake, professor of epidemiology and health promotion and director of the Graduate Program in Clinical Research, to evaluate the safety, quality, cost benefit, and patient satisfaction of the procedures provided by non-dentist providers. Dr. Dasanayake is the lead author on the study, whose coauthors include Dr. Robert Norman, research associate professor of epidemiology and health promotion, Dr. B. S. Brar, a junior research scientist in epidemiology and health promotion, Dr. V. Ranjan, a graduate student in the Department of Epidemiology and Health Promotion, all of NYUCD, and Dr. S. Matta of Columbia University’s faculty of dental medicine. The study has been submitted for publication to the Journal of the California Dental Association.

Citing as the rationale for the study the fact that there has been a noticeable imbalance among the dental treatment needs of the US population and the availability, utilization of oral health services, and the emergence of a new group of non-dentist providers, who do both reversible and irreversible procedures, Dr. Dasanayake and his coauthors did a systematic review of the existing literature on all available models of non-dentist providers, including dental assistants, dental hygienists, expanded function dental assistants and hygienists, New Zealand and Canadian models, and Dental Health Aide Therapists in Alaska, as well as several categories of non-dental providers that have been proposed or are under consideration in the US, including the Advanced Dental Hygiene Practitioner (a model proposed by the American
Dental Hygienists’ Association—see related article on page 30); the Minnesota Dental Therapist model; and the Community Dental Health Coordinator (a model proposed by the American Dental Association—see related article on page 18).

The investigators’ primary question was: “Are the irreversible procedures performed by any non-dentist provider category safe compared to the same procedures performed by dentists?” They concluded that while available evidence is sufficient to state that the non-dentist providers are capable of providing safe and high-quality reversible procedures while enhancing practice productivity, the evidence in relation to the irreversible procedures-related outcomes is insufficient to draw conclusions.

When published in the *Journal of the California Dental Association*, the study’s findings are virtually certain to add to the debate about the need to expand the dental workforce to meet the oral health needs of the US population. Having completed the study, Dr. Dasanayake is thinking ahead to the need for the “gold standard” in clinical research: Randomized controlled trials, which can allocate various procedures to different types of providers who are allowed to perform such procedures and then measure the key outcomes, such as safety, quality, effectiveness, economic considerations, and patient satisfaction. Such data are not currently available. “The challenge,” says Dr. Dasanayake, “is to properly ‘mask’ the study. The alternative is to use existing practice-based research networks to do follow-up studies to measure the same outcomes in a prospective or a retrospective fashion.”

“The investigators concluded that while available evidence is sufficient to state that the non-dentist providers are capable of providing safe and high-quality reversible procedures while enhancing practice productivity, the evidence in relation to the irreversible procedures-related outcomes is insufficient to draw conclusions.”
The Role of Dental Schools in Expanding Access to Oral Health Care

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Despite the wealth and resources of our nation, there is a grave disparity in access to health care, especially oral health care. Disadvantaged populations on Medicaid or with no insurance have very limited access to dental professionals who are able to treat them. The US Public Health Service recognizes 3,600 Dental Health Profession Shortage Areas, in which approximately 49 million Americans live. This disparity affects people of all ages since children develop poor oral health behaviors that they carry into adulthood. These children develop low self-esteem, become reclusive, and modify their diets to accommodate the pain and infection that becomes an unavoidable part of their lives. In addition, more than 51 million documented school hours are missed in the US annually as a result of progressive oral disease in children. Beyond our borders, the statistics are even more disturbing.

The current public health model is not working and begs the question: “What role can dental schools play in reducing or eliminating the gap in care?”

For the past several years, the NYU College of Dentistry (NYUCD) and Henry Schein Cares, the company’s global corporate social responsibility program, have partnered on a program known as the NYUCD-Henry Schein Cares Global Student Outreach Program to increase the availability of dental services within underserved areas of the United States and Latin America, especially for children. Through these outreaches, the program not only addresses the pressing issue of access to care in the immediate future, but also has the potential to influence future generations of dentists.

Participating team volunteers from the NYUCD-Henry Schein Cares Global Student Outreach Program include NYUCD faculty, residents, students of dentistry and dental hygiene, alumni, and, in some instances, students and faculty from other dental schools. Through outreach, collaborative relationships are fostered between the dentist, the patient, and the community, thereby redefining the dental profession within the context of a public health model and transforming the role of a provider for students, faculty, and alumni.

"The current public health model is not working and begs the question: ‘What role can dental schools play in reducing or eliminating the gap in care?’"
TRANSFORMING DENTISTS’ ATTITUDES TOWARD PUBLIC HEALTH SERVICE THROUGH DENTAL STUDENT OUTREACH EXPERIENCES

NYUCD recognizes that predoctoral students can be transformed by their experiences in dental school in ways that may shape lifelong behaviors. To that end, NYUCD is committed to providing dental students with the opportunity to understand inequalities in access to care and to recognize their own abilities to address this pressing issue. The fact that NYUCD alumni are returning to their alma mater to participate in outreach programs proves that early exposure to oral public health opportunities instills in graduates a desire to incorporate public health service into their private practices. We anticipate that 25 alumni will participate in NYUCD outreaches this year, up from 20 in the previous year.

A recent outreach to Machias, Maine, exemplifies the collaborative nature of the NYUCD-Henry Schein Cares Global Student Outreach Program. The outreach provided oral health care to children and adults without a dental home. Services were provided at no cost to the patient, but Maine-Care (Medicaid) was accepted when available. The event was held in collaboration with Caring Hands of Maine, a nonprofit dental clinic operating out of Ellsworth, the Washington County Children’s Program (WCCP), their “Tooth Ferry” mobile dental van, Child and Family Opportunities, Washington Hancock Community Agency, and Down East Community Hospital. Delta Dental Plan of Maine is the primary funder of this program. To view a documentary of the Machias, Maine, outreach, please go to http://www.nyu.edu/dental/news/nyucdtv/maine.html

A SUSTAINABLE CARE MODEL

Twice a year, the NYUCD-Henry Schein Cares Global Student Outreach Program in Machias, Maine, provides oral healthcare education, emergency dental services, screenings, prevention, sealant application, and restorative treatment to underserved communities; assesses the oral health needs of each targeted community; and works to implement a sustainable oral health system, including the identification and training of local members of the community who can sustain oral health education and care on an ongoing basis. At the same time, the program vigorously pursues partnerships with local organizations that are able to provide financial support and other resources. This focus on prevention and partnerships is key to the model’s success.

HENRY SCHEIN®

Because NYUCD is a university-based academic dental center dedicated to education, research, and community service, we are committed to providing a didactic component to our outreach programs, as well as a clinical training experience. Our ultimate goal is to develop and disseminate both a curriculum and a clinical outreach model throughout the US and internationally, thereby taking both a short- and a long-term proactive approach to the issue of access to care.

This is important because the curricula used by dental schools across the US generally focus on preparing graduates to enter private practice. These curricula fail to address the power of exposure to public health methodologies designed to transform dental practitioners into change agents capable of decreasing disparities in access to oral health care. An educational experience emphasizing access to care can introduce evidence-based practices that will prepare students to advocate for and implement public health strategies in their future dental practices.

IMPACT ON MULTIPLE LEVELS

Notably, it is not only current students and alumni who report being transformed by the outreach experience and express a desire to return for future outreaches, but participating faculty as well. Returning from a recent outreach to Machias, Maine, Dr. Andrew I. Spielman,

“This was my first outreach and it immersed me personally remains conceptual when you are talking about it in a
associate dean for academic affairs and professor of basic science and craniofacial biology, said that he had experienced a major transformation in his personal attitudes and values.

“Having devoted myself virtually exclusively to academic administration since 1985, first as a professor and the chair of the Department of Basic Science and Craniofacial Biology, and for over 10 years as the associate dean for academic affairs, this outreach experience made me want to practice clinical dentistry again. This was my first outreach and it immersed me personally in a social context of overwhelming need, something that remains conceptual when you are talking about it in a classroom or even overseeing care in a modern clinic. The conditions we faced and the desperation of the patients we saw were sobering. And this was in the US, not a developing country. One patient, for example, was holding his teeth together with Krazy Glue. Another patient, in desperate pain, arrived at our makeshift clinic at 6:20 am for an 8:00 am opening.

Fortunately, even without actually practicing dentistry, you don’t lose your ability to diagnose. My responsibility was to do triage, which had to be done in five minutes per patient. Each day, using only nine chairs and in extremely rudimentary conditions, we saw over 100 patients, and 700 adults in all. The humility, gratitude, and satisfaction that I felt was equaled by the ability to connect with and mentor students beyond the classroom, and to help teach them some very important life lessons. Namely, that there are personal rewards in providing care to people in need that far outweigh financial rewards. Having had this experience, I plan to participate in at least three outreaches each year.”

In addition to the outreach in Machias, Maine, geographic areas targeted annually by the NYUCD-Henry Schein Cares Global Student Outreach Program include Santo Domingo, Dominican Republic; Grenada (see related story on p. 72); Hudson, New York; Bluefields, Nicaragua (see related story on p. 70); and villages of the Yukon Flats in Alaska, where NYUCD has partnered with Loma Linda University School of Dentistry, Louisiana State University School of Dentistry, University of Washington School of Dentistry, and the Arizona School of Dentistry and Oral Health.

**AN EXCITING AGENDA**

There are nearly 60 dental schools in the US that train more than 4,500 dentists each year. As a result, academic dental centers have the potential to shape the way in which dentists see their role in the profession and to have a tremendous impact on the future delivery of oral health care in America.

NYUCD anticipates that by 2016, an expanding relationship will have been established throughout the northeast region of the US, both with dental schools and key community stakeholders, with approximately 200 dental students from the northeast region participating in both a didactic curriculum and a clinical outreach annually. The programs will be carefully documented and used as a model for other regions throughout the US. Assuming a comparable model is set up in each of four regions within the US, 800 dental students will be exposed to public health dentistry and education annually during the program’s initial development phase, with the ultimate goal of all US dental students having this exposure prior to graduation.

The NYUCD-Henry Schein Cares Global Student Outreach Program is committed to building on the unique outreach experiences of recent NYU dental graduates. The fact that our graduates are interested in returning to NYUCD to participate in outreaches to underserved areas says much about the ability of exposure to outreach to transform one’s practice philosophy. Our goal in the next several years is to demonstrate not only that an outreach experience can be transformative for dental students, but also that a collaborative approach on the part of our nation’s dental schools can have a multiplier effect in improving and sustaining oral health at the national level by changing the way providers view their role within the profession.
When Dr. Nicola Partridge, an international authority on molecular endocrinology and bone and mineral research, arrived at NYUCD in the fall of 2009, she set out to develop synergies among bone researchers at NYUCD and at other institutions and to recruit additional basic science faculty to NYUCD, particularly in the area of bone biology. In the following conversation, Dr. Partridge provides an update on these activities.

Global Health Nexus (GHN): What is the focus of your current research activity?

Dr. Partridge: I am researching the action of parathyroid hormone, or PTH, in bone and mineralized tissue. PTH increases the concentration of calcium in the blood, enhancing the release of calcium from bone and indirectly stimulating osteoclasts, the cells responsible for bone resorption.

Recently, the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) awarded me a four-year, $1.3 million extension of a PTH research grant that the NIDDK has funded continuously since 1993. The new funding enables me to begin in vivo research on how PTH regulates repressor proteins known as histone deacetylases. Repressors are DNA-binding proteins that prevent the transcription of genes. A better understanding of how parathyroid hormone regulates repressor proteins could contribute to the development of drugs that combat genetic disorders, and could help us learn about side effects caused by drugs that treat cancer by targeting the repressor proteins.

GHN: What advances have you made in recruiting junior research faculty to the Department of Basic Science and Craniofacial Biology?

Dr. Partridge: I recruited three new faculty members in 2010 with the help of a $1.5 million grant awarded by the National Institute of Dental and Craniofacial Research (NIDCR):

- Dr. Despina Sitara, formerly a postdoctoral fellow in immunology and infectious diseases at the Harvard University School of Public Health, was hired in October 2010 as an assistant professor of basic science and craniofacial biology, and is currently studying a bone growth factor that has been linked to chronic renal failure—research that could help explain the process by which kidney failure may be
linked to mineralization disorders, such as the mineralization of the aorta in cardiovascular disease.

- Dr. Xin Li, formerly a research fellow in periodontics and oral medicine at the University of Michigan School of Dentistry, was hired in January 2011 as an assistant professor of basic science and craniofacial biology, and is conducting in vivo research on cancer metastasis to bone, and, in particular, why prostate cancer metastasizes so quickly to bone in diabetics.

- Dr. Shoshana Yakar, currently an associate professor of endocrinology/diabetes and bone disease at the Mount Sinai School of Medicine, will be joining NYUCD in September 2011, as an associate professor of basic science and craniofacial biology. Dr. Yakar will focus initially on how insulin-like growth factors produced in the liver affect bone growth and the aging process.

A fourth researcher, Dr. Juhee Jeong, joined NYUCD in September 2010 as an assistant professor of basic science and craniofacial biology with postdoctoral research funding originally awarded to her in 2009 by the National Institute of Dental and Craniofacial Research (NIDCR) while she was in her previous position as a researcher in the Department of Psychiatry at the University of California, San Francisco. Dr. Jeong has begun the second,
three-year phase of the grant, which involves studying transcription factors involved in palate development.

To accommodate the four new researchers, NYUCD has added a 2,400-square-foot laboratory to augment existing laboratory space for the Department of Basic Science and Craniofacial Biology. The new laboratory contains two faculty offices, a microscopy room, tissue culture room, equipment room, developer room, and four rows of bench laboratory space.

**GHN:** How have you expanded research collaborations both within NYUCD and between NYUCD and other institutions?

**Dr. Partridge:** In the past, an obstacle to collaboration was the lack of information sharing among 14 faculty members from nine academic departments within NYUCD and the NYU School of Medicine who are involved in bone research. When I arrived at NYUCD, one of the first steps I took was to initiate a monthly meeting at which faculty present their work and explore potential alliances.

Dr. Cristina Teixeira, associate professor of orthodontics and of basic science and craniofacial biology and interim chair of the Department of Orthodontics, leads the meetings, which draw faculty members from NYUCD’s Departments of Basic Science and Craniofacial Biology; Biomaterials and Biomimetics; Orthodontics; Periodontology and Implant Dentistry; Oral and Maxillofacial Pathology; Radiology and Medicine; and Prosthodontics; and the Departments of Orthopaedic Surgery; Medicine; and Microbiology at the NYU School of Medicine. Dr. Steven Abramson, codirector of the Center of Excellence on Musculoskeletal Disease at NYU, also regularly attends the meetings with his colleagues.

These meetings have led to a number of recent collaborative grant applications to the National Institutes of Health (NIH), including:

- A proposal by Dr. Teixeira to the NIDCR for a study on cartilage and bone cell development, in which I will be a coinvestigator contributing my expertise on transcription factors regulating gene expression in cell development.

- A proposal submitted jointly to the NIDCR by Dr. Kenneth Fleisher, assistant professor of oral and
maxillofacial surgery, and Dr. Deepak Saxena, assistant professor of basic science and craniofacial biology, to research the development of osteonecrosis of the jaw (ONJ). Dr. Fleisher will coordinate the study; Dr. Saxena will focus on identifying bacteria that may contribute to disease onset; I will be a coinvestigator focusing on the impact of bisphosphonate drug use on bone cells; and a second coinvestigator, Dr. Zoya Kurago, assistant professor of oral and maxillofacial pathology, radiology and medicine, will study immune system changes that may be linked to ONJ progression.

I’ve also established a presence for NYUCD at faculty meetings of the Center of Excellence on Musculoskeletal Disease. Dr. Louis Terracio, NYUCD’s Vice Dean for Research, Dr. Teixeira, and I attend the quarterly meetings, where we present updates on NYUCD research activity and learn about developments in musculoskeletal disease research at NYU.

Information sharing at these meetings has led to a number of recent collaborative grant applications to the NIH. For example, I recently submitted a proposal to the NIH’s National Center for Research Resources for funding to enable NYUCD to acquire a micro computer tomography scanner in 2012 for use by over a dozen faculty members from NYUCD, the NYU Langone Medical Center, and the NYU Hospital for Joint Diseases.

The new scanner would supplement one that NYUCD acquired eight years ago, which is currently housed in the Department of Biomaterials and Biomimetics. The new machine will have a higher capacity than the older one, and will produce higher-resolution images. Its acquisition will enable the three institutions to better accommodate the growing needs of research faculty for high-resolution, three-dimensional images that illuminate the cellular development of teeth, bone, and cartilage.

The acquisition will also facilitate collaborations between the three institutions. For example, Dr. Teixeira and Dr. Abramson plan to use the new scanner to examine cellular changes to cartilage caused by osteoarthritis.

The new micro CT would be housed in NYUCD’s Department of Orthodontics, whose faculty will use it to analyze molecular changes to teeth and underlying bone cells during the tooth movement process. Dr. Rodrigo Viecilli, assistant professor of orthodontics, will manage the machine and train faculty from the three
institutions in its use, and Dr. Timothy Bromage, adjunct professor of biomaterials and biomimetics and of basic science and craniofacial biology, and an authority on 3D imaging, will contribute his expertise to a variety of studies that will utilize micro CT scanning.

Coinvestigators on this grant proposal include Dr. Bruce N. Cronstein, the Esserman Professor of Medicine and professor of pathology and pharmacology at the NYU School of Medicine; Dr. Abramson; Dr. Thorsten Kirsch, co-director of the Center of Excellence on Musculoskeletal Disease; and Dr. Claudio Basilico, chairman of the Department of Microbiology at the NYU School of Medicine.

I also recently submitted a grant application to the NYU Clinical and Translational Science Institute (CTSI) for a collaborative study with the NYU Hospital for Joint Diseases to investigate the process by which PTH injections stimulate bone formation.

In an earlier study, bone formation was observed in rats and mice receiving daily injections of PTH. That research suggests that a chemokine regulated by PTH is involved in the increase in bone formation. The new grant application proposes to investigate the actions of this chemokine in 58 post-menopausal women receiving PTH injections. Multiple blood samples of the women would be taken over a four-hour period following PTH injection.

The research would be conducted at the Bellevue Hospital Center under the auspices of the NYU CTSI in collaboration with Dr. Stephen Honig, clinical associate professor of medicine and director of the Osteoporosis Center at the NYU Hospital for Joint Diseases, and Dr. Ann Danoff, associate professor and director of the Division of Endocrinology, Diabetes and Metabolism at the NYU School of Medicine.

**GHN:** What are your research goals going forward?

**Dr. Partridge:** A primary goal is to conduct more collaborative research involving the NYU Langone Medical Center, particularly in the area of transcription. I am also pursuing the possibility of developing a new center of excellence for craniofacial research and surgery that would be a collaborative venture between NYUCD’s Departments of Basic Science and Craniofacial Biology; Oral and Maxillofacial Surgery; Biomaterials and Biomimetics; and the Institute of Reconstructive Plastic Surgery at the NYU Langone Medical Center.
Scientists at Polytechnic Institute of New York University (NYU-Poly) and at the NYU College of Dentistry have discovered a biochemical version of a principle well known among confectioners. Call it the “peanut butter and chocolate” rule: Sometimes two things work better together than alone.

Dr. Seiichi Yamano, assistant professor of prosthodontics at NYU’s College of Dentistry, and Dr. Jin Kim Montclare, who runs NYU-Poly’s Protein Engineering and Molecular Design Lab, have developed a remarkably effective way to combine two methods that scientists use as vehicles to carry DNA into cell nuclei. The result could help researchers understand gene function, analyze proteins, and ultimately improve gene therapy for a number of genetic diseases like hemophilia and muscular dystrophy, acquired diseases like cancer, and neurodegenerative diseases like ALS, as well as HIV and hepatitis.

Their research aims to improve the efficiency of a procedure called transfection, the artificial introduction of genetic material into cells by means of a nonviral “vector,” essentially a biochemical courier.

But transfection is difficult because of the sheer size and the electric charge of the DNA that must penetrate the cell’s membranes.

Indeed, “convincing” a cell to usher a genetic macromolecule to its inner sanctum is a bit like trying to walk a grand piano through airport security. Even if the macromolecules make it to a cell’s cytoplasm, the cell itself sets up a gauntlet of barriers to transfection.
Researchers found a remarkably effective way to combine two methods to carry DNA into the nucleus of a cell (in blue), advancing prospects for gene therapy.

In the past, most transfection vehicles were essentially decommissioned viruses; they could be engineered to carry any sort of genetic material a scientist needed for creating proteins from a cell’s nuclear machinery. But virus bodies don’t work terribly well because cells recognize them for what they are… or were: viruses. When host cells sense the presence of these viral guests, they sound immunological alarms.

The most popular alternatives to viral vehicles are lipids and cell permeating peptides (CPP), which do a similar job without inciting a cell to rebellion. Dr. Yamano’s and Dr. Montclare’s achievement was to create a hybrid comprising two of these: the well-known transfection reagent FuGENE HD (FH), which is a lipid construct, and a modified version of the oft-used CPP HIV-1 Tat (mTat).

Dr. Yamano, a former fellow at the National Institutes of Health (NIH) and at Harvard, whose research focuses on gene therapeutics for oral diseases, says he arrived at the idea to combine the two transfection vehicles because he knew FH by itself is the best stand-alone transfection reagent across a range of cell lines. He also reasoned that mTat, when modified with histidine and cysteine residues, works better than the unmodified CPP Tat. Finally, and perhaps most critically, while mTat does not transfect in a serum medium, which is basically the natural milieu of animal and human cells, FH does—and particularly well.

Thus, the researchers set out to create the best of both worlds by combining FH and mTat. After all, if FH can work in a serum medium, perhaps mTat “wearing” FH as a kind of molecular raincoat could, too. With her prior research into protein engineering, Dr. Montclare would be a natural to perform the physical characterization of these complexes. Her work helped Dr. Yamano’s lab understand surface charges and other subtleties of the new complex.

Indeed, Drs. Yamano and Montclare found that on five different cell types, the new mTat/FH complex was about four times more effective in a medium with...
serum than FH alone. “This result suggests our vector may have a great potential clinical application as an in vivo gene delivery system,” says Dr. Yamano.

Dr. Montclare says arriving at the right FH/mTat structure was more trial and error than complex manipulation. “Some have tried to make lipids that are ‘decorated’ with peptides, but those require sophisticated chemistries,” she says. “But we thought, ‘Let’s do the simplest thing,’ namely, take the two entities and just mix them to find the best combinations.” She says her team went through a number of trials to find combinations with the best transfection efficiencies. “It seems to work, and it doesn’t require complicated chemistries to conjugate one with the other; we essentially just mix them in a pot,” she says.

The joint research from Dr. Yamano’s and Dr. Montclare’s labs was published in the *Journal of Controlled Release*, a prestigious journal for drug and gene delivery.
The cover of the May 2011 issue of PAIN magazine, the official publication of the International Association for the Study of Pain, features a report on research conducted by Dr. Brian Schmidt, professor of oral and maxillofacial surgery and director of the Bluestone Center for Clinical Research, that finds that the transformation of oral precancerous lesions into malignancy is associated with pain. Dr. Schmidt’s research was conducted in collaboration with Dr. David Lam of the University of California, San Francisco (UCSF) Department of Oral and Maxillofacial Surgery. Dr. Lam was Dr. Schmidt’s last surgical fellow at UCSF before Dr. Schmidt joined NYUCD last year.

According to Dr. Schmidt and Dr. Lam, detecting head and neck cancer in the first stages can improve survival by as much as 90 percent. “Although pain is often recognized as an important symptom,” they note, “a clinical aphorism has been that early head and neck cancers often go unnoticed because they are asymptomatic.” They conclude that the onset of pain “may be the best clue to the progression of oral precancer to cancer and should be included in the clinical assessment of patients to identify a high-risk group to whom to apply screening strategies for early cancer detection.”
A PEARL Network Interview with Dean Bertolami Asks: “Can Practice-based Research Broaden the Impact of Dental Education?”

The PEARL (Practitioners Engaged in Applied Research and Learning) Network recently asked Dean Bertolami about his views on the impact of practice-based research networks on dental education today, and in the years to come. The interview appears below.

**PEARL:** What do you see as the impact of practice-based research on dental education?

**Dr. Bertolami:** Practice-based research networks (PBRNs) have the effect of encouraging dental schools to educate a different kind of practitioner. For example, the work that PBRNs are doing to develop evidence-based resources for practitioners reinforces and supports the increasing emphasis at NYU College of Dentistry on developing men and women of science.

Put simply, a man or woman of science is a sophisticated consumer of research. Not every graduate has to become a scientist, in the sense of becoming a producer of new knowledge; but a learned profession does require that every graduate be able to think for herself or himself, be an intelligent user of research, able to critique it, and comfortable with the structure and syntax of modern biomedical science. Only by becoming a person of science is there any hope that the practitioner will be able to acquire and assimilate new knowledge and adapt to the changes in practice and in the profession that the future requires.

Developing men and women of science is a pillar of NYUCD’s strategic plan. At NYUCD, our curriculum provides a foundation of knowledge in epidemiology and epidemiological methods that teaches the student how to read and analyze articles by providing a rich and utilitarian set of “professional literature analysis skills,” and a grasp of the context for use of these critical thinking skills within the challenges of providing “best patient care” in their future dental practices.
When you implement an evidence-based curriculum in a dental school, and teach the value of implementing these standards in real-world clinical practice, then in principle you begin to diminish the distinction between being in school and being in practice.

**PEARL:** Can PBRN members play a role in preparing students to become men and women of science?

**Dr. Bertolami:** Yes. The practitioner-investigators can be role models who help students understand the connection between doing well in evidence-based classes and succeeding in future clinical practice. Schools should consider creating opportunities for interaction between students and the practitioner-investigators (P-Is) in the school’s clinics or in the practitioners’ offices.

**PEARL:** So you see a role for PBRN practitioner-investigators on the faculty?

**Dr. Bertolami:** Yes. Through the PBRNs, we are creating a cohort of practitioners who now have both the confidence and the interest in going back to a dental school to teach. Part of the reason for the shortage of faculty in dental schools is the lack of ability of practitioners to return seamlessly into the academic environment because they’ve been out of it for so long. They might have an interest in teaching, but they don’t often have the skills that are needed.

People who are fully engaged intellectually in a PBRN will not have the problem of integrating into the academic environment, and will recognize that they have skills and interests that are valued by academia. A person who has been in practice for 20 years and can articulate problems and issues through practice-based research has talents that would be valued in an academic environment.

If you can conceptualize a project, articulate your ideas, and convince others within the PBRN system that these are worthwhile questions, propose possible solutions and a methodology for evaluating them, and then see this through to an outcome that results in a change in clinical practice, you can have an energizing impact on the educational process.

The question is, what kind of dentists are we going to present to our students as role models? A thinking dentist who has had the exhilaration of conceiving an idea and taking it to fruition can be an immensely inspiring role model.

**PEARL:** How can PBRNs and dental educators work more closely to further each other’s goals?

**Dr. Bertolami:** Dental schools want to conduct research leading to advances in patient care and treatment, and then teach their students about these new concepts. Practice-based research networks want to test new ideas in a real-world environment. The two can work together to further these goals through a continual cycling of ideas. For example, research faculty develop a solution for a clinical problem, feed the concept into a PBRN for testing, and the PBRN subsequently sends its findings back to the school for additional evaluation, and, if appropriate, for incorporation into the school’s curriculum.

The PBRN capitalizes on the notion that you can’t keep ideas within the academic center, where they may die or not be adequately elaborated. With a PBRN, these ideas are put into the hands of talented people with a scientific orientation. What comes back are applications that could never have been imagined.

Practice-based research represents a departure from the traditional, NIH-funded research model, in which...
“Educators at universities like NYU take a broad view of dental education. We see it as much more than a transaction in which a student has to learn this in order to do that. When they graduate, we want students to feel that they have acquired a way of thinking about clinical problems and a certain level of expertise in assessing treatment methodologies that is much deeper than ‘today I graduated and I know these techniques.’”

studies are performed in isolation in an academic center based on the particular idiosyncrasies of an investigator, who must publish that work and send it out into the ether, where somebody someplace might pick it up and reduce it to practical application.

PBRNs have an important role to play in the process of advancing research from basic science to clinical application. While bright ideas are common, taking those ideas and developing them is of central importance. The PBRN helps to reconcile the differences between what a bench lab scientist and a practicing dentist consider important.

The NYU PEARL Network, for instance, can evaluate practical applications for ideas that originated in the College of Dentistry’s basic science laboratories and were further developed in the NYU College of Dentistry’s Bluestone Center for Clinical Research or in the NIH-funded NYU Clinical and Translational Science Institute.

PEARL: Looking to the future, how do you see the relationship between PBRNs and dental schools evolving?

Dr. Bertolami: Educators at universities like NYU take a broad view of dental education. We see it as much more than a transaction in which a student has to learn this in order to do that. When they graduate, we want students to feel that they have acquired a way of thinking about clinical problems and a certain level of expertise in assessing treatment methodologies that is much deeper than “today I graduated and I know these techniques.” Tapping into the PBRN, strengthening our ties to the PBRN, and encouraging interaction between students and PBRN practitioners will broaden the impact of dental education.
Dr. Timothy Bromage Introduces Human Paleobiomics, a New Direction in Evolution Research

NYU College of Dentistry paleoanthropologist Dr. Timothy Bromage is championing a new field of research that he is calling “human paleobiomics,” which represents a new direction for the field of human evolution. Dr. Bromage has launched human paleobiomics with the help of a $1 million-plus grant from the Max Planck Society, which awarded Dr. Bromage the 2010 Max Planck Research Award in recognition of his achievements in establishing the modern field of growth, development, and life history in paleoanthropology.

Within the field of human paleobiomics, Dr. Bromage seeks to uncover connections between bone and tooth microstructure and the development, physiology, and metabolism of ancestral humans in different geographic and climate zones. Dr. Bromage, an adjunct professor of biomaterials and biomimetics and of basic science and craniofacial biology, aims to bring bone and tooth biology into the global mainstream of human evolution research.

The new endeavor is an outgrowth of Dr. Bromage’s earlier pioneering research in bone and tooth microanatomy, including the discovery of a new biological clock, or long-term rhythm, hypothesized to control many metabolic functions. Dr. Bromage also observed a related pattern of incremental growth in skeletal bone tissue—the first time such an incremental rhythm
The findings suggest that the same biological rhythm that controls incremental tooth and bone growth also affects bone and body size and many metabolic processes, including heart and respiration rates.

Human paleobiomics also involves searching for bone and tooth specimens in fossil-rich regions of Africa, and analyzing samples using advanced imaging techniques, such as 3D computer-simulated reconstruction, in a specially designed hard tissue research laboratory at NYU CD.

An early result of the human paleobiomics initiative was the discovery in 2010 of a 2.5-million year-old ancestral human tooth in Malawi by Dr. Bromage and Drs. Ottmar Kullmer and Friedemann Schrenk, two paleoanthropologists from the Senckenberg Research Institute in Frankfurt, Germany, host of the 2010 Max Planck Research Award. The tooth, belonging to the earliest known species of Homo—the same genus as modern man—was discovered several hundred meters from the site where a tooth belonging to Paranthropus, another hominid genus, was unearthed five years earlier.

While anthropologists believe that Homo and Paranthropus coexisted in Africa, Dr. Bromage’s discovery, reported in an article in the Journal of Human Evolution, marks the first time that scientists have been able to determine that fossils found at the same site are from earliest Homo and earliest Paranthropus. Dr. Bromage’s finding is thus the strongest support to date for the hypothesis that the two genera coexisted at the same time in the same biome.

“When I examined the microanatomy of the 2.5-million-year-old ancestral human tooth fragment, I found that it displayed characteristics that are associated more with those of earliest Homo than other early human species,” said Dr. Bromage.

Those characteristics reflect an adaptation to the environmental changes occurring 2.5 million years ago, when there was a significant cooling of the earth’s climate. As the earth cooled, habitats became more arid, vegetation became tougher, and mammals adapted by developing larger teeth with more chewing capacity,” he added.

Dr. Bromage plans additional research on the evolution of bone and tooth microanatomy in these and other hominid genera.

Dr. Bromage aims to bring bone and tooth biology into the global mainstream of human evolution research.
Spaghetti and Science Society Gives Students a Taste for Critical Thinking

When Canadian psychologists found that women who drink even moderately develop a reduced ability to rate attractiveness in male faces, they didn’t know that their study would ultimately be judged by NYU dental students.

A dozen NYU CD students gathered one evening last December in Monte’s Italian restaurant in Greenwich Village to evaluate the study, which was led by Dr. Kirsten Oinonen, a psychology professor.

The monthly dinners are open to second-, third-, and fourth-year DDS students from Dr. Katz’s SAPL (Skills in Assessing the Professional Literature) classes. They often feature an invited guest, either a faculty member or one of Dr. Katz’s oral epidemiology postdoctoral fellows.
at Lakehead University in Thunder Bay, Ontario. The students were members of the Spaghetti and Science Society, founded in 2003 by Dr. Ralph Katz, professor and chair of the Department of Epidemiology and Health Promotion, to provide extra helpings of science for students who hunger for more discussion than is possible in the classroom. The monthly dinners, which have become a forum to debate controversial research and public health issues, are open to second-, third-, and fourth-year DDS students from Dr. Katz’s SAPL (Skills in Assessing the Professional Literature) classes. They often feature an invited guest, either a faculty member or one of Dr. Katz’s oral epidemiology postdoctoral fellows.

Dr. Oinonen recruited 45 women for her study, measuring their ability to evaluate facial perception after an evening of drinking. Each woman was presented with pairs of male faces. One in each pair was more symmetrical than the other and the women had to identify it in each of the pairs. Male facial symmetry is considered to be a marker of attractiveness and an important factor in the choice of a partner.

Dr. Oinonen found that women who drank more scored lower on the symmetry test. Each additional drink led to a reduced score.
The findings suggest that alcohol has an effect on visual perception abilities controlled by the brain, said Dr. Oinonen, who published the study in the January 2007 issue of the *Journal of Psychopharmacology*.

At the Spaghetti and Science dinner, Dr. Katz challenged students to identify possible limitations in the research.

One potential issue is that the study evaluated attractiveness only in the context of facial symmetry, while discounting emotional attractiveness, said Hans Hsu, Class of 2013.

While agreeing that emotional factors can be important, Dr. Katz noted that the researchers had deliberately chosen to limit the study to the relationship between monthly alcohol consumption and facial symmetry perception. “Although it’s true that this is just one grain of information that may not tell us the whole story, every research project gets down to a narrow question,” Dr. Katz said.

“If you want the whole smear, you have to read 10 to 12 papers,” Dr. Katz added, as a waiter doled out garlic bread.

“The study could have been strengthened by testing women’s facial perceptions before, as well as after, they had been drinking,” said Dr. Lin Li, an oral epidemiology postdoctoral fellow in the Department of Epidemiology and Health Promotion and a 2009 graduate of the MS in Clinical Research Program, who will enter the PhD in epidemiology program at Louisiana State University in August.

“The women had to make quick decisions about symmetry,” she said. “I doubt how reliable that was.”

Other students debated her point, remaining focused on the research even as a waiter went back and forth with plates of piping hot meatballs. “These dinners encourage us to practice what we learn in class,” said Amir Daoud, Class of 2014.

While these Spaghetti and Science Society meetings always have a specific article at the heart of the discussion with the goal of reinforcing SAPL skills, the conversations always segue into a wide range of topics—this is, after all, a “chat and chew” social dinner—ranging from broad social issues, to personal experiences, to “hot topics” related to dentistry and/or other activities at NYUCD.

“From my perspective,” said Dr. Katz, “it’s a chance to really get into deep discussions on a range of topics with a small group of students and to get to know a handful of students well. I’m amazed each month, month-in and month-out, that between 6 and 10 students find the time in their busy, hustle-bustle worlds to take on this socially oriented science meeting as an extracurricular activity and to share a plate of pasta and a libation with their fellow students and me.” —Dr. Ralph Katz
Three NYUCD faculty members were elected to leadership positions during the 2011 annual session of the American Dental Education Association (ADEA), and two students and a faculty member received prestigious ADEA awards. Dr. Maureen McAndrew, clinical associate professor of cariology and comprehensive care and director of clinical faculty education, was elected secretary of the educational research/development and curriculum section; Dr. Laurie Fleisher, clinical assistant professor of endodontics, was elected secretary of the endodontics section; and Dr. Josephine Lomangino-Cheung, clinical assistant professor of cariology and comprehensive care, was elected secretary of the clinical simulation section.

Sam Bae, ’12, won the ADEA/Gies Foundation/AADR Academic Dental Careers Fellowship Program Award; Alexis Cohen, ’12, won the ADEA/Johnson & Johnson Healthcare Products Preventive Dentistry Scholarship; and Dr. Elise Eisenberg, senior director of Informatics and clinical professor of epidemiology and health promotion, received the ADEA/Gies Foundation Education Fellowship, as well as an ADEA presidential citation.

In addition, NYUCD received two American Association for Dental Research (AADR) National Student Research Group (NSRG) Awards for 2011. NYUCD had 50 new student members in 2010 and 2011 combined, and 45 student abstracts accepted for the meeting, representing the most new members in AADR for the 2010–2011 membership years and the most student abstracts accepted for the 2011 IADR/AADR/CADR General Session.
Research Days Feature Dr. Jane A. Weintraub and 21 Prize-Winning Students

NYUCD’s annual Student Research Days, held April 14 and 15, 2011, showcased outstanding work by 21 NYUCD students in areas ranging from the basic sciences to clinical treatment. The two-day event also featured Dr. Jane A. Weintraub, the Lee Hysan Professor and Chair of the Division of Oral Epidemiology and Dental Public Health at the University of California, San Francisco (UCSF) School of Dentistry; director of the UCSF Center to Address Disparities in Children’s Oral Health; and incoming dean of the University of North Carolina at Chapel Hill College of Dentistry. Dr. Weintraub’s keynote lecture was entitled “An Outlier’s Research Path: Integrating Population Science, Practice, and Policy to Improve the Public’s Oral Health.” In recognition of her accomplishments, Dr. Weintraub received the 2011 NYUCD Distinguished Scientist Award. Vice Dean for Research Dr. Louis Terracio presided over the poster and awards presentations.

“All of the awardees have contributed to the knowledge base in the health sciences,” said Dean Bertolami. “Their achievements and their collaborations with faculty mentors exemplify NYUCD’s commitment to research as an integral part of the dental education experience.”

NYUCD congratulates all of the student awardees, whose names, presentations, and mentors are listed below.

**Dean’s Award and Best Master of Science Presentation**
Dr. Elyse Wagner, ’11
Investigation of Oral Mucosa Stromal-Cell Interactions in 3-D Models
Mentor: Dr. Zoya Kurago

**Best Postdoctoral Presentation**
Dr. Pablo Peixoto, Basic Science and Craniofacial Biology
MAC Function Triggers Bystander Effects in Cancer Cells
Mentor: Dr. Kathleen Kinnally

**Honorable Mention, Postdoctoral Presentation**
Dr. Zhou Chen, Basic Science and Craniofacial Biology
Correlation of Periodontopathogenic Bacterial Colonization and HIV Infection: Preliminary Results
Mentor: Dr. Yihong Li

**Best Presentation by Resident in Pediatric Dentistry**
Dr. Alfonse Doan, PG ’11
Current Views about Orthodontic Education in Pediatric Dental Residencies
Mentor: Dr. Frederick More

**Best International Fellow Presentation (CTOR)**
Dr. Bandar Alyami, PG
Orthodontics ’11
Osteogenic Effect of High Frequency, Low Magnitude Forces on Alveolar Bone
Mentors: Dr. Mani Alikhani and Dr. Cristina Teixeira

**Best Presentation by Resident in Implant Dentistry**
Dr. Ismael El Khouly Castilla, PG ’11
A New Osteotome Technique in Atrophic Posterior Maxilla - A Case Series
Mentor: Dr. Sang-Choon Cho

**Honorable Mention, Resident in Implant Dentistry**
Dr. Manasee Joshi, PG ’11
Improve Parallelism of Implants for Immediate Loading: A Retrospective Case Series
Mentor: Dr. Sang-Choon Cho

**Best Basic Science Presentation**
Dr. Ignacio Aliaga, PG ’11
Dental Implant Placement and Simultaneous Bone Grafting in Atrophic Ridges
Mentor: Dr. Sang-Choon Cho

**Best Clinical Science Presentation**
Dr. Takanori Suzuki, PG ’11
Treatment Options for Compromised Extraction Socket in the Esthetic Area - Socket Preservation Techniques vs. Early Implant Placement
Mentor: Dr. Sang-Choon Cho

**Best Case Study**
Dr. Jonathan Beley, PG ’11
Enhance Peri-Implant Soft Tissue Contours with Orthodontic Techniques After Implant Placement
Mentor: Dr. Sang-Choon Cho

**Dean’s Award, DDS Research and Dentsply Award**
Mr. Sam Bae, ’12
Local Effect of IB4+ Neurons in Carcinogenesis & Pain
Mentor: Dr. Brian L. Schmidt
Student research award winners with Dr. Louis Terracio (standing, far left) and Dr. Jane Weintraub (standing, far right): Standing, from left: Jonathan Beley, Manasee Joshi, Ignacio Aliaga, Nicole Willer, Nicholas Zawada, Jimmy Duong, Bandar Alyami, Kathryn Fabella, Sung Kwang Kim, Elyse Wagner, Pablo Peixoto, Zhou Chen, Vincent Scaringi, Rachel Lin. Seated, from left: Tanakori Suzuki, Ismael El Khouly Castilla, Maryam Toufani, Sam Bae, Thikampha Bertrand. Not shown: Jason Kwan and Alfonse Doan.

**Student Research Group Award**
Mr. Sung Kwang Kim, ’13
Characterization of anti-TNF-alpha Bioactivity in Oral Squamous Carcinoma Cells
*Mentor*: Dr. Zoya Kurago

**Honorable Mention, DDS Research Presentation**
Mr. Jimmy Duong, ’13
Loupes: Their Use, Effect on Clinic Productivity, and Relationship to Perceptual Ability Test Scores
*Mentor*: Dr. Kenneth Allen

Ms. Rachel Lin, ’14
Analgesic Medication Use and Its Relation to Pain Thresholds in TMD Patients
*Mentor*: Dr. Karen Raphael

Mr. Nicholas Zawada, ’12
Geographical Distribution of Oral Cancer Across Great Britain, Scotland and Southeast England
*Mentor*: Dr. Ananda Dasanayake

Dr. Maryam Toufani, ’11
Randomized Controlled Trial of Botulinum Toxin-A (BoNT-A) in Trigeminal Neuralgia
*Mentor*: Dr. David Sirois

Mr. Vincent J. Scaringi, ’14
Human Hard Tissue Growth Rate Variability
*Mentor*: Dr. Timothy Bromage

**OKU, Alfano Award**
Ms. Kathryn Fabella, ’14
Effects of PDGF from a Collagen Membrane on Gene Expression in Preosteoblasts
*Mentor*: Dr. Seiichi Yamano
DR. STEPHEN M. ZECK, a former clinical assistant professor and co-director of Comprehensive Care Dentistry at the University of Illinois at Chicago College of Dentistry, has been appointed assistant dean for clinical operations and patient care. Dr. Zeck earned a DDS degree from Indiana University School of Dentistry. He was chief dental resident at Durham Cerebral Palsy Hospital in Durham, North Carolina, and has had extensive leadership training. As assistant dean, Dr. Zeck will lead and direct patient care support services, including having oversight for the Smiling Faces, Going Places mobile dental care program.

DR. JENNIFER GIBBS, formerly an assistant professor of endodontics at the University of California, San Francisco (UCSF) School of Dentistry, has been appointed assistant professor of endodontics. Dr. Gibbs earned a DDS degree from the University of Texas Health Science Center at San Antonio Dental School; a PhD in pharmacology from the University of Texas Health Science Center at San Antonio Graduate School of Biomedical Sciences; an MS degree in clinical research from the UCSF School of Medicine; and a certificate in endodontics from the UCSF School of Dentistry.

DR. XIN LI, formerly a research fellow in periodontics and oral medicine at the University of Michigan School of Dentistry, has been appointed assistant professor of basic science and craniofacial biology. Dr. Li earned an MS degree in insect pathology and physiology from the Chinese Academy of Sciences in Beijing and a PhD in physiology and biophysics from the University of Medicine and Dentistry of New Jersey.
**Ms. Arly Tuysuzian**, formerly a financial analyst for the NYU Office of Sponsored Programs, has been appointed assistant director for business development and clinical research operations for the Bluestone Center for Clinical Research. Ms. Tuysuzian earned a BS degree in business administration from the American University in Washington, DC.

**Mr. Gabe Rothhauser** has been appointed senior director of facilities management for NYUCD. Mr. Rothhauser was formerly senior director of facilities management at NYU’s Washington Square campus, where he was responsible for operations and renovations in faculty housing.

**Mr. John Huff** has been appointed assistant director of facilities management for NYUCD. Mr. Huff was formerly an academic facilities manager at NYU’s Washington Square campus.

**Ms. Helen Wong**, formerly an architectural design project manager at Hackensack University Medical Center, has been appointed senior project manager in NYU’s Office of Construction Management, with responsibility for construction and renovation at NYUCD.
Promoting our Own

**Dr. Eugenia E. Mejia**, formerly director of admissions, has been promoted to senior director of admissions, with responsibility for admissions to the advanced education and master’s degree programs as well as the DDS and Advanced Placement DDS programs.

**Dr. Esther Yang**, formerly a part-time clinical assistant professor of pediatric dentistry, has been promoted to a full-time clinical assistant professor of pediatric dentistry.

**Mr. Steven M. Kahn**, senior financial analyst in the Office of Administration and Finance, has been appointed interim director of financial management and business operations, with responsibility for the day-to-day operations of the NYUCD Business Office.
NYUCD Extends a Warm Welcome to Its Newest Part-time Faculty

Department of Cariology and Comprehensive Care
Dr. Zina Aaron, Clinical Instructor
Dr. Kenneth Aschheim, Clinical Assistant Professor
Dr. Benjamin Bass, Clinical Instructor
Dr. Viktoria Bounitch, Instructor
Dr. Newton P.B. Cardoso,
  Adjunct Assistant Professor
Dr. Man Hong Sandra Chau, Clinical Instructor
Dr. Micheline Habashy-Santiago, Clinical Instructor
Dr. Norman Kaufman, Clinical Assistant Professor
Dr. Jeffrey B. Rappaport, Clinical Instructor
Dr. Angela Zavulunova, Clinical Instructor

Dental Hygiene Program
Ms. Niccole M. Massaro, Clinical Instructor
Ms. Nicole Mourtzinis, Clinical Instructor
Ms. Fida A. Ras, Clinical Instructor
Ms. Margarita Rivera, Clinical Instructor
Ms. Amy L. Soss, Clinical Instructor

Department of Oral and Maxillofacial Pathology,
Radiology and Medicine
Dr. Alison L. Newgard, Clinical Instructor

Department of Oral and Maxillofacial Surgery
Dr. Riccardo I. Ambrogio, Clinical Assistant Professor
Dr. Mendel I. Markowitz, Clinical Assistant Professor

Department of Orthodontics
Dr. Myron Gurman, Clinical Assistant Professor

Department of Pediatric Dentistry
Dr. Jed M. Best, Clinical Assistant Professor
Dr. Yasmi O. Crystal, Clinical Associate Professor
Ms. Kimberly J. Ferguson,
  Clinical Assistant Professor
Dr. Evan S. Hershkowitz, Clinical Assistant Professor
Dr. Yoon Hee Kim, Clinical Assistant Professor

Ashman Department of Periodontology and
Implant Dentistry
Dr. Jonathan M. Abenaim, Clinical Instructor
Dr. Elliot L. Auerbach, Clinical Associate Professor

Department of Prosthodontics
Mr. Hyun-Woong Baek, Instructor
Dr. Udo H. Schutte, Clinical Assistant Professor

Congratulations to Recently Promoted Part-time Faculty

Department of Cariology and Comprehensive Care
Dr. Michael A. Apa, from Instructor to Clinical Assistant Professor
Dr. Philip G. Kotick, from Instructor to Clinical Assistant Professor
Dr. Ellen Lee, from Instructor to Clinical Assistant Professor
Dr. Dana R. Vieru, from Instructor to Clinical Assistant Professor

Dental Hygiene Program
Ms. Andrea Beall, from Clinical Instructor to Clinical Assistant Professor

Department of Epidemiology and Health Promotion
Dr. Malvin N. Janal, from Adjunct Assistant Professor to Adjunct Associate Professor

Department of Prosthodontics
Dr. Ashraf M. Estafan, from Clinical Assistant Professor to Clinical Associate Professor
From March 27 through April 2, the NYUCD-Henry Schein Cares Global Student Outreach Program provided oral health care to approximately 700 children and adults in collaboration with the local Moravian Church in Bluefields, Nicaragua. Located on the Atlantic “Mosquito Coast,” Bluefields is the chief Caribbean port of Nicaragua. Bluefields and its surrounding communities are home to an estimated 70,000 inhabitants composed of the indigenous Miskito, Creole, and Mestizo peoples.

The event was open to all Bluefields residents, focusing primarily on children at the Moravian School and adults requiring emergency care. Treatment included oral hygiene instruction, screenings, composite and amalgam restorations, fluoride applications, sealants, stainless steel crowns, root canal therapy, X-rays, and extractions. The dental outreach team included 15 students, eight residents, and six faculty members.

In addition, NYU College of Dentistry and College of Nursing faculty members Vera W. L. Tang, DDS, MS, clinical assistant professor of cariology and comprehensive care, and Kelley Newlin, DNSc, ARNP-C, assistant professor of nursing, collaboratively conducted research designed to contribute to the growing science linking diabetes and oral disease. Three years ago, Dr. Newlin initiated a diabetes research project in partnership with the local Moravian Church. The project established a clinic to provide free diabetes screenings and treatment under the supervision of local nurses who specialize in diabetes management.

Both diabetes and periodontal screenings and treatment are available through the new, collaborative dental-nursing study, whose goals are to determine the correlation between the oral HbA1c tests and peripheral blood HbA1c tests, and whether a
single intervention of subgingival scaling and root planing with Arestin®, a long-acting antibiotic, can result in lower HbA1c levels.

Seventy-five adults diagnosed with periodontal disease were offered diabetes testing performed by nurses using a peripheral blood HbA1c determination and by dentists using an oral HbA1c determination. The oral HbA1c results were compared with peripheral HbA1c results to determine the reliability of oral HbA1c testing. Patients diagnosed with diabetes were offered treatment including comprehensive diabetes education, evidence-based lifestyle interventions for promotion of physical activity, weight-control interventions targeting overall improvements in glycemic levels, and medications, if needed. Forty patients diagnosed with diabetes and severe periodontal disease were given the option for treatment by scaling and root planing with Arestin®. Follow-up visits coordinated with the local nursing staff will include peripheral HbA1c glucose monitoring every three months for one year.

Initial findings show that the oral HbA1c test and peripheral blood HbA1c test both have a high correlation and may be used interchangeably. This has the potential to enable dentists to make immediate therapeutic decisions and to offer education and intervention to periodontal patients, thus improving patient treatment outcomes.
In February 2011, the NYUCD-Henry Schein Cares Global Student Outreach Program, with the generous support of Colgate-Palmolive, inaugurated the first phase of a National School-based Oral Health Plan to decrease new decay in Grenadian children by 50 percent over three years and to build capacity among the local public health infrastructure to prevent dental caries and promote oral health.

The outreach followed a yearlong period of planning and assessment of the oral health status of the children of the tri-island nation of Grenada, which found that Grenadian children had one of the highest, if not the highest, incidence of dental caries in the world, and the acceptance by the Grenadian government’s Ministry of Health (MOH) of an NYUCD proposal to create a sustainable, school-based plan to ameliorate the situation. The initiative was conceived and is overseen jointly by NYUCD’s Office of International Initiatives and Development and its Department of Cariology and Comprehensive Care.

According to Dr. Mark Wolff, survey director for the Grenada outreach, associate dean for predoctoral clinical education, and professor and chair of the Department of Cariology and

Grenada Outreach Update: The Public Health Approach to Reducing the Decay Rate of a Nation’s Children
Comprehensive Care, “Grenada represents a different kind of outreach from initiatives undertaken in the past, in that it is focused not just on treating disease, but on preventing disease on a long-term basis.”

In just two weeks in February, a 20-member team of dental providers from NYUCD and the MOH visited 110 schools, providing preventive oral health services for the 22,000 children living in Grenada, Carriacou, and Petite Martinique. The February initiative launched the school-based brushing program in every classroom in the country. The cooperation of the schools, and particularly of the teachers and principals, was key to the program’s implementation, and will continue to be the critical factor in ensuring the program’s future sustainability. This two-week visit was followed by a return visit in April, marking the second of eight visits planned by the NYUCD-Henry Schein Cares Global Student Outreach Program over the next two-and-a-half years, during which NYUCD will continue to work with the MOH and the Ministry of Education (MOE) to implement the National School-based Oral Health Plan.
From April 16 to May 7, 30 NYUCD outreach team members provided fluoride varnish for 16,000 children and applied 6,000 sealants. NYUCD, in collaboration with the MOH, also provided several evening sessions for all public health nurses to educate and train them in prevention and in nutrition needs of children and infants, as well as to provide fluoride varnish and toothbrushes to be kept in the public health clinics and used for infants and toddlers as an added measure to prevent tooth decay.

NYUCD’s overall commitment includes building capacity within the present infrastructure by:

- training public health nurses, who provide health care and health education for pregnant women and for infants and toddlers who are not yet in the nation’s school system,
- training teachers to implement classroom-based tooth-brushing programs using individual toothbrushes for youngsters who never before had their own toothbrushes, and using fluoridated toothpaste,
- training local providers to apply fluoride varnish, which requires no special equipment or cleanings and has been shown to result in a 40 to 70 percent reduction in decay, when applied regularly.
- providing oral health education for students and their caregivers, and
- mobilizing PTA groups.

“The NYUCD-Henry Schein Cares Global Student Outreach Program,” notes Dr. Wolff, “is designed to demonstrate in both a dramatic and a pragmatic way that it’s time to move from fixing teeth to improving health and the healthcare system in a locally sustainable model.”
For the second consecutive year, NYUCD hosted the New York State Global Health Forum, an initiative cosponsored by The Associated Medical Schools of New York and The New York State Academic Dental Centers.

The daylong event, held on December 14, 2010, brought together nearly 100 faculty, staff, and students from medical schools, dental schools, affiliate nursing schools, and public health schools from around New York State to focus on curricula and competencies across professions.

The event was co-chaired by Oliver Fein, MD, associate dean for affiliations, Weill Cornell Medical College, and Natasha Anandaraja, MD, MPH, director, global health center, Mount Sinai School of Medicine, and featured welcoming remarks by Dean Bertolami. During the plenary session on “Defining Global Health Competencies Across the Health Professions,” NYUCD was represented on the panel by Mark Wolff, DDS, PhD, professor and chair of the department of cariology and comprehensive care and associate dean for predoctoral clinical education.

Dr. Michael P. O’Connor, vice dean for finance and administration and clinical professor of epidemiology and health promotion, was a key organizer of the forum.
When Dr. Igor Chikunov chose prosthodontics as a way to combine his interest in health care with his love of craftsmanship, he never thought that he would be fabricating prosthetic eyes, ears, noses, and jaws.

Dr. Chikunov, a clinical assistant professor of prosthodontics, is one of approximately only 400 maxillofacial prosthodontists in the United States. These specialists are trained to prosthetically correct maxillofacial defects in cancer survivors, people with congenital defects, and trauma patients, and to fabricate conventional intraoral prostheses such as crowns, bridges, veneers, and dentures.

After earning a DDS degree from Kharkov State Medical University Dental School in his native Ukraine, Dr. Chikunov enrolled at NYU CD, earning a DDS degree in 2002 and a certificate in prosthodontics in 2005. Dr. Laurence Brecht, NYU CD’s director of maxillofacial prosthodontics, encouraged Dr. Chikunov to pursue maxillofacial specialty training, and Dr. Chikunov subsequently completed an additional year as a fellow in maxillofacial prosthodontics at Memorial Sloan-Kettering Cancer Center in Manhattan.

Today, Dr. Chikunov divides his time between a private group practice in Manhattan and NYU CD, where he trains prosthodontics residents and serves as co-director of Clinical Removable Prosthodontics for the DDS program. Several of his colleagues, including Dr. Mijin Choi and Dr. Kenneth Kurtz, are also trained in maxillofacial prosthodontics. Three of Dr. Chikunov’s residents have gone on to careers in maxillofacial prosthodontics.

One of Dr. Chikunov’s most challenging cases involved crafting a jaw prosthesis, a prosthetic eye, and facial tissue for a cancer survivor who had undergone surgery to remove a facial tumor. “I made impressions of the mouth, nasal cavity and face, fabricated the intraoral prosthesis, sculpted a facial prosthesis made of silicon to replace missing skin and the missing eye, selected the eye color and matched the prosthesis to the patient’s skin tone,” explains Dr. Chikunov. “The facial and intraoral prostheses were connected and retained by strong magnets.

“Maxillofacial prosthodontics is rewarding and challenging work that can make a big difference in the lives of people who sometimes cannot even face the trauma of leaving home to do simple chores,” says Dr. Chikunov.

Adds Dr. Leila Jahangiri, clinical associate professor and chair of the Department of Prosthodontics, “Dr. Chikunov’s career demonstrates that when you come to NYU CD, you can develop in ways that you never imagined.”
VISITING SCHOLARS ADD LUSTER TO THEIR CVs AND TO NYUCD’S INTERNATIONAL REPUTATION

For international visiting scholars, spending a year at NYUCD provides an opportunity to be mentored in innovative research concepts and technology and to coauthor articles for submission to peer-reviewed journals. Over the past several years, Brazil has been especially highly represented among PhD candidates who have come to NYUCD as visiting scholars. At the same time, the visiting scholars’ skills and interests enrich NYUCD’s research enterprise and enhance its international reputation.

Each year, visiting scholars collaborate with mentors, including Dr. Nelson da Silva, assistant professor of prosthodontics, and Dr. Paulo G. Coelho, assistant professor of biomaterials and biomimetics, on topics ranging from implant surface engineering to mechanical testing of ceramics, resulting in an average of 20 coauthored articles annually. These articles have appeared in prestigious publications, including the Journal of Dental Research, Journal of Biomedical Materials Research, and Journal of Prosthodontics.

During the past year, three new PhD candidates joined the Department of Biomaterials and Biomimetics as visiting scholars from Brazil. All three received grants from the Brazilian government through a program designed to assist PhD candidates in studying abroad.

**Dr. Fabio C. Lorenzoni**, a PhD candidate in oral rehabilitation at the University of São Paulo Bauru School of Dentistry, is being mentored by Drs. da Silva and Coelho on mechanical testing methods for new ceramic materials. Dr. Lorenzoni earned a DDS degree from the Federal University of Pelotas School of Dentistry, and an MS degree in oral rehabilitation from the University of São Paulo Bauru School of Dentistry.

**Dr. Juliana A. Delben**, a PhD candidate in prosthodontics at the São Paulo State University Araçatuba School of Dentistry, is being mentored by Drs. Coelho and da Silva on the application of nonthermal plasma technology in dentistry and medicine. Dr. Delben earned a DDS degree and an MS in prosthodontics from the São Paulo State University Araçatuba School of Dentistry.

**Dr. Erika O. de Almeida**, a PhD candidate in prosthodontics at the São Paulo State University Araçatuba School of Dentistry, is being mentored by Drs. da Silva and Coelho on implant engineering. Dr. de Almeida earned a DDS degree from the Caruaru School of Dentistry and an MS in prosthodontics from the São Paulo State University Araçatuba School of Dentistry.
NYU Nursing-Dental Research Team Receives CTSI Grant to Assess Effectiveness of A1C Diabetes Screening Technique Using Blood from Periodontal Patients

NYU’s Clinical and Translational Science Institute (CTSI) has awarded an NYU nursing-dental research team a one-year pilot grant to assess the feasibility of using gingival crevicular blood from periodontal patients to gauge hemoglobin A1C—a blood glucose measurement—as a means of diagnosing diabetes and identifying pre-diabetes. CTSI is a partnership between New York University’s Langone Medical Center and the New York City Health and Hospitals Corporation, funded by a grant from the National Center for Research Resources of the NIH.

The hemoglobin A1C test has long been used to measure how well people already diagnosed with diabetes have their blood glucose levels under control. In January 2010, the American Diabetes Association issued new clinical practice recommendations calling for the addition of the hemoglobin A1C test as a means also of diagnosing diabetes and diabetic risk.

Led by Dr. Shiela Strauss, associate professor of nursing and co-director of the Statistics and Data Management Core for NYU’s Colleges of Nursing and Dentistry, the study will gauge levels of hemoglobin A1C utilizing a version of an A1C testing kit that was initially developed specifically to enable dentists and dental hygienists to collect finger-stick blood samples and send them to a laboratory for analysis.

Dr. Strauss has adapted the testing kit to include oral blood as well as finger-stick samples. Using Dr. Strauss’s adapted version of the test, oral healthcare providers can play a role in screening patients for diabetes without having to draw and analyze venous blood samples, a process requiring certification by the Centers for Medicare and

This study is dedicated to the memory of the late Alla Wheeler, clinical assistant professor of dental hygiene, who played a major role in an earlier NYU nursing-dental study on the link between diabetes and periodontal disease.
Medicaid Services, a division of the US Department of Health and Human Services.

Dr. Strauss will recruit periodontal patients for the research based on an earlier study she led that found that over 90 percent of people with periodontal disease but with undiagnosed diabetes are at risk for diabetes and should be screened for diabetes, based on the American Diabetes Association’s guidelines. Dr. Strauss’s research team will recruit 120 subjects from the NYU College of Dentistry’s periodontal treatment program for the new study. Each subject will provide one finger-stick blood sample and, if there is oral bleeding, one blood sample drawn from a deep pocket of gum inflammation.

Dental and dental hygiene students and faculty will collect the oral blood samples, while the subjects will either draw their own finger-stick blood or do so with help from the students and faculty. Both samples will be sent to the same laboratory, which will determine whether subjects’ hemoglobin A1C levels are in the normal, pre-diabetic, or diabetic range. The research team will compare the laboratory results to see if there is a correlation between A1C levels in the finger and oral blood samples.

Dr. Mary Rosedale, an assistant professor of nursing, will counsel those subjects whose finger-stick hemoglobin A1C levels are determined to be in the diabetic range regarding the importance of follow-up. Dr. Rosedale will also interview subjects to assess their reactions to diabetes screening in a dental setting.

Dr. Strauss indicates that A1C testing may be more easily incorporated into a dental visit than a fasting blood glucose screening—often the first test for diagnosing diabetes—since most people don’t fast before seeing a dentist.

“If we find a high correlation between the A1C finger-stick and oral blood samples in our new study, we plan to conduct additional research on oral blood A1C testing involving a broader pool of subjects and dental practice sites,” said Dr. Strauss. (See related story on page 70.)

An earlier NYU nursing-dental study led by Dr. Strauss suggested that the dental visit could be a useful opportunity to conduct an initial diabetes screening. In that study, researchers used a testing device known as a glucometer to screen 46 subjects with periodontal disease for casual blood glucose levels, measuring blood glucose without regard to when a person last ate. The study determined that the glucometer can provide glucose-level readings that are highly correlated with glucometer readings for finger-stick blood samples when oral blood samples are drawn from deep pockets of gum inflammation.

“There is a critical need to increase opportunities for diabetes screening and early diabetes detection,” Dr. Strauss noted. “The issue of undiagnosed diabetes is especially critical because early treatment and secondary prevention efforts may help to prevent or delay the long-term complications of diabetes that are responsible for reduced quality of life and increased levels of mortality risk.”

In addition to Dr. Rosedale, Dr. Strauss’s coinvestigators include Dr. Stefanie Russell, assistant professor of epidemiology and health promotion; Dr. Robert Schoor, clinical associate professor of periodontics and director of the advanced education program in periodontics; and Ms. Janet Tuthill, clinical assistant professor of dental hygiene.
Two years ago, when Dr. Michael Atar, a prominent pediatric dentist practicing in London, decided that he wanted to expand his professional activities to include research with an international collaborator, he thought of reaching out to pediatric dentists in both eastern and western Europe, where he had traveled extensively, and especially in Switzerland, where he had earned his PhD in craniofacial anatomy. Ultimately, however, he was influenced by the warm and welcoming reception he received from pediatric dentists in the US, in general—and by NYUCD’s strong global reputation as a leader in pediatric dentistry, in particular—to seek out NYUCD’s Department of Pediatric Dentistry. He was especially interested in the research being conducted by Dr. Amr Moursi, associate professor and chair of the Department of Pediatric Dentistry, in areas such as dental forensics using DNA derived from teeth, the microbiological effect of fluoride therapy, and developmental biology and the influence of systemic disease on tooth development.

Dr. Moursi responded enthusiastically to Dr. Atar’s interest in forming an international research collaboration, which has led to Dr. Atar and
Dr. Moursi coauthoring, with colleagues from NYUCD, two manuscripts which have been submitted for publication to *Pediatric Dentistry*, the journal of the American Academy of Pediatric Dentistry: “Oral Health Findings of Special Olympics Athletes at the New York City Metro Games,” and “Outcome of Indirect Pulp Treatment in Primary Molars Using Resin-Modified Glass Ionomer and Two Percent Chlorhexidine Gluconate,” as well as Dr. Atar’s participation in NYUCD’s postgraduate pediatric dentistry program as an adjunct associate professor of pediatric dentistry.

Dr. Atar travels to NYUCD twice a year to present lectures to pediatric dentistry residents, to assist them in developing research protocols and gaining IRB (Institutional Review Board) approval, and to help in analyzing data and preparing abstracts for publication.

“This has proven to be an exceptional collaboration,” said Dr. Atar, who, in addition to teaching and collaborating on pediatric dentistry research at NYUCD, has made a commitment of half a million dollars to promote the advancement of the Department of Pediatric Dentistry’s goals. “I believe strongly in the direction that the Department of Pediatric Dentistry has taken under Dr. Moursi’s leadership,” he added, “and my wife and I decided to demonstrate our conviction with a major gift.”

“Dr. Michael Atar is that rare individual,” said Dr. Moursi, “who combines philanthropy with service to education and research in the field that he loves. NYUCD is very fortunate to have his personal participation and support. Everyone in the Department of Pediatric Dentistry feels, as I do, that we could not have a better partner.”
AAPD Healthy Smiles, Healthy Children’s Access to Care Grant Awarded to NYUCD

Healthy Smiles, Healthy Children (HSHC), the Foundation of the American Academy of Pediatric Dentistry (AAPD), has awarded New York University College of Dentistry’s Department of Pediatric Dentistry one of five HSHC Access to Care grants. This $20,000 grant honors the department’s “ABC’s of Early Childhood Oral Health for Rural Practitioners Program,” which is committed to hands-on, customized training for general dentists in the provision of preventive oral health care and referrals for children up to five years of age in Broome and Steuben counties in New York.

The number of patients treated in the operating room for dental caries has increased in New York State in recent years. This project will take advantage of the resources of NYU, combined with the support of the region’s dental societies, to bring training and support in early childhood oral health to general dentists in rural, underserved areas. Participating dentists in the “ABC’s of Early Childhood Oral Health for Rural Practitioners Program” will be trained in pediatric oral health principles and practices to improve their ability to identify oral disease, perform behavior guidance, classify risk factors, provide anticipatory guidance and education, apply fluoride varnish, and make appropriate referrals for follow-up treatment.

According to Dr. Amr M. Moursi, associate professor and chair of the Department of Pediatric Dentistry, “This program will target two counties in rural upstate New York where finding a dentist to see young children continues to be a problem. We will provide general dentists with the necessary training to create a ‘dental home’ for these underserved children. Additionally, we will create a network of local dental mentors who will be teamed with each participating dentist to provide support and referral services as needed. Once completed, this program has the potential to reach over 15,000 children from infancy to five years of age.”

General dentists in Broome and Steuben counties will be invited to participate in a continuing education course, followed by hands-on clinical training at a community clinic. Upon completion of this 12-month program, participating dentists will receive a minimum of nine continuing education credits from NYU. In the future, this model will be expanded to other rural areas throughout New York State and the nation.

The HSHC Access to Care grant will support the purchase of clinical supplies, travel, conference expenses, printing, media, promotional materials, and continuing education fees. In addition, NYUCD’s Department of Pediatric Dentistry plans to use this grant to obtain matching funds from other foundations and from local and state governmental agencies.

“We are delighted to receive this grant,” said Dean Bertolami. “HSHC’s effort to promote the goal of establishing a ‘dental home’ for each child and reduce the burden of untreated dental disease is inspirational to all of us seeking to increase access to care for all children. Earlier intervention by dental practitioners equals a lower incidence of early childhood caries.”
NIH Grant Awarded to NYUCD to Promote Oral Cancer Examinations in Puerto Rico

NYUCD has received a two-year, $430,000 grant from the National Institute of Dental and Craniofacial Research (NIDCR), part of NIH, to investigate methods to encourage practicing dentists in Puerto Rico to routinely conduct oral cancer examinations. Puerto Rican males residing in Puerto Rico have one of the highest oral cancer rates in the Western Hemisphere.

The NYU research team will interview dentists in Puerto Rico to identify strategies for promoting greater incorporation of oral cancer examinations into routine clinical practice and to assess how best to implement these strategies, said the study’s principal investigator, Dr. Walter Psoter, assistant professor of epidemiology and health promotion.

Dr. Psoter’s study will gather data from focus groups and one-on-one interviews with practicing dentists, public health officials, and dental faculty at the University of Puerto Rico School of Dental Medicine. The interviews will seek to establish the likelihood of practicing dentists’ adopting promising new oral cancer diagnostic technologies; whether new licensing and continuing education requirements could be used to increase oral cancer examinations in clinical practice; and whether social forces, such as an advertising campaign to heighten the public’s oral cancer awareness, could be harnessed as an incentive to motivate dentists to routinely conduct examinations. A subsequent study is planned to test the effectiveness of one or more of these strategies.

Dr. Psoter’s study will address issues identified in an earlier study sponsored by the NYU Oral Cancer RAAHP (Research for Adolescent and Adult Health Promotion) Center, which compared rates of suspicious lesions diagnosed by pathology laboratories in New York City and in Puerto Rico and found that while rates of oral cancer diagnosis were higher in Puerto Rico, biopsy rates of suspicious lesions were lower. In an article on the study published in the February 2009 issue of Cancer Detection and Prevention, the study’s lead investigator, Dr. Douglas Morse, associate professor of epidemiology and health promotion, wrote that Puerto Rico residents with intraoral lesions suspicious for oral cancer and precancer are most likely to be biopsied only after developing an invasive oral cancer.

Dr. Psoter’s multidisciplinary collaborators are from NYUCD, the University of Puerto Rico Schools of Dental Medicine and Public Health, and the University of Florida College of Dentistry. A complete list of study collaborators appears in the online version of this article at http://www.nyu.edu/dental/nexus/index.html.
Dr. Carlos Castro is 2011 Litvak Fellowship Recipient

Dr. Carlos A. Castro, ’08, a second-year student in the Jonathan and Maxine Ferencz Advanced Education Program in Prosthodontics, and a teaching fellow in prosthodontics, has become the 13th recipient of the Dr. Harold Litvak Junior Fellowship in Prosthodontics.

Dr. Castro earned a DDS degree from Pontificia Universidad Javeriana in Bogota, Colombia, and a certificate in prosthodontics from NYUCD’s Advanced Program for International Dentists in Prosthodontics. He plans to pursue a career in research, teaching, and private practice after completing his prosthodontics specialty training in 2012.

“Dr. Castro was awarded the fellowship based on his academic excellence, approach to patient care, and positive interactions with faculty and peers,” said Dr. Farhad Vahidi, associate professor of prosthodontics and director of the Jonathan and Maxine Ferencz Advanced Education Program in Prosthodontics.

The Litvak Fellowship was established in 1999 through a generous grant from Mrs. Adele Block in honor of her dentist, Dr. Litvak, a clinical professor of prosthodontics at NYUCD and a generous donor to the College. Mrs. Block is a member of the family that owned the Block Drug Company, Inc., a major producer of oral and general healthcare products, which is now a division of GlaxoSmithKline.

“Dr. Castro was awarded the fellowship based on his academic excellence, approach to patient care, and positive interactions with faculty and peers.”
In recognition of a major gift from Dr. Stuart Super, a prominent Manhattan oral and maxillofacial surgeon, and his wife, Tibby, NYUCD has named the Dr. Stuart and Tibby Super Orthognathic Surgery Conference Suite in their honor. The suite is located within the Gary and Alyse Ruth Oral and Maxillofacial Surgery Wing.

Dr. Super currently serves as a clinical assistant professor of oral and maxillofacial surgery at NYUCD and was for many years the director of the Advanced Education Program in Oral and Maxillofacial Surgery at Bellevue Hospital Center. Dr. and Mrs. Super are cofounders of the Dr. Stuart and Tibby Super Foundation for Facial Deformities, which provides treatment for financially disadvantaged young adults with facial deformities, enabling them to lead normal lives.

“I cannot think of a better way to honor the generosity of Stuart and Tibby Super than to join their names to our orthognathic surgery conference suite, a facility central to our efforts to provide the best possible treatment planning for our oral and maxillofacial surgery patients,” said Dean Bertolami. “Now, the Supers’ commitment to improving lives has been appropriately recognized.”
Fox News broadcast an interview with Dr. Mark Wolff, associate dean for predoctoral clinical education and professor and chair of the Department of Cariology and Comprehensive Care, about NYUCD’s Program for Survivors of Torture—the first program in the US designed to educate dental students to provide dental services for survivors of torture. The story was also reported by Yahoo News and AOL Video.

ABC7 NY broadcast interviews with Dr. Wolff on the safety of amalgams in dental restorations; on NYUCD’s program to improve communication between patients and future dentists; on the benefits of chewing gum; and on technology designed to muffle noise from dental drills. The latter story was also reported by Discover and by KSFO Radio San Francisco.

ABC7 NY reported on the annual Give Kids a Smile day at NYUCD and on the visit of the NYU College of Dentistry Smiling Faces, Going Places mobile dental van to a public school in Brooklyn, New York.

The NYC News Service ran an interview with Dr. Ananda Dasanayake, professor of epidemiology and health promotion and director of the graduate programs in clinical research, on the links between periodontal disease and systemic disease.

The Huffington Post quoted Dr. Wolff about a study he headed that found a connection between drinking white wine and teeth staining.

The Arizona Republic reported on the awarding of five Healthy Smiles, Healthy Children Access to Care grants, including one to NYUCD. The story was also reported by PR Newswire.

The Daily News and WebMD interviewed Dr. Wolff about dental phobias.

Fitness Magazine interviewed Dr. Wolff on various methods for sanitizing toothbrushes.

AARP Bulletin interviewed Dr. Wolff to ask the question, “Are Teeth Whiteners Worth the Cost? What works, what doesn’t and what they cost.”

Drug Week published the findings of new apoptosis research from NYUCD.

KWQZ-TV6 broadcast a story entitled “At What Age Can Kids Start Brushing Their Own Teeth?” featuring Dr. Nancy Dougherty, clinical associate professor and director of NYUCD’s Postgraduate Program in Pediatric Dentistry.

News 12 Bronx reported on the visit of NYUCD’s Smiling Faces, Going Places mobile dental van to Public School 163.

Univision 41 interviewed Dr. Lucy Troncoso, clinical assistant professor of cariology and comprehensive care, for a story about oral cancer.

The Dr. Oz Show featured Dr. Gerald Curatola, ’83, who demonstrated a dramatic dental make-over story.
Metro NY quoted Dr. Mark Wolff in an article about fluoride levels in the water supply. Doctor Radio, a Sirius satellite radio channel sponsored by the NYU Langone Medical Center, also interviewed Dr. Wolff about fluoride levels in New York City’s water.

Metro NY interviewed Dr. Donna Shelley, associate professor of cariology and comprehensive care and director of interdisciplinary research and practice, on substance (especially tobacco) abuse.

The Wall Street Journal featured NYUCD’s program to improve communication between patients and future dentists, and quoted Dr. David Hershkowitz, clinical assistant professor of cariology and comprehensive care, and Dr. Louis Siegelman, clinical associate professor of pediatric dentistry, in a story about dental phobias. The New York Daily News also quoted Dr. Siegelman in a story about dental phobias.

Good Morning America interviewed Dr. Stefanie Russell, assistant professor of epidemiology and health promotion on the prophylactic removal of wisdom teeth. Dr. Russell was also interviewed by iVillage about gingivitis during pregnancy.

Dentistry@Sydney, a blog published by the University of Sydney, Australia, Faculty of Dentistry, ran an item promoting Global Health Nexus magazine.

Hudson Register-Star reported on the NYUCD-Henry Schein Cares Global Student Outreach Program’s visit in April 2011 to Hudson, New York.

Dental Tribune International ran a story on dentists from around the world attending International Implantology Week at NYUCD.

Yahoo News reported on a collaborative study between NYUCD and the Polytechnic Institute of NYU that found an effective way to combine two methods that scientists use as vehicles to carry DNA into cell nuclei. The news was also reported by DentistryIQ.com, DOCSEducation.com, HawaiiNews.com, Finanzas, HealthNewsDigest.com, and El Nuevo Herald Miami.

Health & Medicine Week reported on research on an all-ceramic core crown designed by Dr. Nelson da Silva, assistant professor of prosthodontics; on a study on gene expression in mineralization, conducted by Dr. Cristina Teixeira, associate professor and interim chair of the Department of Orthodontics and associate professor of basic science and craniofacial biology; on tobacco cessation programs directed by Dr. Donna Shelley, associate professor of cariology and comprehensive care and director of interdisciplinary research and practice; on immigrant and minority health research conducted by Dr. Shelley; on fracture prevention in all-ceramic restorations studied by Dr. Yu Zhang, assistant professor of biomaterials and biomimetics; and on a study on subcellular fractions conducted by Dr. Pablo Peixoto, associate research scientist in the Department of Basic Science and Craniofacial Biology.

ADA News reported on presentations by NYUCD faculty at the 2010 Symposium on Early Childhood Caries in American Indian and Alaska Native Children.

ADA News quoted Dr. Michael C. Alfano, executive vice president of NYU, former dean of NYUCD, and current professor of basic science and craniofacial biology at NYUCD, and Dr. David Glotzer, associate professor of cariology and comprehensive care, in an article about training dental students in emergency response.

Reuters Health reported on a study led by Dr. Brian Schmidt, professor of oral and maxillofacial surgery and director of the Bluestone Center for Clinical Research, that found that in comparison with other patients, those with oral cancer report significant levels of spontaneous pain and functional restriction from pain.
**USA Today** interviewed Dr. Mark Wolff about tooth whitening.

**New York State Dental Association News** reported that the National Institute of Dental and Craniofacial Research awarded a two-year, $245,000 grant to an NYUCD research team led by Dr. Deepak Saxena, assistant professor of basic science and craniofacial biology, to identify bacteria associated with oral cancer.

**CBS2 NY** interviewed Dr. Amr Moursi, associate professor and chairman of the Department of Pediatric Dentistry, about fluoride levels in the water supply.

**CBS2 NY** broadcast an interview with Dr. David Tarrab, clinical associate professor of pediatric dentistry, about amalgam dental restorations. The story was also reported by WRAL-TV, Raleigh-Durham.

**Lab Management Today** reported on an oral health assessment conducted in 2010 on behalf of the government of Grenada by the NYUCD-Henry Schein Cares Global Student Outreach Program.

**Parent Paper** quoted Dr. Karen Raphael, professor of oral and maxillofacial pathology, radiology and medicine, in an article about temporomandibular joint disorder.

**WCSH-TV**, Portland, Maine, reported on the NYUCD-Henry Schein Cares Global Student Outreach Program’s 2010 outreach to Machias, Maine. The news was also reported by *The Bangor Daily News*, *The Machias Valley News Observer*, *The Downeast Coastal Press*, *The Quoddy Tides*, and the *Calais Advertiser*.

**Weekly Asahi**, a popular Japanese news magazine, featured residents of the Implant Dentistry Fellowship Program in a story on differences between American and Japanese approaches to implant dentistry education.
The New York State Dental Journal reported on a study led by Dr. Racquel Z. LeGeros, Linkow Professor of Implant Dentistry and associate chair of the Department of Biomaterials and Biomimetics, that identified a promising new approach for treating tooth hypersensitivity.

The New York State Dental Journal reported that the National Institute of Dental and Craniofacial Research (NIDCR) awarded a joint, five-year $1.25 million dollar grant to Dr. Brian L. Schmidt, professor of oral and maxillofacial surgery and director of the Bluestone Center for Clinical Research, and Dr. Markus Hardt, a protein chemist at the Boston Biomedical Research Institute, for a study of the molecular mechanisms of oral cancer pain.

The New York State Dental Journal also reported that the National Institutes of Health (NIH) awarded a multimillion dollar grant to the Venter Institute in collaboration with Dr. Walter Bretz, associate professor of cariology and comprehensive care, for a study to predict caries risk.

The New York State Dental Journal quoted Dr. Donna Shelley, associate professor of cariology and comprehensive care and director of interdisciplinary research and practice, in an article about advertisements for smoking cessation programs.

WebMD interviewed Dr. Denise Estafan, associate professor of cariology and comprehensive care and director of esthetic dentistry, for an article about tooth bleaching.

Futurity carried a story entitled “Pool Water May Strip Tooth Enamel,” which featured a discussion with Dr. Leila Jahangiri, associate professor and chair of the Department of Prosthodontics, who observed at firsthand the effects of improper pH levels on a patient’s teeth. The Toronto Star, QR77 Radio in Calgary, Alberta, Canada, and Biospace also carried the story.

Doctor Radio interviewed Dr. Morey Gendler, clinical assistant professor of cariology and comprehensive care, on oral health tips for seniors; Dr. Robert Glickman, professor and chair of the Department of Oral and Maxillofacial Surgery about TMJ and bruxism; Dr. Brian Schmidt, professor of oral and maxillofacial surgery and director of the Bluestone Center for Clinical Research, on advances in oncology; Dr. Amr Moursi, associate professor and chair of the Department of Pediatric Dentistry, on fluoride levels in New York City drinking water; Dr. Ananda Dasanayake, professor of epidemiology and health promotion and director of the Graduate Program in Clinical Research, on new advances in dentistry; Dr. Rima Bachman Sehl, associate professor of cariology and comprehensive care, on dental care as we age; and Dr. Joan Phelan, professor and chair of the Department of Oral and Maxillofacial Pathology, Radiology and Medicine on dental X-ray safety.

The New York Daily News carried a calendar item on the 2011 Oral Cancer Walk, cosponsored by NYUCD.

The Times of India interviewed Dr. Bapanaiah Penugonda, associate professor of cariology and comprehensive care and group practice director; Mr. Jimit Khakhar, ‘12; and Mr. Dharam Tayal, ‘12, for a story about students from India at NYUCD.

Health magazine interviewed Dr. Angela Kamer, associate professor of periodontology and implant dentistry, about a study she led that found new evidence to support a link between gingival inflammation and Alzheimer’s disease. Redbook also interviewed Dr. Kamer about the study.

The ADEA Bulletin of Dental Education profiled Edly Destine, DDS Program Class of 2014, and Rosa Maria Salvo, Dental Hygiene Program Class of 2012.

NewsRX reported on a study about a smoking cessation program for Chinese immigrants living in New York led by Dr. Donna Shelley, associate professor of cariology and comprehensive care and director of interdisciplinary research and practice.
The procedure that was performed at NYU Langone Medical Center on February 19, 2011, was nothing short of spectacular, even to an advanced team of surgeons who had spent months planning the surgery and years envisioning it. The 29-year-old patient, Maria Palmia, was diagnosed with ameloblastoma, a benign tumor that forms from the precursor cells of teeth. Such tumors can become dangerously large but typically do not spread to other parts of the body. This young woman’s tumor was in the lower anterior portion of the jaw—one of the hardest parts to reconstruct—and involved most of her lower teeth.

David Hirsch, DDS, MD, FACS, oral and maxillofacial and head and neck surgeon, has devoted himself over the past five years to perfecting the computer-aided technology that enabled this surgery to take place, significantly reducing the time the patient spent in surgery as well as the cosmetic repercussions of the procedure. Thanks to the passion of Dr. Hirsch and a highly skilled team, a process that used to require three surgeries over the course of a year can now be done in a day. So it was that on February 19, after the lower half of the patient’s jaw was removed and replaced with bone from the leg, and dental implants were placed in the new bone, she woke up with a set of functional teeth—the first time this operation has been accomplished in one surgical session in the United States.
The 29-year-old patient was diagnosed with ameloblastoma, a benign tumor that forms from the precursor cells of teeth. Such tumors can become dangerously large but typically do not spread to other parts of the body. This young woman’s tumor was in the lower anterior portion of the jaw—one of the hardest parts to reconstruct—and involved most of her lower teeth.

An ameloblastoma is generally discovered on a routine X-ray, which was the case for this young woman. In the past, the surgery to remove the tumor and replace the affected jawbone with bone from the patient’s leg was extremely long and almost always disfiguring. Calculations of how much leg bone was needed and its subsequent removal could not be done until the jaw bone had been removed, all with the patient under anesthesia.

Over the past five years, Dr. Hirsch, who serves on the faculties of NYU College of Dentistry and NYU Langone Medical Center, working with Jamie Levine, MD, plastic and reconstructive microsurgeon and chief of microsurgery at NYU, and Lawrence E. Brecht, DDS, director of dental services and craniofacial prosthetics at the Institute of Reconstructive Plastic Surgery of NYU Langone Medical Center, and a member of the NYUCD faculty, has revolutionized the process for removing tumors by using computer-aided imaging to plan the entire surgery in advance. Recognizing the potential for such imaging in maxillofacial surgery, Dr. Hirsch began working with both a software company and a manufacturer that, together, created blueprints and actual models, enabling the surgeries on both the jaw and the leg bone to be planned precisely in advance. This planning allowed surgical teams to operate simultaneously on the jaw and leg, reducing the length of surgery from the usual 20 to only 8 hours.

Prior to the February surgery, Dr. Hirsch and Dr. Levine had performed some 40 mandibular reconstructions using the computer-aided technique. They continually refined the procedure, on both the computer and in the operating room. Yet, patients who underwent the much-improved surgery still needed to return in 8 to 12 weeks for a second operation to receive dental implants in their newly fashioned jawbone. It took another four to five months before prosthetic teeth could be made, because of concern as to whether the dental implants, set into the leg bone, would settle in the proper position. The entire process could take well over a year.

“Imagine what we could do for patients, psychologically, if they could leave the operating room with...
“That’s what led us to the next steps.”

The team studied whether dental implants—titanium cylinders that are drilled into bone—could be surgically placed with the needed precision at the same time as the transfer of leg bone, and determined that they could. This development eliminated the need for a second surgery to place the implants. The extremely delicate operation would require the surgeon to place the implants into the leg bone before it was detached from its blood supply.

“A NEW ERA OF MICROSURGERY”

“Historically,” Dr. Levine says, “it was rare for a person who needed jaw reconstruction to receive dental rehabilitation. People were left with serious deformities. The era of microsurgery, beginning in the 1970s, led to facial-bone replacement from other parts of the body. Even so, full dental reconstruction, enabling a patient to chew and function maximally, was not even conceived of as recently as the ’70s or ’80s. Now we can plan these surgeries much more accurately and ensure a much better quality of life for our patients.”

Planning for the February 19 surgery began a month in advance. All of the doctors and their support staff met together with the patient to explain each step in the surgical and recovery processes—a step that, in itself, might not have been done in a less patient-centered era. Once Dr. Hirsch decided where to make the cuts around the tumor in the patient’s jawbone, Dr. Brecht’s role was to figure out exactly where the teeth on the same day,” Dr. Hirsch asked himself.

Area of the patient’s leg from which bone was removed to be placed in the patient’s jaw. Computer technicians in Golden, Colorado, produced a set of cutting guides, which Dr. Hirsch humbly likens to furniture-assembly instructions.
implants and new teeth needed to be placed. Finely sliced CT scans of the patient's face and leg were then formatted into digital three-dimensional images. Computer technicians in Golden, Colorado, turned the digital images into a physical model. The same company produced a set of cutting guides, which Dr. Hirsch humbly likens to furniture-assembly instructions. A second set of models was made so that the surgery could actually be performed on the model to pretest the guides. Teeth and ideal implant locations were constructed in Reno, Nevada, also using the digital plan. On the day of the surgery, cuts were made in both the jaw and the leg bone according to the computer-generated cutting guides.

“What David Hirsch has done, through his technological interest and expertise, is to find the common bond that brings together not only various specialties but the various parts of the body to get the superb results they achieved,” says Robert Glickman, DMD, professor and chair of the Department of Oral and Maxillofacial Surgery at NYU College of Dentistry.

Dr. Glickman adds that computer-aided surgery has existed for some time, but in the past it was not precise enough for maxillofacial surgery. Dr. Hirsch pushed the software developers to create a model so precise that it mirrored the actual surgery.

When it came time to perform the surgery, Dr. Levine removed about 15 centimeters of bone in the middle portion of the fibula, leaving it attached to the circulation that provides blood flow from the peroneal
blood vessels. He attached the pre-planned devices that would help guide the surgeon’s cuts and ensure that the bone would bend precisely to the jaw. With the devices still attached to the leg bone, Dr. Hirsch placed the dental implants and then Dr. Brecht snapped the prosthetic teeth into position. Then, Dr. Levine, using a microscope and needles the size of a human hair, attached the peroneal vessels to the vessels of the neck. The fibula construct, including implants and the fixed prosthesis, was then connected to the patient’s remaining mandible using titanium plates. Damage to the leg is minimal, he notes, because the fibula bears only three percent of the body’s weight, and patients can walk soon after.

“The beauty of this story is that no one part could have happened without a very close-knit working team of specialists who really understand what each person on the team does, their skill, the risks that others are assuming, and the orchestration,” says Dr. Levine.

Dr. Hirsch concurs that it took an exceptional interdisciplinary team effort to conduct this surgery because so many things had to go perfectly. “With the computer-generated blueprint, everything turned out right,” he says. A WINNING COMBINATION OF SKILLS

Dr. Brecht adds that the procedure could not have happened without the combined world-class skills found at NYU in oral and maxillofacial surgery, microsurgery, and maxillofacial prosthodontics. In a prior era, he joined the team later in the process, and sometimes he wished that the space for implants had been made in a different location. Now that his expertise is incorporated from the start, implants can be placed exactly where he wants them.

The Institute of Reconstructive Plastic Surgery at NYU, where Dr. Brecht serves as director of dental services, was founded after World War II by plastic surgeons and dentists who had routinely worked together on maxillofacial units in the European theater of war. When they came back to the United States, they wanted to continue their collaborations for ordinary surgical patients. “What’s unique about the institute is that its people forged a working environment where teams
really understand one another and how their skill sets work in unison,” Dr. Brecht says.

Dr. Glickman’s pride in the team’s work is evident. “David Hirsch is an extraordinarily well-trained surgeon. In Jamie Levine, you have one of the finest reconstructive plastic surgeons in the United States. And Larry Brecht is one of the best maxillofacial prosthodontists—of which there are very few. It would be very hard to get this level of expertise anywhere else.”

Most important, the patient is making an exceptional recovery, having left the hospital after merely seven days. Despite some facial swelling, her teeth looked natural, she can smile, and she is able to eat using her new prosthesis.

Dr. Levine compares the groundbreaking surgery to building the world’s first skyscraper. All of the components had to have been invented first, and then it was a matter of someone having the vision to put them all together.

“We’ve been evolving toward this ability for some time. But getting there is truly unique,” he says.

—BARBARA KANCELBAUM
A new, 170,000-square-foot building, with 85,000 square feet for the NYU College of Nursing, 55,000 square feet for the NYU College of Dentistry, and 30,000 square feet for the Department of Bioengineering at the Polytechnic Institute of NYU (NYU-Poly), will rise on First Avenue, between East 25th and East 26th streets.

Currently known as 433 First Avenue, in recognition of the entrance location on the northwest corner of 26th Street and First Avenue, the new building will become the home and center of academic excellence for the College of Nursing, enable the College of Dentistry to relocate classrooms and offices for administrative and student services, free up existing space for research laboratory growth, and enable students from both the Colleges of Dentistry and Nursing to benefit from a shared learning center. It will also provide materials scientists at NYU-Poly new opportunities for research collaboration with scientists at the Colleges of Dentistry and Nursing, as well as additional space and resources required to consolidate its position as a top destination for cutting-edge technology and research.

“The academic consolidation of NYU’s College of Dentistry and College of Nursing six years ago has been a success,” said Dean Bertolami. “This step—their physical consolidation—is both the natural outgrowth of that academic decision and in line with the goals of NYU’s 2031 plan to maximize the use of its existing footprint. The addition of the Department of Engineering extends the College of Dentistry’s and College of Nursing’s philosophy of collaboration within and between disciplines and offers opportunities from which a new model of education, healthcare delivery, and scientific partnership can emerge.

“Arrangements have been made to memorialize the demolition and document the subsequent construction and progress of the new building. A camera, pointed at the Guggenheim and Basic Science buildings, has been set up on NYU-CID’s roof to take digital photographs every five minutes. In this way, we can illustrate via time-lapse photography the “disappearance” of the buildings over the next several months and the new building rising as it is created over the next several years.”
“Toward this goal,” added Dean Bertolami, “the building will reflect innovative design elements to promote a more exciting, integrated, and collaborative educational and professional model.”

Interior demolition of the existing buildings—the Guggenheim Building at 339 East 25th Street and the Basic Science Building at 433 First Avenue—is nearly complete, and scaffolding around these buildings has been in place since mid-March. Construction of the new building is to begin in 2012, and the building will open in the fall semester of 2013 or the spring semester of 2014.

“As a bonus,” noted NYUCD’s Director of Administration Susan Abraham, “arrangements have been made to memorialize the demolition and document the subsequent construction and progress of the new building. A camera, pointed at the Guggenheim and Basic Science buildings, has been set up on NYUCD’s roof to take digital photographs every five minutes. In this way, we can illustrate via time-lapse photography the ‘disappearance’ of the buildings over the next several months and the new building rising as it is created over the next several years.” Stay tuned for information on how to access these images.

**NEW BUILDING BRINGS NEW NAMING OPPORTUNITIES**

The construction of a new building at 433 First Avenue brings opportunities to shape dramatically the future of healthcare education, research, and patient care in the 21st century. The generous support of alumni and friends will determine the success of our efforts to create facilities, programs, and technologies commensurate with our goal of bringing students and faculty together in new and interdisciplinary ways to enhance the education of students and promote fruitful collaborative research among faculty.

A future issue of *Global Health Nexus* will include a sampling of naming opportunities that allow you to link your name to the new building or to honor or memorialize a loved one; pay tribute to an individual; or give something back to the College of Dentistry, the College of Nursing, or the Polytechnic Institute of NYU.
Dr. Terry Fulmer Steps Down as Dean of the College of Nursing

Dr. Terry Fulmer, the Erline Perkins McGriff Professor and dean of the NYU College of Nursing since 2005, stepped down from her position, effective July 1, 2011. Dr. Fulmer will continue to be a part of the College of Nursing community: she will be returning to teaching and research as a member of the faculty.

Dr. Judith Haber, the Ursula Springer Leadership Professor in Nursing and associate dean for graduate programs, is serving as interim dean while the University conducts a search for Dr. Fulmer’s successor.

As dean, Terry has shown true leadership and compiled a list of significant achievements. Her deanship has been marked by record fund-raising efforts, an admirable record of accreditation reviews, and recognition of the College’s improved stature. This year, US News and World Report listed the NYU College of Nursing as the number one graduate Nurse Practitioner Program in Geriatrics in the nation.

In addition, Dr. Fulmer was an important part of the team that has made the merger of the College of Nursing with the College of Dentistry such a success.

Impressive growth has been another hallmark of Dr. Fulmer’s stewardship. Since Terry first took on a leadership role—as interim head of the then Division of Nursing in January 2002—the school has grown from 23 to 634 full-time faculty, seen remarkable growth in recruitment of part-time faculty, and an increase in the student body from 600 to more than 1,500. However, growth alone does not tell the entire story. During her deanship, the College of Nursing has improved qualitatively in all domains, including its faculty, its student body, its research portfolio (it increased from 46th to 11th place in the NIH ranking), and its outstanding teaching and scholarship.

Terry has also had personal successes, most notably her induction in 2010 into the Institute of Medicine, a high honor in the fields of health and medicine that recognizes individuals who have demonstrated outstanding professional achievement and commitment to service.

NYUCD/NYUCN thanks Dr. Fulmer for her excellent and dedicated service to the College of Nursing and to the entire NYU community and wishes her well, as we welcome and congratulate Judith Haber on her new assignment.
Dr. George J. Cisneros Leaves Chairmanship of the Department of Orthodontics

Dr. George J. Cisneros, chairman of the Department of Orthodontics since 2002, left that position, effective September 1, 2011. Dr. Cisneros continues to be a part of the College of Dentistry community as a professor of orthodontics.

Dr. Cristina Teixeira, associate professor of orthodontics and of basic science and craniofacial biology, is serving as interim chair of the Department of Orthodontics, while NYUCD conducts a search for Dr. Cisneros’s successor.

As chairman of orthodontics, George led the department to intensify its research focus while simultaneously introducing advanced clinical techniques. Dr. Cisneros’s own research activities include employing nuclear medical techniques for evaluating facial growth and development; the use of speech bulb reduction appliances in children with velopharyngeal insufficiency; diagnosis and treatment of patients with obstructive sleep apnea; the impact of orthodontics appliance design on the efficiency of tooth movement; and the relationship between malocclusion and speech problems.

In the area of clinical care, one of Dr. Cisneros’s proudest achievements has been the continuing impact of the partnership between the New York City Bureau of Dental Health Services and the Department of Orthodontics to address health disparities by expanding access to orthodontic care for medically indigent youngsters. One of New York’s great public-health success stories, the program has minimized bureaucracy, expanded access to care, and improved young lives as a result.

NYUCD thanks George for his dedicated service to the College of Dentistry and congratulates Cristina Teixeira on her new position.
In 2009, Dean Bertolami founded the Dean’s Colloquium as an evening of dinner and discussion dedicated to bringing together major stakeholders in dental education, organized dentistry, and the corporate sector, along with selected NYU officials and external experts in a variety of areas to address the issue of what the NYU College of Dentistry can do that we are not already doing to make a meaningful difference in people’s lives, especially people in the developing world.

In its first year, the colloquium featured remarks by Dr. John Howe III, president and CEO of Project HOPE, who spoke about a growing desire among people to volunteer, which led to a suggestion by Mr. Stanley Bergman, chairman and CEO of Henry Schein, that NYUCD implement a collaborative access to care model based on recruiting volunteer dentists who are members of the New York State Dental Association to join NYUCD’s existing outreach infrastructure.

The following year, the colloquium featured a report by Dr. Mark Feldman, executive director of the New York State Dental Association and former president of the American Dental Association, on the progress to date of that model. The program also featured a presentation by Dr. Phil Borges, an orthodontist by training, who has documented indigenous and tribal cultures around the world for over 20 years in a series of award-winning exhibits, books, and multimedia projects, including “Bridges to Understanding,” an online program that connects youth worldwide through digital storytelling in order to enhance cross-cultural understanding and build a sense of global citizenship in youth.

Building on this distinctive approach of combining an
An intellectually inspiring presentation with updates on pragmatic approaches that NYUCD is taking to expand access to care, the 2011 colloquium began with recollections from Michael Dirda, Pulitzer Prize–winning book columnist for The Washington Post and former writer for The Washington Post Book World, on his reasons for pursuing a profession based on his love of reading. Dr. Dirda, who holds a PhD in comparative literature, was a boyhood friend of Dean Bertolami’s. His discovery of books and his love of reading, he said, became his passport to the world, a strategy for transcending his humble origins and becoming comfortable in the wider world.

Following Dr. Dirda’s remarks, Dr. Mark Wolff, professor and chair of the Department of Cariology and Comprehensive Care and associate dean for predoctoral clinical education, presented another kind of strategy for helping people to navigate the world more successfully. Dr. Wolff reported on the national oral health model developed by NYUCD for Grenada with the support of Henry Schein Cares and Colgate-Palmolive. In words and images, Dr. Wolff showed how sustainable oral health care could become a passport to a world of improved health and well-being for underserved populations around the world.
NYU College of Nursing Establishes Educational Diabetes Care Program for Older Adults

The NYU College of Nursing’s Nursing Faculty Practice (NFP), a nurse practitioner (NP) managed primary care practice, launched the Diabetes Care and Lifestyle Center (DCLC) for older adults on January 3, 2011. The DCLC, located in the Nursing Faculty Practice on the first floor of the NYU College of Dentistry, includes a comprehensive diabetes management and patient diabetes self-management education and training program (DSME/T). The American Diabetes Association has recognized the DCLC as a satellite of the NYU Langone Medical Center’s Diabetes Self-Management Education Center (DSMEC).

DSME/T provides a unique diabetes education by incorporating a collaborative approach to patient care. Patients, families, and healthcare providers work together in order to achieve ideal diabetes self-management goals, building around knowledge acquisition, skill attainment, and behavioral strategies. This blueprint, combined with the short-term and long-term objectives provided by the DCLC, will allow patients to follow a detailed, realistic method for diabetes treatment and prevention.

There are approximately 500,000 adults in New York City living with diabetes, and 38 percent (195,000) are older adults. Another 33 percent of all older adults in New York City (900,000) face a high risk of diabetes onset, due to impaired fasting glucose, or pre-diabetes. As a result, the number of older adults affected by diabetes is projected to increase exponentially.

One of the main factors contributing to effective control of chronic and acute diabetes is patient understanding of and ability to manage this chronic disease. Patient education designed to develop diabetes self-management skills is key to maintaining optimal health. Access to DSME/T programs in New York City is limited; 18 sites currently operate throughout NYC's five boroughs, and none are strictly dedicated to older adult populations. This is noteworthy, for it shows that taxpayer dollars dedicated to Medicare and Medicaid—programs that help fund DSME/T—are being used inefficiently. Thus, not many older adults either with or at-risk of diabetes take the initiative to receive DSME/T. DCLC is geared toward filling this service gap.

This service gap, states the DCLC director, Dr. Kelley Newlin, assistant professor of nursing, is “related, in part, to a shortage of trained clinicians specializing in diabetes care, especially for the older adult. Accordingly, each year the DCLC will train a cohort of multidisciplinary clinical students from such disciplines as nursing, dentistry, medicine, podiatry, and social work, among other areas.”

Historically, leading institutional diabetes care teams (IDCT) have included the University of Miami, Vanderbilt University, Albert Einstein College of Medicine, and Yale University. However, IDCTs have not focused on the older adult population, and do not
include crucial social work services, such as the consideration of economic constraints. The NYU College of Nursing’s NFP design aims to provide a reproducible, national Diabetes Care and Lifestyle Center model aimed at older adult diabetes self-management and interdisciplinary education.

Now, older adults in New York City will be able to receive a thorough assessment of their health status and have an algorithm of services developed specifically for each individual. They will have access to services including, but not limited to, diabetes treatment, nutritional advising, social work support, interdisciplinary training programs, and routine monitoring, evaluations, and systematic referral processes.

—CHRISTOPHER JAMES

Harvard’s Dr. Leonard Kaban Is Academy of Distinguished Educators Guest Lecturer

Dr. Leonard Kaban, department head and Walter C. Guralnick Professor of Oral and Maxillofacial Surgery at the Harvard School of Dental Medicine, presented a lecture at NYUCD in April entitled “Minimally Invasive Oral and Maxillofacial Surgery at Massachusetts General Hospital: Bench to Bedside.” Dr. Kaban was a guest of NYUCD’s Academy of Distinguished Educators.

Dr. Kaban, an authority on craniofacial, orthognathic, temporomandibular, and pediatric oral and maxillofacial surgery, described how practitioners at Massachusetts General Hospital use translational research to solve clinical problems.
NYUCD Becomes First Dental School to Provide Interdisciplinary Training in Early Childhood Caries Prevention

NYUCD, in collaboration with the New York City Department of Health and Mental Hygiene, has become the first dental school in the nation to provide a comprehensive, hands-on program to train physicians in preventing Early Childhood Caries (ECC)—the number one chronic disease among US children. The initiative to train pediatricians to recognize and prevent ECC is being led by NYUCD’s Office of Clinical Affairs, with a protocol developed by the Department of Pediatric Dentistry. Program sponsors include Premier Dental and Henry Schein Cares. The program is authorized by a New York State Legislature bill passed in September 2009 allowing Medicaid to reimburse medical practices for providing four fluoride varnish treatments annually for children under seven years of age.

With guidance and support from the New York City Department of Health and Mental Hygiene, NYUCD put these principles into practice in January 2011, when 35 pediatricians, nurse practitioners (NPs), and nurses from throughout New York City attended an introductory networking event at NYUCD led by Dr. Cosmo V. DeSteno, associate dean for clinical affairs; Dr. Amr Moursi, associate professor and chair of the Department of Pediatric Dentistry; Dr. Neal Herman, clinical professor of pediatric dentistry; and Ms. Jill Fernandez, clinical associate professor of pediatric dentistry and director of pediatric dentistry outreach programs. The objective was to train these primary care providers in the importance—and ease—of long-term successful childhood caries management. The session focused on how to recognize ECC and on the technique for applying fluoride varnish, which was demonstrated on mannequins. Each participant left with a starter kit of fluoride varnish. The introductory session was followed by additional training programs in February and April.

According to Associate Dean DeSteno, “This program offers a wonderful opportunity both to expand access to dental care for underserved youngsters and to actively involve primary care providers in the oral health care of their Medicaid patients. Since most children, especially from low-income backgrounds, see their primary care provider much more frequently than they see their dentist (if they have one) in the first years of life, this program has the potential to eradicate a long-standing and previously intractable problem that afflicts the youngest members of our communities.”

Future plans call for additional training sessions and for the creation of a website and an e-mail address for both practitioners and lay people.
NYUCD Celebrates Martin Luther King, Jr., Week with a Black History Month Oral Health Day

On Saturday, February 12, NYUCD’s Office of Student Affairs, in collaboration with New York State Assembly Member Keith Wright, New York City Council Member Inez Dickens, and Vice President Allen McFarlane of NYU’s Office of Student Diversity Programs and Services, sponsored the Martin Luther King, Jr./Black History Month Oral Health Day at the Harlem State Office Building on 125th Street in Manhattan.

NYUCD’s Smiling Faces, Going Places mobile dental van provided complimentary oral screenings to adults and children. Assembly Member Keith Wright and Vice President Allen McFarlane made appearances at 12 noon to open the day.

This year NYU commemorated the 50th anniversary of the 1961 visit of the Reverend Dr. Martin Luther King, Jr., to NYU’s Washington Square campus. On February 10, 1961, Dr. King met with members of the NYU community during a three-hour visit. After lunch with student leaders and meeting campus officials, Dr. King delivered a speech entitled “The Future of Integration.”

PUBLIC OFFICIALS WELCOME SMILING FACES, GOING PLACES VAN

In recent months, New York State Assembly Members Barbara Clark and Linda Rosenthal and New York City Council Member Leroy Comrie have enthusiastically welcomed NYUCD’s Smiling Faces, Going Places mobile dental care program to their districts. NYUCD takes great pleasure in saying “Thank you” to legislators for their support by visiting their districts during health fairs and other outreach activities.
More than 100 New York City high school students visited NYUCD in February for an event designed to encourage underrepresented young people to consider careers in dentistry. The half-day event was organized by Dr. Eugenia Mejia, senior director of admissions.

Following a presentation by Dean Bertolami, who discussed educational requirements for entering dental school, NYUCD students met with the high school students and showed them how to make typodont impressions in the 11th floor learning center.

“This event was both inspiring and educational,” said Dr. Mejia. “It provided participants with valuable information about what dentists do and how they are trained, as well as the personal viewpoints of NYUCD students from underrepresented groups who related their own stories about how they persevered and overcame obstacles to enter dental school. I’ve received very positive feedback from participants who said that the event has opened their eyes to dentistry as a career option.”

Dr. Mejia plans to follow up with the visiting students after they graduate from high school in a continued effort to encourage them to consider careers in dentistry.
The NYU College of Dentistry opened its pediatric dentistry resources to hundreds of neighborhood children on Friday, February 4, 2011, for the American Dental Association’s annual Give Kids a Smile (GKAS) day. WABC-TV previewed the event on February 3 by covering a visit by the NYUCD Smiling Faces, Going Places mobile dental van to a public school in Brooklyn. To view the video of that visit, go to http://www.nyu.edu/dental/news/nyucdtv/.

GKAS was created to highlight the ongoing challenges that underserved children face in accessing oral health care and to build support among policymakers for public and private solutions that provide regular access. At NYU, children arrived throughout the day for dental treatment, screenings, education, career information about what it’s like to be a dentist, and nutrition consultations provided by NYU faculty and student volunteers. Representatives from Henry Schein Dental, the founding exclusive professional product sponsor of GKAS, were on hand to assist children participating in “Reach Out and Read” activities and at a “Give Yourself a Smile” crafts table.

In congratulating the GKAS sponsors and volunteers, Dean Bertolami said, “GKAS is a goal that we can all rally around; namely, providing care for children and spotlighting the need to address healthcare disparities in the United States.”
6th Annual NYC Oral Cancer Walk Held on April 16

On Saturday, April 16, 2011, oral cancer survivors and their families joined dental students from the NYU chapter of the Student National Dental Association (SNDA), residents, dental hygiene students, and nursing students and faculty of the NYU College of Dentistry for New York City’s sixth annual Oral Cancer Walk in Edgar Allan Poe Park in the Bronx, to raise awareness of a disease that kills over 7,000 American men and women each year.

Other sponsors and participants included Bronx-Lebanon Hospital Center, Columbia University, Stony Brook University, students from other chapters of the SNDA, plus participants from the Martin Luther King, Jr., Health Center, the Oral Cancer Foundation, and the Oral Cancer Consortium. If detected in its earliest stages oral cancer is easily treated. The key is early detection and prevention. Major risk factors are tobacco and heavy alcohol use.

Free oral cancer screenings and general health screenings were available throughout the event, and free healthy snacks and beverages were provided to all walkers. There was also live music, a Latin and rap dance exhibition, and face painting, clowns, and a magician to entertain youngsters.

The event was a success, attracting some 600 adults and children, and raising nearly $30,000.
“Bonding, Ceramics, and CAD/CAM Technology” Is Focus of 2011 Aesthetics Symposium

The 9th Annual NYU Aesthetics Symposium held in March 2011 featured internationally recognized experts in the field of “Bonding, Ceramics, and CAD/CAM Technology,” including Dr. Christian Coachman (second from left), Dr. Roland Frankenberger, Dr. Alessandro Devgus, Dr. Irena Sailer, and Dr. Ariel Raigrodski. The event, which drew more than 200 participants, was co-organized by Dr. Christian Stappert, assistant professor of periodontology and implant dentistry and scientific chair of the symposium (far right), and Mr. Ken Beacham, assistant dean for continuing education (far left).

President’s Penthouse Is Site of 10th Anniversary Celebration of the Graduate Program in Clinical Research

NYU’s elegant President’s Penthouse overlooking Washington Square Park in Greenwich Village was the site of the 10th anniversary celebration of NYUCD’s Graduate Program in Clinical Research. The event, hosted by Dr. Ananda P. Dasanayake, professor of epidemiology and health promotion and founding director of the program, paid tribute to current students in the master’s degree and certificate programs and to graduates of the past 10 years.
Dental Hygiene Program Open House Draws Record Number of Attendees

Over 100 potential dental hygiene BS degree program students—the highest-ever number for such an event—attended a recent open house designed to provide an on-site glimpse into opportunities offered by the program. A highlight of the event was the screening of a new video about the program, which can be viewed by going to http://www.nyu.edu/dental/academicprograms/dh/index.html.

Dr. Stephen J. Moss Honored

Dr. Stephen J. Moss, professor emeritus of pediatric dentistry, was honored at a reception in June hosted by Dr. Amr Moursi, associate professor and chair of the Department of Pediatric Dentistry.
Dental Students Launch “What It Means to Me” Lecture Series

Students in the NYU chapter of the American Dental Education Association (ADEA) have introduced a new lecture series designed to encourage students to pursue careers in dental education and research. Entitled “What It Means to Me,” the series, which began in November 2010, has featured faculty members who share stories about their personal lives and their journeys toward careers in academia.

Sam Bae, Class of 2012 and president of the NYU ADEA chapter, explained that “one of our visions as a chapter is to bring students and faculty closer together by sharing mutual motivations and aspirations. The “What It Means to Me” lecture series allows us to do that by inviting notable faculty members to speak, those who we believe have had significant influence and made important contributions to the students’ learning experience over the course of their studies at NYU CD.”

Faculty speakers to date have included Dr. Ivy Peltz, clinical associate professor of cariology and comprehensive care; Dr. Maureen McAndrew, clinical associate professor of cariology and comprehensive care and director of clinical faculty education; Dr. Kathleen Kinnally, professor of basic science and craniofacial biology; Dr. Martin Roy, professor of basic science and craniofacial biology; Dr. Anthony Vernillo, professor of oral and maxillofacial pathology, radiology, and medicine; Dr. Charlie Larsen, clinical assistant professor of pediatric dentistry; and Dr. Wayne Kye, clinical assistant professor of periodontology and implant dentistry.

“Talking with students at the ‘What It Means to Me’ event about how I developed my own academic career was a wonderful opportunity to interact in a very different way from that of a formal talk,” said Dr. Vernillo. “I was able to share my unique, personal challenges of pursuing a goal that was very different from what most did in dentistry at the time. I truly enjoyed the questions and conversations that came afterward, and I hope that my talk will help others along their own way in our profession.”

Hans Hsu, Class of 2013, noted that “the lecture series has been a wonderful opportunity for students like me to get firsthand accounts of just some of the possible career opportunities that are available outside of the traditional private practice setting. It was a tremendously inspiring experience to listen to Dr. Roy’s and Dr. Vernillo’s accounts, not only to witness their dedication to teaching and the advancement of science, but also to feel encouraged, supported, and challenged by them to pursue my interests in academia and research. I know now that I want both of those areas to be a part of my professional life in the future.”
On May 26, 2011, the Class of 2011, including approximately 330 candidates for the degree of Doctor of Dental Surgery, candidates for Advanced Education and Clinical Research Program certificates, MS degrees in clinical research, BS degrees in dental hygiene, and AAS degrees in dental hygiene, all saw their dreams come true as they received their degrees and certificates in front of a crowd of more than 2,700 people in Avery Fisher Hall at Lincoln Center.

In addition to the conferral of degrees and certificates, highlights of the ceremony included welcoming remarks from NYU Executive Vice President Michael C. Alfano on behalf of New York University, presentation of the Michael C. Alfano Award for promoting...
diversity in dental education to Dr. Pamela Alston, dental director of the Alameda County Medical Center Department of Ambulatory Healthcare Services, and presentation of the Dr. Harry Strusser Memorial Award for contributions to improved public health to Dr. Allen L. Finkelstein, CEO of Bedford Healthcare Solutions.

“The NYU College of Dentistry today celebrates the achievements of our newest alumni, of the faculty, family, and friends who have guided them to this momentous day, and of our awardees, who have contributed so much to the dental profession,” said Dean Bertolami. “Getting to this day,” added Dean Bertolami, “has taken more than hard work, dedication, and discipline. It has also taken a commitment to educational excellence, a strong community service orientation, and a growing global perspective, all of which has made this class so special. We wish our graduates great success and happiness in the years ahead.”
NURSING’S DR. JUDITH HABER AWARDED NYU’S HIGHEST TEACHING HONOR

Dr. Judith Haber, the Ursula Springer Leadership Professor in Nursing and interim dean of the NYU College of Nursing, has been awarded the prestigious NYU Distinguished Teaching Award. The award recognizes that—along with research—exceptional teaching, both within and outside the classroom, is among NYU’s institutional priorities. Professor Haber was one of only six NYU faculty members to receive this award.

In his nomination letter, Dean Bertolami wrote that “Professor Haber understands that the secret to success in nursing education is a combination of scholarly expertise, the effective delivery of evidence-based practices, and a focus both on outcomes and on compassion, caring, and respect for the patient. She is a person of immense knowledge and skill, but also one who values, instills in her students, and models the professionalism, nurturing, and protectiveness toward vulnerable patients so necessary for those who pursue careers in nursing.

“Professor Haber is also an invaluable member of the leadership team responsible for the establishment of the dentistry/nursing alliance at NYU in 2005, an alliance that promotes the relevance of and need for interdisciplinary care. In this regard, as well as in her nursing education initiatives, her title as “Ursula Springer Leadership Professor” is altogether fitting. Judi’s commitment, energy, and creativity have been indispensable in developing the operative paradigm for education and training at the Colleges of Dentistry and Nursing.”

“Professor Haber understands that the secret to success in nursing education is a combination of scholarly expertise, the effective delivery of evidence-based practices, and a focus both on outcomes and on compassion, caring, and respect for the patient.”

—Dean Charles N. Bertolami
Mr. Ken Fauerbach, NYUCD’s chief information officer (CIO) and senior director of technology and informatics services (TIS), has been awarded the 2011 Distinguished Administrator Award presented by New York University in recognition of outstanding achievement as an administrator and dedicated service to students, faculty, and staff. This award is a special acknowledgement of the value that NYU places on administrative excellence and a way to formally honor the significant contributions of administrative and professional staff.

“Ken is responsible not only for helping us see the possibilities for the use of technology in all of our efforts,” said Dr. Michael P. O’Connor, vice dean for administration and finance, “from investing in and utilizing technologies to enhance education, research, patient care, and management systems, but also for playing a pivotal role in planning comprehensively to more efficiently and effectively utilize resources to match institutional priorities.

“Beyond his technical expertise, Ken has shown himself to be an enterprise player in supporting one of the major pillars of NYUCD’s strategic plan; namely, fostering and maintaining an environment for excellence. Through his personal example of ethics and integrity, his superb organizational skills, and his highly effective leadership style, Ken has created a cohesive group of information and technology professionals who share in creating and implementing collaboratively developed strategies, structures, and processes. In short, he has succeeded in creating consensus values, and, in so doing, in making a major positive impact on the NYUCD community as a whole.”

“Through his personal example of ethics and integrity, his superb organizational skills, and his highly effective leadership style, Ken has created a cohesive group of information and technology professionals who share in creating and implementing collaboratively developed strategies, structures, and processes.”

—Vice Dean Michael P. O’Connor
On March 21, 2010, former NYUCD full-time faculty member Gustavo D. Cruz, DMD, MPH, was in the room when then-democratic majority leader Nancy Pelosi struck her gavel down, acknowledging the House votes needed to pass the Affordable Care Act, which President Barack Obama signed into law two days later.

Dr. Cruz’s intimate access to this pivotal moment in US healthcare history was made possible through his experience as a Robert Wood Johnson (RWJ) Health Policy Fellow, a position he held for 15 months, from the fall of 2009 though December 2010.

The RWJ Health Policy Fellows program is a national program supported by the Robert Wood Johnson Foundation (RWJF), America’s largest philanthropy, whose mission is to improve the health and health care of all Americans, with direction and assistance from the Institute of Medicine (IOM).

Founded over 40 years ago, the RWJF launched its Health Policy Fellows program in 1974. This highly prestigious Washington, DC-based program offers mid-career health professionals and behavioral and social scientists the opportunity to actively participate in health policy processes at the federal level and gain hands-on policy experience. Each year the program selects six fellows. In its 37-year history, 15 dentists have been selected, including Dr. Cruz.

The timing of Dr. Cruz’s fellowship could not have been more fortuitous. “We arrived in Washington during this historic moment, when there was a huge effort to transform the healthcare system and the delivery of health care in this nation. To be part of that conversation, the passing of the law and its early implementation, was quite exciting,” said Dr. Cruz.

The fellowship began with a rigorous three-month training period. “It was very intensive, like obtaining a crash master’s degree in public health policy,” said Dr. Cruz. During this period, the fellows heard lectures from over 100 experts in policymaking, from various think tank members,

“...
“Because of everything happening with overhauling the healthcare system, the Department of Health and Human Services decided to take two of us. This kind of made us pioneers, and it really could not have happened at a better time.”

...
Dr. Cruz’s path to healthcare policymaking in Washington, DC, was paved by his career at NYUCD, which began in 1996.

healthcare policymaking in an international arena, and also obtain advice on specific projects.

Dr. Cruz’s path to healthcare policymaking in Washington, DC, was paved by his career at NYUCD, which began in 1996 with his appointment as an associate research scientist and subsequently associate director of the NYUCD Northeast Research Center for Minority Oral Health. “At this point, very few scientists were investigating the oral health care of immigrants,” said Dr. Cruz. “This gave me the opportunity to look at healthcare disparities and lack of access to care, which triggered my interest in seeing how that research could be translated into policy.”

In 2000, Dr. Cruz joined the NYUCD Department of Epidemiology and Health Promotion as an associate professor and director of public health promotion. Dr. Cruz also served as director of the Global Oral Health Concentration (2007–2009), part of the master’s in Global Public Health Program at NYU. Along with other healthcare faculty, Dr. Cruz was instrumental in developing this five-year dual degree program. “We really started from scratch, as there were no models for us in developing the courses, particularly in the oral healthcare concentration,” said Dr. Cruz. “So it was extremely rewarding to help get those courses up and running.”

Among his numerous research projects at NYUCD, Dr. Cruz undertook the largest-ever study on the oral health of immigrants in the United States, analyzing caries and periodontal disease in over 1,500 immigrants living in New York City. The study linked tooth decay and gum infections to ethnicity and country of origin.

In accepting the RWJ Health Policy fellowship, Dr. Cruz was required to leave his tenured faculty position at NYUCD, although he continues to hold a position as adjunct professor of epidemiology and health promotion.

When Dr. Cruz’s extended fellowship came to an end in December 2010, a little bit of luck intervened again. He was offered the position of chief of the oral health branch at the USDHHS/HRSA (Health Resources and Services Administration) Bureau of Health Professions Division of Medicine and Dentistry.

“Because of The Affordable Care Act, the amount of funding for training at both the predoctoral and postdoctoral levels expanded tremendously,” said Dr. Cruz. “Someone was needed to oversee this large number of grants, as well as to help create an oral health branch that would oversee various goals, such as expanding the oral health workforce.”

Dr. Cruz’s career in dentistry can be divided into three distinct acts. “I practiced dentistry for 15 years prior to entering academia, and then research and academic administration for the second act,” said Dr. Cruz. “Entering the healthcare policy arena feels like a natural progression.”

The HRSA’s oral health mission, “to improve the nation’s health by assuring access to comprehensive, culturally competent, quality oral health care for all, as an integral component of comprehensive health care,” provides the perfect mandate to carry Dr. Cruz through his third act.

—STEPHANIE SUSNJARA
The NYU Academy of Distinguished Educators presented its first Clinical and Educational Scholarship Showcase on March 3 and 4, 2011. The showcase featured a keynote presentation by Dr. John W. Killip, assistant dean for student programs and clinical professor of restorative dentistry at the University of Missouri-Kansas City. The showcase also featured a Clinical Scholarship Category, which presents examples of patient treatment that highlight innovative approaches to treatment and management of unique clinical presentations, and an Educational Scholarship Category, which focuses on educational methods or research that may enhance teaching ability.

The first-place winners in the category of Clinical Scholarship were Dr. Adi Einhorn, a postgraduate student in periodontics, and Dr. Robert Schoor, clinical associate professor of periodontology and implant dentistry and director of the Advanced Education Program in Periodontics, for their presentation, “Decision making: To Maintain the Natural Incisor or Replace It With an Anterior Implant.” The runners-up in this category were Dr. Austin Griffith, Class of 2011, and Dr. Kay Oen, clinical assistant professor of cariology and comprehensive care, for their presentation, “Implant Retained Removable Partial Dentures: A Case Report and Literature Review of Risks, Benefits, and Alternatives.”

The first-place winners in the category of Educational Scholarship were Dr. Martine Mandracchia, clinical associate professor of cariology and comprehensive care and group practice director; Dr. Martin J. Lapidus, clinical associate professor of cariology and comprehensive care; and Ms. Thikamphaa Bertrand, Class of 2012, for their presentation, “Adding a Self-Assessment Component to a Traditional Competency: A Comparison.” The runners-up in this category were Dr. Ellen Lee, clinical instructor in cariology and comprehensive care, Dr. Lisa Antonoff, clinical associate professor of prosthodontics and director of preclinical prosthodontics, and Dr. Gene Sherwin, clinical assistant professor of cariology and comprehensive care, for their presentation, “Enhancing Performance in the Simulation Laboratory: Pilot Study.”

“These awards,” said Dean Bertolami, “exemplify the Academy’s commitment to championing the central role of teachers in facilitating innovation in teaching, conducting research, and creating an environment that enhances the status of health professions educators.”

“These awards exemplify the Academy’s commitment to championing the central role of teachers in facilitating innovation in teaching, conducting research, and creating an environment that enhances the status of health professions educators.”

—Dean Charles N. Bertolami
So much has changed in dental education and practice over the past 100 years. Yet it is easy to forget how very different dentistry was one hundred years ago compared to the system we have today.

In 1911, 14 years prior to its affiliation with New York University, today’s NYUCD was known as the New York College of Dentistry. One hundred years ago, the New York College of Dentistry had just graduated its 46th class celebrating the end of their third (and final) year of dental school. The College was located at 205–207 East 23d Street, at the site of what is today the School of Visual Arts.

In the wider world, Roald Amundsen had reached the South Pole; Ernest Rutherford had explained the existence of a compact atomic nucleus; the first ocean-going diesel ship had been launched; and Marie Curie had won the Nobel Prize in chemistry.

Dentistry, however, had not yet reached professional prominence. Dental clinics were crowded, and outfitted in a primitive fashion. X-ray machines, just introduced, were crude, expensive, and potentially dangerous to use.
due to high radiation dosages and secondary “scatter” effects. The dental chair was pneumatic and practitioners stood during treatment. Drilling was done using a foot pedal dental drill engine. Amalgam and zinc oxychloride cement were the predominant restorative materials and gold foil was state-of-the-art. Antibiotics had not yet been discovered. Salvarsan had just made its debut in the fight against syphilis. Infection control in dentistry was almost nonexistent and Novocaine had just been introduced as a local anesthetic.

But major change was on the horizon. Following the publication of the Flexner report (1909) that revolutionized medical education in the United States, the College of Dentistry actively sought an alliance with a major research university, and looked at partners, including NYU, Columbia, and Cornell. It was not to happen, however, until 1925, when the New York College of Dentistry officially merged with New York University, which led to the promotion of research and postdoctoral education.

In 1911, the 51-week academic year consisted of didactic and clinical sessions that started at the beginning of October, with the didactic portion lasting 32 weeks. Commencement exercises were held on Monday, June 5, at Carnegie Hall.

Tuition in 1911 was $185, with an additional $5 for registration and $10 for the Infirmary fee; instruments and books were additional. Twenty textbooks were recommended in 1911. Interestingly, the Department of Anatomy was using Gray's textbook. The average textbook cost $4.00. The most expensive textbook was G.V. Black's *Operative Dentistry* ($10). The total cost for the 20 textbooks was $81. Additionally, instruments for all three years cost $173. Room and board was between $5 and $9 per week. All told, the cost of tuition, fees, books, and instruments per year was approximately $285.

How much was $285 in 1911? To put things in perspective, in 1911 the average cost of gas was seven cents per gallon; first-class mail was two cents; the
average salary was $750 per year; one ounce of gold was $18.92; and an average home cost between $2,000 and $5,000.

Students received a “ticket” upon payment of their fees. These tickets entitled them to attend lectures and participate in patient care. For 17 weeks during the summer months, students participated in a full-time clinical education course in what was called the "infirmary," for a grand total of 300-plus clinical training days over the course of the year.

The academic year had few interruptions: only six official holidays and a nine-day winter break between December 23 and January 2. From May 2 to May 31, all students attended an examination session, which consisted of five oral and written (essay) examinations. Oral examinations were conducted before all professors, who were also the chairs of the individual departments. In addition, all students, except freshmen, had two practical exams. Freshmen had only one practical. Failure rate was close to 25 percent. Re-exams took place in the fall semester. There was a high rate of attrition as indicated in the considerable drop in the number of students from year to year (141 freshmen versus 100 in the second year and 85 in the third year).

Patient care began in the freshman year with 60 hours in the extraction clinic. The three-year dental curriculum looked a lot different (see table on next page) from what we know today.

The College’s academic bulletin indicates that during the academic year 1910–1911, students took 173 radiographs. Similar statistics regarding the oral surgery clinic indicate that the clinic had seen 1,686 oral surgery cases and performed 6,241 extractions. Among the cases treated by students were 212 mandibular and six maxillary fractures; 296 acute and chronic alveolar absceses; 39 impacted wisdom teeth; 13 cases of necrosis of the jaws; and seven oral lesions due to syphilis.

Students performed 13,856 fillings and 1,400-plus prosthetic treatments. Overall during 1911, 9,786 patients were treated at the College during 32,245 visits. Eight hundred and eighty-four (8.6 percent) of the patients received free treatment because they could not afford to pay anything. Even when paying, patients were charged solely for the material used in treatment.

The New York State
Licensing exam was offered three times a year: in September, February, and June. There were no National Dental Board Examinations at the time. The National Dental Board Exams were introduced in 1933–1934.

The Dean of the College in 1911 was Faneuil D. Weisse, an MD oral surgeon. Dr. Weisse was a founder of the College, a faculty member beginning with its establishment in 1865, and its dean from 1897 to 1912. He was a well-respected teacher and leader.

Overall, students at the New York College of Dentistry had a very busy curriculum even 100 years ago. They worked hard under less than ideal conditions and practiced dentistry focused on infections, extractions, and restorations that used rather simple methods. Considerable advances in science, technology, and education over the past 100 years have moved dental education into new areas, especially prevention, and have made dental practice much more effective, safer, and more efficient. The beneficiaries of these advances have been patients, students, and educators alike, in the process creating today’s New York University College of Dentistry, which is recognized as a leading source for dental care in New York City and a leader in national research rankings and national policy issues in dentistry.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>D1* hours (141 students)</th>
<th>D2 hours (100 students)</th>
<th>D3 hours (85 students)</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Normal Histology</td>
<td>230</td>
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<tr>
<td>Dental Anatomy/Operative Technique</td>
<td>270</td>
<td></td>
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<tr>
<td>Operative Dentistry Demonstration</td>
<td>87</td>
<td>100</td>
<td>85</td>
<td>272</td>
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<tr>
<td>Extraction clinic</td>
<td>60</td>
<td>360</td>
<td></td>
<td>420</td>
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<tr>
<td>Practical Physics laboratory</td>
<td>240</td>
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<tr>
<td>Prosthetic Technique Lab</td>
<td>435</td>
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<tr>
<td>Practical Chemistry classes</td>
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<td>230</td>
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<td>230</td>
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<tr>
<td>Prosthetic Dentistry demonstration classes</td>
<td>105</td>
<td>120</td>
<td></td>
<td>225</td>
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<tr>
<td>Porcelain and gold inlay work classes</td>
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<td>Pathological Histology and Bacteriology classes</td>
<td>72</td>
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<td>X Ray demonstration classes</td>
<td></td>
<td>280</td>
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<tr>
<td>Physical Exam and Emergency classes</td>
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<tr>
<td>Oral Surgery Classes</td>
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<tr>
<td>Specialty Clinic in Operative Dentistry</td>
<td></td>
<td>28</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Specialty Clinic in Prosthetic Dentistry</td>
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<tr>
<td>Specialty Clinic in Oral Surgery</td>
<td></td>
<td>28</td>
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<tr>
<td><strong>Total curricular hours</strong></td>
<td><strong>1,322</strong></td>
<td><strong>1,005</strong></td>
<td><strong>1,009</strong></td>
<td><strong>3,336</strong></td>
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* Anatomy is not included in this curriculum because it was done outside the college.
In the summer of 2008, when Bob Range, DDS ‘12, arrived on the NYUCD campus, he had never done any research, never even touched a microscope. He began his academic career early, participating in an eight-week summer research program. Accepted by Kathleen Kinnally, PhD, professor of basic science and craniofacial biology, Bob began studying mitochondrial morphology in her lab.

“It was a great opportunity for me to do research, something I had always been interested in trying but hadn’t been able to do previously, as well as get acclimated to life in Manhattan,” said Bob.

Bob quickly acclimated to lab life as well as city life. “He came in with a thirst for investigating things,” said Dr. Kinnally. “He’s also computer savvy, an important asset for the type of research that I do.”

“The main focus of our research,” said Bob, “has been the biochemical cascade of apoptosis. Specifically, we were looking at two proteins called BAX and BAK, which are known to be pro-apoptotic proteins that form an oligomer channel on the mitochondria membrane during apoptosis. We discovered a relationship in which the channel forms and then the mitochondria start to fragment, which has led to further studies to try to understand the role these proteins play.”

The study of mitochondria is a hot topic these days. “If we can better understand apoptosis, we can potentially control it in the grand scheme, which has all sorts of implications, including intervening in cancer.”

In the lab Bob has worked closely with associate research scientist Dr. Pablo Peixoto. “Bob struck me as a brilliant guy and very mature. He is able to listen and then come back the next day with a very broad, panoramic view of what we are trying to accomplish,” said Dr. Peixoto.

To get an idea of the level of excellence Bob has achieved in his research work at NYUCD, one need only glance at his many awards:

* Recipient of the Michael C. Alfano Excellence in...
Prior to NYUCD, Bob, 35, lived in New Orleans, where he had a career in computer networks, setting up systems in university and hospital settings. “Dentistry and computers may seem far apart, but in many ways they’re not. I was working with my hands all day. I’m meticulous, and I like repetition. I realized I wanted to transition into a healthcare field and help people.” All of this combined to help Bob select dentistry.

Bob chose NYUCD because he wanted to learn about global health and also gain clinical experience that included exposure to a broad-based population. “Research was a bonus, something that I realized I just really enjoyed.

“Dentistry and computers may seem far apart, but in many ways they’re not. I was working with my hands all day. I’m meticulous, and I like repetition. I realized I wanted to transition into a healthcare field and help people.” All of this combined to help Bob select dentistry.

After his studies are completed, Bob plans to go into clinical practice and hopes to incorporate both research and teaching into his career. “What’s nice about private practice is that you can do clinically applied research. You can see how your restoration work holds up over five, 10 years, which puts you in a really good position to analyze biomaterials.”

In addition to all of his research, didactic, and clinical work, Bob was also able to fit in participation in NYUCD’s initial two-week global outreach to Grenada. “It was my dream to do an outreach, and this was a phenomenal experience.” Ideally, Bob would like to practice 10 months out of the year and spend two months visiting an underserved country to provide care.

“In pursuing clinical work, he’ll hopefully be able to involve himself in something like the PEARL practice-based research network,” said Dr. Kinnally. “He’s someone who thinks critically and evaluates all of his options, and I am sure he will apply this behavior while working with patients.” She then added, “He’s a forest guy, not a tree guy.”

—STEPHANIE SUSNJARA
JOANNA KOZLOSKA, ’12, DENTAL HYGIENE PROGRAM
A PASSION FOR EDUCATING OTHERS EQUALS A CAREER IN DENTAL HYGIENE

When she first applied to NYU’s dental hygiene program, Joanna Kozloska, ’12, AAS in Dental Hygiene, worried that she might not get in. “But then I got the call from Professor Lisa Stefanou who said, ‘It would be an honor to have you,’” explained the 24-year-old from Bayside, Queens. “So I enrolled right away, and have been completely in love ever since. I love interacting with the dental students. I love caring for and educating patients. I love both the dental faculty and the hygiene faculty, who are all so helpful and wonderful.”

Joanna’s bubbly enthusiasm is surpassed only by her dedication to the field and her drive to succeed. “Sometimes you can just see leadership qualities,” said Winnie Furnari, clinical assistant professor of dental hygiene, who first met Joanna during her pre-clinical studies. “She’s articulate in her speech and in her studies. She interacts well with colleagues and classmates. And she demonstrates a scientific mind.”

Professor Furnari encouraged Joanna to enter an essay competition offered by the American Dental Hygienists’ Association (ADHA), the nation’s largest professional organization for dental hygienists, whose mission is to advance the art and science of dental hygiene, and to promote the highest standards of education and practice in the profession. The topic of the essay was, “How does ADHA membership benefit students?”

Joanna entered the competition and won. She served as Student Delegate, along with a Student Alternate Delegate, representing the ADHA’s District II region (New York, New Jersey, Connecticut, and Pennsylvania) at the organization’s 88th Annual Session, which was held in June in Nashville, Tennessee. Along with the other student members selected as delegates, Joanna represented the ADHA student membership and attended the House of Delegates sessions along with other scheduled events.

“I would never have pursued this if it hadn’t been for Professor Furnari,” said Joanna. “We voted on legislation and got an insider’s view of the future of
dental hygiene. It was a very exciting learning experience."

“This is really a big commitment,” said Professor Furnari. “Joanna had a lot of information to absorb. I’m looking forward to her sharing everything she has learned so that other students can benefit from her experience. It really makes an impact when they hear about such an event directly from one of their peers.”

Before Joanna knew she wanted to be a dental hygienist, she knew she wanted to be a teacher. She began her college career studying education at Queens College. “But I couldn’t figure out what I wanted to teach.” It was after she began working as an assistant in a local dental office that her career aspirations began to come together. “From assisting, I knew that education was a key part of being a hygienist. So I knew I wanted to become a dental hygienist.”

Following graduation, Joanna hopes to get a job immediately working in a general dental practice and then possibly transition to a practice specializing in periodontics or pediatric dentistry. “I really enjoy teaching patients how to keep their oral cavity healthy. Each person is an individual and should have their own homecare regime—they may have to incorporate using a water pick if they have pocket depth, or they may have to use a fluoride rinse, for example.” She also hopes to be actively involved in the ADHA, and would like to volunteer as well.

Joanna recalled one of her early patients at NYUCD, a man in his 40s, taking the suction tube out of his mouth. He looked her in the eye and pointing a finger at her, said, “I’ve had a lot of people clean my teeth. You, you’re going to be a good one.”

“I see her as having a great future,” said Professor Furnari, echoing that patient’s prediction.

—STEPHANIE SUSNJARA

AN EXCERPT FROM JOANNA KOZLOSKA’S PRIZE-WINNING SUBMISSION TO THE 2011 ADHA ESSAY COMPETITION

“Student membership in the ADHA is one of the primary connections between a student and the dental hygiene profession. Membership is a means of communicating ideas, building relationships, and developing a professional identity for our future. There are numerous tangible and intangible benefits that our professional association offers to its members. Students can appreciate that ADHA enhances our education with offerings such as board review, education courses, publication opportunities, and evidence-based research. Empowering future hygienists, supporting our community, and developing new and qualified educators shapes our future.”

G L O B A L  H E A L T H

A N  E X C E R PT  F R O M  
JO A N N A  K O Z L O S K A ’ S  P R I Z E - W I N N I N G  
S U B M I S S I O N  T O  T H E  2 0 1 1  A D H A  
E S S A Y  C O M P E T I T I O N
TIMOTHY SHI, ’12, NYU COLLEGE OF NURSING

NURTURING AS KEY TO LEADERSHIP

If you don’t recognize Timothy Shi yet, he hopes you’ll tune in to see him cooking teriyaki sliders on the show “Student Chef” on NYUnews.com. A nursing student with his own cooking show? At age 20, Tim is one part Emeril, one part Nightingale, carving his own path at NYU College of Nursing.

Growing up in Maryland and New Jersey with frequent visits to China, Tim is used to occupying diverse worlds effortlessly. He was known as the “caring person” in his family, who got up early to make breakfast for his late-rising older sister and helped his friends with their troubles. But Tim, the son of an immunologist and a stem cell researcher, also had a great love of science. He knew he wanted to combine these interests in a healthcare career. But he didn’t seriously consider nursing until his driving instructor—who also happened to be a nurse—convinced him. During six hours of behind-the-wheel instruction, the teacher listed the reasons that Tim should pursue nursing. “If you like to help people, it’s the field for you,” the instructor told him, at the same time cautioning Tim that nursing requires someone who can handle multiple challenges.

“I felt like I could do it,” Tim says. The harder part was convincing his father, an immigrant from a farming family in China, where nurses command less respect than they do in the United States. It took some time for Dr. Yufang Shi, now the director of the Institute of Health Sciences of the Chinese Academy of Sciences and a university professor at Robert Wood Johnson Medical Center, to get used to the idea.

“I did a lot of research about the need for nurses, and my father especially liked the idea of my becoming a nurse practitioner,” Tim says. “That was crucial, since he’s paying the tuition!”

Tim has soaked up an especially wide range of opportunities through the NYU College of Nursing since beginning his undergraduate studies in 2008. He serves on the Ethics Council, which investigates issues of cheating and professionalism. He used AP credits earned in high school to take a minor in public health and policy at the NYU Steinhardt School of Culture, Education, and Human Development during his sophomore year. And, thanks to the

He collaborated with NYU dental students for the first time while on a spring-break trip to Honduras in 2010, with the organization Global Brigades.
encouragement of Gail Wolfmeyer, assistant director of graduate admissions and student affairs, he joined the Undergraduate Student Nurses Association (USNA), of which he is now president.

USNA has flourished under Tim’s leadership, offering new activities and rallying larger numbers of students to join. This year, USNA sponsored two student tours of the Metropolitan Museum of Art led by a pathologist-art historian who focuses on health issues that are visible in artwork. Tim chipped in as well, providing a cooking class for his fellow students.

“Tim really represents involvement in the university,” says Dr. Hila Richardson, former associate dean of the undergraduate program for the College of Nursing. “He makes very clear the leadership potential of our undergraduate students.”

In turn, leading USNA has helped Tim become more confident and organized—just in time for his third year of nursing school, when coursework becomes more demanding. Usually an excellent student, Tim was caught off guard by a score of 76 on a pathophysiology midterm. He says, “I was enjoying patho a lot, but I was used to studying a day or two before the exam. I realized I had to get it together.” For two weeks, he stayed in the library from 9 am until midnight, leaving only for meals and classes. “I pounded it out and got a 96 on the test. It was a major learning experience, seeing how hard I had to study.”

At the College of Nursing, Tim’s favorite class has been the Adult and Elder simulation lab, where students learn and practice numerous basic nursing skills—such as hanging an intravenous line, caring for wounds and tracheostomies, and giving patients baths—using high-fidelity mannequins.

He collaborated with NYU dental students for the first time while on a spring-break trip to Honduras in 2010, with the organization Global Brigades. There, he joined a team that brought water to a town that had none during the dry season. After being trained by volunteer dentists, Tim helped them show community members how to brush and floss their teeth, and he applied fluoride to help prevent cavities. He also observed minor dental surgeries, shadowed a pharmacist and a nurse practitioner, and assisted in the triage station, where he helped obtain patients’ vital statistics and record patient health histories.

Tim’s background has given him a unique window into the meaning of cultural competency, which the College of Nursing strives to impart to each student. Living for part of the year in China, he is well acquainted with the health system there. “Cross culturally, it gave me a better sense of what Chinese people expect from health care,” Tim says.

Tim learned to cook by watching his mother, Dr. Liying Zhang, a scientist and a talented cook. By high school, he was regularly preparing dinner for his family. In April 2010, Tim came in second in the NYU Master Chef tournament, creating a three-course meal in one hour. He did so, he says, despite the extreme challenge of having to cook without soy sauce—not one of the sanctioned ingredients. The Washington Square News asked him to host a show on NYUNews.com, which presents appealing, inexpensive foods that college students can make. In one recent episode, Tim taught viewers to make sushi, and in another, he made teriyaki sliders with homemade teriyaki sauce, wasabi mayonnaise, and sesame leaves on top.

Tim does not know where his nursing career will lead, but when a professor recently suggested that he would make a good head nurse in a hospital, he liked the sound of it. In the meantime, he continues to juggle his USNA responsibilities and to nurture those around him—both crucial ingredients in the recipe for becoming an outstanding nurse.

—STEPHANIE SUSNJARA
Each year NYUCD’s Student Council pays tribute to a group of faculty and staff who have gone the extra mile to help students succeed at the College. The awards recognize specific qualities demonstrated by the winners, including integrity, respect for others, providing excellent service, teamwork, adaptability, and, especially, mentoring, modeling, and motivating students to achieve their potential for excellence.

The winners of the 2011 Student Council Appreciation Awards are: Mr. Glenn Marrus, assistant dean for quality assurance, Mr. Jeremy Duhme, academic affairs administrator, Ms. Gail Wolfmeyer, assistant director of graduate student affairs and admissions, Ms. Winnie Furnari, clinical assistant professor of dental hygiene, Dr. Scott Podell, clinical assistant professor of cariology and comprehensive care and group practice director, Dr. Andrew B. Schenkel, clinical associate professor of cariology and comprehensive care and group practice director, Dr. Steven J. Resnick, clinical associate professor of cariology and comprehensive care, Dr. Teresita Salgado, clinical assistant professor of biomaterials and biomimetics, Dr. Michael Ferguson, clinical associate professor of prosthodontics, and Mr. Freddy Pimental, restorative support technician.

NYUCD congratulates all of the award winners and thanks the members of the Student Council for their thoughtful acknowledgment of the efforts of these outstanding individuals.
SMILING FACES, GOING PLACES ADMINISTRATOR
CONSTANCE TURNER HONORED BY NYC COUNCIL MAJORITY LEADER JOEL RIVERA AND NYC COUNCILMAN LEROY COMRIE

NYUCD’s Constance T. Robinson-Turner was presented a City Council Proclamation by Majority Leader Joel Rivera in celebration of Women’s History Month on March 2, 2011, during New York City Council Ceremonial Tributes. Ms. Turner is the administrator of NYUCD’s Smiling Faces, Going Places mobile dental care program, which provides a fully equipped dental office on wheels for financially and medically distressed communities throughout New York City, bringing oral health care to children who would not otherwise have access to essential dental care.

“Mrs. Turner’s accomplishments, commitment, and dedication to public service are evident in her professional career, as she is the epitome of women in contemporary America working towards bettering the lives in her community and her surroundings,” stated Majority Leader Rivera.

Ms. Turner was further acknowledged by the City Council on March 26, 2011, when Councilman Leroy Comrie presented her an “Unsung Heroine” award, continuing the celebration of Women’s History Month.

“All of us at NYUCD are so proud of Connie,” said Dean Bertolami. “Her recognition by city leaders testifies to her unwavering commitment to the mission of the Smiling Faces, Going Places mobile care program and to her ability to ensure the fulfillment of that mission on a daily basis. We join the New York City Council in saluting Connie and thank her for strengthening NYUCD’s reputation as a leader in public service for the people of New York City.”
Dr. Nicole Willer, ’11 (left, with NYU President John Sexton), received a 2011 NYU President’s Service Award at a pre-commencement ceremony recognizing her leadership in organizing the sixth annual New York City Oral Cancer Walk. (See related story on page 108.)

Dr. Ryan Woody, ’11, below, was featured in NYU’s Commencement Tribute Video honoring graduates from throughout the University. The video can be viewed at http://www.plywoodpictures.com/nyumedia/2011tributepage.html.
SUSAN ABRAHAM’S WORK ON PERMANENT DISPLAY AT THE ANDRES INSTITUTE OF ART IN BROOKLINE, NEW HAMPSHIRE

Susan Abraham, NYUCD’s director of administration and a world-recognized creator of massive stone sculptures, was one of only four artists worldwide who were selected to create outdoor, site-specific sculptures at the 2010 international Sculpture Symposium at the Andres Institute of Art in Brookline, New Hampshire. Susan’s sculpture, entitled Nearly Naked, is now a permanent part of the landscape of Big Bear Mountain in Brookline. The work was created in response to the symposium’s theme, “A Place for Change.” It is carved from two blocks of New Hampshire granite, each about nine feet long, three feet wide, and four feet high.

“The concept and ability to change is preceded by a state of vulnerability,” says Susan. “Be it an insect emerging from a cocoon, a newborn from the womb, the release and renewal of a life recovered from despair or addiction, the emotional nakedness to fall in love—all are situations for change. Nearly Naked is a metaphor for the state that enables us to change and realize our potential.”

The sculpture is composed of two simple and sensual complementary forms surrounded in the center by folds of stone from which one form enters and emerges affirmatively up and out the other side. “It aims,” says Susan, “to entice people to explore the simple, sensual rounded forms and carved folds.” For details on the symposium, please go to www.andresinstitute.org. To view more of Susan’s sculptures, please go to www.sabraham-sculpture.com.
NYUCD COMMUNITY VOICES DEBUTS
FIRST NEWSLETTER DESIGNED SPECIFICALLY FOR NYUCD EMPLOYEES

The first-ever newsletter designed specifically to highlight issues relevant to working at NYUCD debuted in spring 2011. Entitled NYUCD Community Voices, the newsletter is produced by the NYUCD Office of Human Resources and Faculty Services.

“NYUCD Community Voices is all about empowering administrators and staff to take advantage of opportunities to expand their knowledge, develop professionally through in-service training, and enhance their health and well-being,” said Julia Murphy, JD, senior director of the Office of Human Resources and Faculty Services. Wellness initiatives for staff and administrators have included free oral exams provided by dental faculty; free cholesterol, glucose, blood pressure, and weight screenings; and a series of lectures on stroke prevention and on nutrition.

To that end, the debut issue carried a three-month calendar of “Friday Staff and Administration Focus” sessions on topics such as “How NYUCD Is Organized,” “Wellness at NYUCD,” “Understanding the NYUCD Budget Process,” “HIPAA Computer Security,” “Basic Business Communication,” “Civility and Emotional Intelligence” and “Cultural Competence,” to name a few. Presenters at these sessions have included Dean Bertolami, Vice Dean Michael P. O’Connor, and Assistant Deans Cheryl Westphal-Theile and Anthony Palatta. “Providing opportunities for networking and for mentoring and being mentored are a focus of these Friday sessions,” said Dr. O’Connor, NYUCD’s vice dean for finance and administration. Because the Friday Focus sessions have been so popular, an expanded program will begin in September 2011.

Added Vice Dean O’Connor, “I strongly support the outstanding efforts being made by Julia and her team to communicate to the entire NYUCD community a broader knowledge of the resources and activities available through the Office of Human Resources and Faculty Services.”
Staff Stars, a program designed to enhance the professional development of clinical and administrative staff at the Colleges of Dentistry and Nursing, graduated its second class in January. Graduates were honored at a ceremony hosted by Michael O’Connor, vice dean for administration and finance, Julia Murphy, senior director of the Office of Human Resources and Faculty Services, and Staff Stars cofounder Ira Beresnoy, senior director for clinic operations and extramural programs.

The graduates are: Back row, from left: Marie Gaudin, administrative aide, Office of the Vice Dean for Administration and Finance; Wayne Green, patient accounts billing assistant; Cynthia Chong, administrative aide, Department of Basic Science and Craniofacial Biology; Clement Baafi, supply assistant, clinic operations; Sharon Ferdinand, lead dental assistant, postgraduate prosthodontics clinic; Enrique Mata, administrative secretary, Office of Informatics; Sylvia Van Dyck, patient services representative, clinic operations; and Nadine Legister, patient services representative, clinic operations.

Front row, from left: Kevin Wood, patient services representative, clinic operations; Ruthie Davis, lead senior patient service representative, clinic operations; LaNelle Alexander, administrative aide (College of Nursing); Amanda Garofalo, administrative aide (College of Nursing); and Isha Rodriguez, customer service representative, Office of Clinical Affairs.

Congratulations to our staff stars!
One hundred and thirty full- and part-time faculty members, administrators, and staff were honored at the 2011 annual Service Recognition Ceremony for their contributions to the Colleges of Dentistry and Nursing over an extended period of time.

“All of these people have displayed exemplary dedication and play an important role in NYUCD/NYUCN’s continued success,” said Dean Bertolami. “We are tremendously grateful to them and salute their commitment to the Colleges of Dentistry and Nursing.” The names of recipients of Service Recognition Awards appear below.

### 50-Year Service Award
Department of Oral and Maxillofacial Pathology, Radiology and Medicine
Ms. Gloria T. Turner

### 40-Year Service Award
Department of Cariology and Comprehensive Care
Ms. Lois Winter

### 35-Year Service Award
Office of Development and Alumni Affairs
Assistant Dean Rita Startup

Department of Prosthodontics
Dr. Gerald M. Barrack

Office of Quality Assurance
Assistant Dean Glenn Marrus

### 30-Year Service Award
Dental Hygiene Program
Ms. Lorilei D. Kirby

Office of Clinical Affairs
Mr. Eli Czaykowsky

### 25-Year Service Award
Office of Academic Affairs
Ms. Carla D. Thomas

Department of Cariology and Comprehensive Care
Dr. Rima Bachiman Sehl

Office of Clinic Operations
Ms. Lourdes Roman-Negron

Office of Financial Management and Business Operations
Ms. Renee Kleinman

Office of Human Resources and Faculty Services
Ms. Kathy D. Gray

Department of Orthodontics
Dr. Harold G. Edwards

### SERVICE RECOGNITION AWARDS PRESENTED
20-Year Service Award
Department of Basic Science and Craniofacial Biology
Dr. Richard G. Cotty
Dr. Phyllis A. Slott

Department of Cariology and Comprehensive Care
Dr. Robert G. Castracane
Dr. Emilie Fong
Dr. James D. Hudson
Dr. David M. Jacobowitz
Dr. Munzer B. Kara
Dr. Stanley Markovits
Dr. Todd A. Ross
Dr. Arthur A. Sonnenblick
Dr. Daryl Styner

School of Dental Hygiene
Ms. Brenda Bendigo
Ms. Vielka Clavijo
Ms. Helen D. Samuels
Ms. Annmarie Spaulding
Ms. Klavdiya Tumanov
Ms. Judith Vega

College of Nursing
Dr. Mathy Mezey

Dental Hygiene Program
Dr. Michael Levandowsky
Dr. Joseph Liddicoat
Dr. Arkalg Rao-Shantha-Korkantzis

Dr. I.N. and Sally Quatrararo Department of Endodontics
Dr. H. Lee Adamo
Dr. Alan B. Rosenthal

Department of Epidemiology and Health Promotion
Dr. Frederick G. More

Office of Health Services and Compliance
Ms. Joan Barber

Office of Technology and Informatics Services
Mr. Donald K. Joyner

15-Year Service Award
Department of Biomaterials and Biomimetics
Dr. Dindo Q. Mijares

Department of Cariology and Comprehensive Care
Dr. Fred Dubrowsky
Dr. Paul Friedman
Dr. Robert H. Friedman
Dr. David T. Kim
Dr. Alan Levy
Dr. Zitta Royzman
Dr. Steven Silberg

Ashman Department of Periodontology and Implant Dentistry
Dr. Brian I. Chadroff
Dr. Peter Cornick
Mr. Leonard Marotta
Dr. Mea Weinberg

Department of Prosthodontics
Dr. Joshi Bharat
Dr. Jyoti P. Srivastava

Office of Development and Alumni Affairs
Ms. Lauren Siegel

Office of Financial Management and Business Operations
Mr. Junior Bazzey

Department of Oral and Maxillofacial Pathology, Radiology and Medicine
Dr. Henry Young

Department of Pediatric Dentistry
Dr. Emanuela F. Corielli

Office of Clinical Operations
Ms. Charita Krasnopolkskaya

Office of Clinical Affairs
Mr. Ira Beresnoy

Dental Hygiene Program
Ms. Vilma E. Poyser
Ms. Fern S. Shulman-Dembner

Office of Technology and Informatics Services
Mr. Donald K. Joyner
Ashman Department of Periodontology and Implant Dentistry
Dr. Leslie G. Batnick
Dr. Mitchell J. Bloom
Dr. Anthony Classi
Dr. Robert M. Davidson
Dr. Dominick A. Galasso
Dr. Kenneth W. Judy
Dr. Cheryl Goren Robins
Dr. Robert A. Horowitz
Dr. Zev Kaufman
Ms. Valerie Sternberg-Smith

Office of Technology and Informatics Services
Ms. Rosie Domenech-Kirby
Ms. Isabella Pellicciari

10-Year Service Award
Department of Cariology and Comprehensive Care
Dr. Jerome Bogin
Dr. Alan S. Brown
Dr. Debra S. Fischoff
Dr. Jason Kim
Dr. Richard A. Kosofsky

Dr. Anna K. Landau
Dr. Herbert M. Mendelson
Dr. Seung-Hee Rhee
Dr. Larry Rosenthal
Dr. Krystyna Sosnowski
Dr. John Sung
Dr. Darryl Wu
Dr. Jane Yang

Office of Clinical Operations
Ms. Josefin Cruz
Ms. Lindell Hampton
Ms. LaTonia Mc Millan
Ms. Cynthia Ramirez
Ms. Jackelin Saa
Ms. Marina Tidoe

College of Nursing
Ms. Amy J.B. Knowles

Dental Hygiene Program
Ms. Lorraine Minto

Dr. I.N. and Sally Quartararo
Department of Endodontics
Dr. William M. Reyer
Office of Human Resources and Faculty Services
Mr. Duhané Clough
Ms. Nakia P. Wade

Department of Oral and Maxillofacial Pathology, Radiology and Medicine
Dr. Jeffrey R. Levenson
Dr. Rina Roth

Department of Oral and Maxillofacial Surgery
Dr. Kenneth E. Fleisher

Department of Orthodontics
Dr. Michael S. Apton
Dr. George J. Cisneros
Ms. Alba Lucia Ramirez

PEARL Network
Ms. Maria DeAcetis

Department of Pediatric Dentistry
Dr. Sue Ortnner
Dr. Douglas Pollack
Dr. Glen Shanock

Ashman Department of Periodontology and Implant Dentistry
Dr. Giorgio T. DiVincenzo
Dr. Brian Ehrlich
Dr. Angela R. Kamer
Dr. Richard C. Lee
Dr. Nima Mirmadjlessi
Dr. Richard Nejat
Dr. Glenn Ngan
Dr. Rodolfo Sanchez
Dr. Stephen Stein
Dr. Miles J. Yacker

Office of Technology and Informatics Services
Mr. Devell Brown
Mr. Mitchel Ervin

In Memoriam
35 Years of Service
Department of Cariology and Comprehensive Care
Dr. Eugene Hittelman

25 Years of Service
Endodontics
Ms. Lillian E. Morales

20 Years of Service
Dental Hygiene
Dr. Lilly Newman
NYUCD students raised $2,500 for Japan earthquake relief efforts at a March fundraiser and talent show organized by the Office of Student Affairs and the Student Council.

Over a dozen student organizations participated in the fundraiser. Held in the Alfano Commons, the event featured sales of homemade ethnic foods, clothing and restaurant voucher raffles, and a student talent show. All proceeds were donated to the US Fund for UNICEF Japan Relief.
CONGRATULATIONS TO...

DR. MANI ALIKHANI, assistant professor of orthodontics and co-director of the NYUCD Consortium for Translational Orthodontic Research (CTOR), on co-organizing a workshop on accelerated orthodontic tooth movement at the American Association of Orthodontists 2011 annual meeting.

MS. ANDREA L. BEALL, instructor in dental hygiene, on presenting a poster entitled “Oral Health Literacy Pilot Program Initiative” at the 2011 annual meeting of the American Dental Education Association, with Dr. Cheryl Westphal-Theile, assistant dean for allied health programs, and Ms. Lisa Stefanou, clinical assistant professor of dental hygiene.

DR. CHARLES N. BERTOLAMI, Herman Robert Fox Dean of NYUCD, on presenting a keynote address entitled “Why Our Ethics Curricula Don’t Work” at the Ethical Issues in Dentistry Symposium cosponsored by the Polytechnic Institute of NYU, SUNY Downstate Medical Center, and the New York Academy of Sciences.

DR. TIMOTHY BROMAGE, adjunct professor of biomaterials and biomimetics and of basic science and craniofacial biology, on coauthoring an article entitled “Molar Macrowear Reveals Neanderthal Eco-Geographic Dietary Variation,” for PLoS One.

DR. JOHN CALAMIA, professor of cariology and comprehensive care and director of esthetics, on serving as chief editor of Dental Clinics of North America, Cosmetics and Esthetics for the Modern Dental Practice: Update 2011. Dr. Calamia’s coeditors are Dr. Mark Wolff, associate dean for predoctoral clinical education and professor and chair of the Department of Cariology and Comprehensive Care, and Dr. Richard D. Truskowsky, clinical associate professor of cariology and comprehensive care. Added kudos to Dr. Calamia on his election to the Board of Directors of the American Academy of Cosmetic Dentistry.

DR. PAULO COELHO, assistant professor of biomaterials and biomimetics, on coauthoring an article entitled “Characterization of Five Different Implant Surfaces and Their Effect on Osseo-integration: A Study in Dogs,” for the Journal of Periodontology.

MS. ALMA L. CORREIA, ’13, on receiving a LeGrand Newman Scholarship from the Northeast Regional Chapter of the National Association of Medical Minority Educators,
and on being named Student of the Month for February 2011 by the NYUCD Student Council.

**DR. FREDERICK A. CURRO,** clinical professor of oral and maxillofacial pathology, radiology and medicine, on coauthoring an article entitled “Risk Factors for Osteonecrosis of the Jaws: A Case Control Study from the CONDOR Dental PBRN,” for the *Journal of Dental Research.*

**THE CHART ROOM STAFF,** on being named Staff of the Month for March 2011 by the NYUCD Student Council

**DR. STUART FROUM,** ’70, clinical professor of periodontology and implant dentistry, on coauthoring an article entitled “Risk Assessment Before Extraction for Immediate Implant Placement in the Posterior Mandible: A Computerized Tomographic Scan Study,” for the *Journal of Periodontology,* with Dr. Sang-Choon Cho, clinical assistant professor of periodontology and implant dentistry.

**MS. WINNIE FURNARI,** assistant professor of dental hygiene, on authoring articles entitled “The Core Values of Beneficence and Veracity” for *Access,* and “Oral Health Professional Alert: Elder Abuse Concern in the United States and Canada,” for the *Canadian Journal of Dental Hygiene,* and on serving as committee secretary of the American Dental Association Joint Working Group on Forensic Odontology Informatics.

**MS. POONAM GAT,** ’12, on coordinating an oral health education and screening program for special needs children and youth in Kolhapur, Maharashtra, India.

**MS. KRISTINE HASSAN,** ’13, on being named Student of the Month for March 2011 by the NYUCD Student Council.

**MS. ROSEMARY HAYS,** clinical associate professor of dental hygiene, on presenting a poster entitled “A Model Program: Interdisciplinary/Interprofessional Approach to Access to Oral Health Care for Older Adults,” at the 2011 annual meeting of the American Dental Education Association (ADEA), with Ms. Lisa Stefanou, clinical assistant professor of dental hygiene; and Ms. Eva Lupovici, clinical professor of dental hygiene. Added kudos to Professor Hays on presenting posters entitled “Association Between Body Mass Index and Tooth Loss” and “Periodontopathogenic Bacterial Colonization in Individuals with
Gastrointestinal Precancer,” with Dr. Patricia Corby, assistant professor of periodontology and implant dentistry and associate director of the Bluestone Center, and Dr. Yihong Li, professor of basic science and craniofacial biology, at the 2011 annual meeting of the American and International Associations for Dental Research; and on coauthoring an article entitled “Partner with Your Patients: How to Keep the Remineralization/emineralization Process in Balance,” for Dimensions of Dental Hygiene.

MS. LISA M. HAYSTRAND, on being appointed research administrator in the Office of International Initiatives and Development.

DR. JENNI HJERPPPE, formerly a Visiting Scholar in the Department of Biomaterials and Biomimetics, on being selected as a finalist for the International Association for Dental Research Arthur Frechette Award for New Investigators in Prosthodontics. Dr. Hjerppe was mentored by Dr. Nelson da Silva, assistant professor of prosthodontics.

DR. WEI-HSI HONG, teaching fellow in orthodontics and a member of the NYUCD Consortium for Translational Orthodontic Research (CTOR), on presenting a poster entitled “Expression of Inflammatory Markers in Response to Different Magnitude of Orthodontic Forces” at the American Association of Orthodontists 2011 annual meeting.

DR. LEILA JAHANGIRI, clinical associate professor and chair of the Department of Prosthodontics, on authoring an article entitled “Recruitment, Development, and Retention of Dental Faculty in a Changing Environment” for the Journal of Dental Education.

DR. NEELAM JHAWAR, ’11, on being named Student of the Month for January 2011 by the NYUCD Student Council.

DR. KENNETH JUDY, ’68, clinical professor of periodontology and implant dentistry, on coauthoring an article entitled “Trends in Implant Dentistry” for Dental Economics.


DR. SOPHIA KHAN, ’07, instructor in cariology and comprehensive care, on winning a Service Award from the Xi Psi Phi fraternity.

DR. EDMUND KHOO, PG Orthodontics ’11, and a member of the NYUCD Consortium for Translational Orthodontic Research (CTOR), on presenting a poster entitled “Expression of Osteogenic Markers in Response to High Frequency, Low Magnitude Forces on Alveolar Bone,” at the American Association of Orthodontists 2011 annual meeting.

MS. ELLY KOSKORELOS, on being appointed alumni outreach administrator in the Office of Development and Alumni Affairs.

DR. RACQUEL Z. LEGEROS, Linkow Professor of Implant Dentistry and professor and associate chair of the Department of Biomaterials and Biomimetics, on coauthoring an article entitled “Effect of Fluoride-substituted Apatite on In Vivo Bone Formation” for the *Journal of Biomaterials Applications*, and on being awarded the Philippines Development Foundation USA Award of Excellence in Science and Engineering.

DR. MARCI LEVINE, clinical instructor in oral and maxillofacial surgery, on being elected secretary of the First District Dental Society.

DR. TERRY LIN, PG Prosthodontics ’11, on being selected to receive an American College of Prosthodontists Research Fellowship Award for an abstract entitled “The Effect of Bioactive Collagen Membrane Carrying PDGF for Bone Regeneration.”

MS. EVA LUPOVICI, clinical professor of dental hygiene, on presenting a poster entitled “Impact of Economic Changes on Trends in Dental Hygiene Education” at the 2011 annual meeting of the American Dental Education Association (ADEA), with Ms. Judith Kreismann,
clinical associate professor of dental hygiene; Ms. Lisa Stefanou, clinical assistant professor of dental hygiene; and Dr. Cheryl Westphal-Theile, assistant dean for allied health programs.

**DR. WILLIAM J. MALONEY, ’92,** clinical associate professor of cariology and comprehensive care, on authoring articles entitled “Babe Ruth’s Battle with Nasopharyngeal Carcinoma and the Dentist’s Role in its Diagnosis and Treatment” and “The Significance of Methamphetamine Usage for Dental Practice,” both for Dentista y Paciente, the latter article coauthored by Dr. Maura Maloney, ’92; “Significance of Cannabis Use in Dental Practice,” for The New York State Dental Journal; “Occam’s Razor and Hickam’s Dictum: The Transformation of a Theoretical Discussion into a Modern and Revolutionary Tool in Oral Diagnostics,” and “Vitruvian Man: Leonardo da Vinci’s Interpretation of the Golden Proportion and Its Application to Modern Dentistry,” with Mr. Jake Fried, ’12, for WebMedCentral. Added kudos to Dr. Maloney on his appointment to the editorial board of the Mexican dental journal Dentista y Paciente.

**DR. LEANDRO M. MARTINS,** formerly a Visiting Scholar in the Department of Biomaterials and Biomimetics, on being selected as a finalist for the International Association for Dental Research Arthur Frechette Award for New Investigators in Prosthodontics. Dr. Martins was mentored by Dr. Nelson da Silva, assistant professor of prosthodontics.

**DR. JOSE M. NAVARRO,** MS in Biomaterials, ’10, on being selected as a finalist for the Research Competition Award of the European Academy of Esthetic Dentistry. Dr. Navarro was mentored by Dr. Nelson da Silva and on his appointment to the editorial board of the Mexican dental journal Dentista y Paciente.

**MR. JOHN MATTHES,** ’12, on winning the New York Academy of Dentistry Award for his poster presentation entitled “Marginal Microscopic Analysis of CAD/CAM All Ceramic Crowns,” with Dr. Nelson da Silva, assistant professor of prosthodontics, and Dr. Mark Wolff, associate dean for predoctoral clinical education and professor and chair of the Department of Cariology and Comprehensive Care.
Silva, assistant professor of prosthodontics.

**DR. FRANCIS V. PANNO**, professor emeritus of prosthodontics, on receiving the 2010 Greater New York Academy of Prosthodontics Achievement Award in recognition of lifelong contributions to the dental profession and the specialty of prosthodontics.

**DR. ERIC PLOUMIS**, associate professor of orthodontics, on being interviewed for an article on 3D cone beam computed tomography scanning in *Dental Economics*.

**DR. KAREN RAPHAEL**, professor of oral and maxillofacial pathology, radiology and medicine, on authoring an article entitled “Post-Traumatic Stress Disorder Moderates the Relation Between Documented Childhood Victimization and Pain 30 Years Later” for *Pain*; and on presenting a lecture entitled “Bruxism and Orofacial Pain: A Critical Reappraisal” at Aarhus University School of Dentistry in Denmark.

**DR. MARKOS RAPTIS**, PG Orthodontics ’11, and a member of the NYUCD Consortium for Translational Orthodontic Research (CTOR), on presenting a poster entitled “Accelerated Tooth Movement: from Rats to Humans” at the American Association of Orthodontists 2011 annual meeting.

**DR. VICTORIA RAVEIS**, research professor of cariology and comprehensive care and director of the Psychosocial Research Unit on Health, Aging and the Community, on coauthoring an article entitled “Managing Conflicts of Interest in Clinical Care: A National Survey of Policies in US Medical Schools,” for *Academic Medicine*, and for the following presentations: “ART CART: Saving the Legacy of Aging Artists” at the Aging in America 2011 Annual Conference of the American Society of Aging and at the 2011 Annual Meeting and Educational Leadership Experience of the Association for Gerontological Society of America; “Family Caregiving Transitions: Addressing the Care Needs of Older Adults During the Cancer Survivorship Period” and “Involving Aging Artists in Interdisciplinary Academic Training and Service Programs: Lessons Learned,” at the Gerontological Society of America, 63rd Annual Scientific Meeting; and “Underserved Individuals with Conditions Other Than Cancer Who Require Palliative Care: HIV/AIDS in the US,” at the 18th International Congress on Palliative Care.

**DR. DIANNE REKOW**, professor and former chair of the Department of Basic Science and Craniofacial Biology and provost of the Polytechnic Institute of NYU, on being installed as the 88th President of the International Association for Dental Research.

**DR. MIRIAM R. ROBBINS**, associate professor of oral and maxillofacial pathology, radiology and medicine, on being named Faculty of the Month for January 2011 by the NYUCD Student...
Council; and on coauthoring an article entitled “Global Perceptions and Misconceptions about Dental Treatment During Pregnancy Among Health Care Providers,” for the Journal of Dental Education, with Dr. Stefanie Russell, assistant professor of epidemiology and health promotion.

**DR. PAUL A. ROSENBERG,** professor and chair of the Dr. I.N. and Sally Quartararo Department of Endodontics, presented lectures to residents and faculty of the Harvard School of Dental Medicine, Tufts University School of Dental Medicine, and Boston University School of Dental Medicine at the Harvard School of Dental Medicine, and to residents and faculty at the University of Gainesville, Florida, School of Dental Medicine. The topic was “Endodontic Pain: Biologic Causes and Preventive Strategies.”

**MS. JOHANNA ROSMAN,** academic program coordinator for the Department of Pediatric Dentistry, on earning a BS degree in nursing from the NYU College of Nursing.

**DR. STEFANIE RUSSELL,** assistant professor of epidemiology and health promotion, on authoring an article entitled “Is Motherhood Bad for Oral Health? Parity and Dental Disease: Recommendations for Research, Clinical Practice, and Policy,” for the Journal of Dental Education.

**DR. BRIAN SCHMIDT,** professor of oral and maxillofacial surgery and director of the Bluestone Center for Clinical Research, on being selected as the Norman Rowe lecturer for the 2011 national meeting of the British Association of Oral and Maxillofacial Surgeons.

**DR. STUART L. SEGENICK,** clinical associate professor of periodontology and implant dentistry, on coauthoring articles entitled “Doxycycline-Induced Dizziness in Dental Patients” for The New York State Dental Journal and “Management of Nonvariceal Upper Gastrointestinal Bleeding” for US Pharmacist, with Dr. Mea Weinberg, clinical associate professor of periodontology and implant dentistry, and on coauthoring an article entitled “New York State Ear, Nose and Throat Specialists’ Views on Pre-Sinus Lift Referral” for the Journal ofPeriodontology, with Dr. Michael T. Cote, PG Periodontics ’12, and Dr. Robert Schoor, clinical associate professor of periodontology and implant dentistry and director of the Postgraduate Program in Periodontics. Added kudos to Dr. Segelnick on his installation as president of the Second District Dental Society; on becoming a Diplomate of the International Congress of Oral Implantologists; and on receiving the Bernard P. Tillis...
Award for Excellence in Dental Writing for an article entitled “Hard to Say Goodbye,” which appeared in the SDDS Bulletin.

**DR. DAVID SIROIS,** associate professor of oral and maxillofacial pathology, radiology and medicine and associate dean for graduate programs, on coauthoring an article entitled “Persistent Orofacial Muscle Pain” for Oral Diseases: Proceedings of the Fifth World Workshop on Oral Medicine: Systematic Reviews and Position Papers on Future Directions for International Specialty Training, Practice and Research.

**DR. SILVIA SPIVAKOVSKY,** clinical assistant professor of oral and maxillofacial pathology, radiology and medicine, on being named Faculty of the Month for February 2011 by the NYUCD Student Council.

**DR. DONNA SHELLEY,** associate professor of cariology and comprehensive care and director of interdisciplinary research and practice, on coauthoring an article entitled “Implementing Tobacco Use Treatment Guidelines in Public Health Dental Clinics in New York City” for the Journal of Dental Education, with Dr. Tuo-Yeng Tseng, a junior research scientist in the Department of Cariology and Comprehensive Care; Ms. Madeleine Lloyd, practice director of the NYU Nursing Faculty Practice; and Dr. Mark Wolff, associate dean for predoctoral clinical education and professor and chair of the Department of Cariology and Comprehensive Care; and on coauthoring an article entitled “Ethnic Disparities in Self-Reported Oral Health Status and Access to Care Among Older Adults in NYC” for the Journal of Urban Health, with Dr. Stefanie Russell, assistant professor of epidemiology and health promotion.

**MS. LAURA J. SLEEPER,** assistant director of clinic operations for postgraduate education, on coauthoring an article entitled “Tips for Chairsde Hypersensitivity Treatment” for Dimensions of Dental Hygiene, with Ms. Lisa Stefanou, clinical assistant professor of dental hygiene.

**MS. REBECCA STAUFFER,** on being appointed administrator for the Department of Oral and Maxillofacial Pathology, Radiology and Medicine.

**DR. CRISTINA TEIXEIRA,** associate professor of orthodontics and of basic science and craniofacial biology, interim chair of the Department of Orthodontics, and co-director of the NYUCD Consortium for Translational Orthodontic Research (CTOR), on co-organizing a workshop on accelerated orthodontic tooth
movement at the American Association of Orthodontists 2011 annual meeting.

**MS. JANET TUTHILL,** clinical assistant professor of dental hygiene, on authoring articles entitled “Heroin Addiction and Our Adolescent Patients” for Access and “A New Generation of Risk Assessment” for *Dimensions of Dental Hygiene.*

**DR. ANALIA VEITZ-KEENAN,** clinical assistant professor of oral and maxillofacial pathology, radiology and medicine, on authoring a guest editorial entitled “The Affordable Care Act and Evidence-Based Care” for *The Journal of the American Dental Association.*

**DR. ANTHONY VERNILLO,** professor of oral and maxillofacial pathology, radiology and medicine, on authoring an article entitled “Routine Opt-out HIV Testing in Dental Healthcare—Its Implementation and the Advancement of Public Health” for the *American Journal of Bioethics,* and on presenting lectures entitled “Property and Privacy Paradigms of ‘Marketable Spit’: An Ethical and Legal Counterpart to Blood?” at the Ethical Issues in Dentistry Symposium of the Sixth International Conference on Ethical Issues in Biomedical Engineering, and “Oral Diagnostics and Bioethics” at the Naval Postgraduate Dental School of the National Naval Medical Center.

**DR. RODRIGO VIECILLI,** assistant professor of orthodontics, on being invited to speak at the 2011 annual meeting of the Spanish Orthodontic Society.

**DR. CHERYL WESTPHAL-THEILE,** assistant dean for allied health programs and director of the dental hygiene program, on earning a Doctor of Education degree from Fielding Graduate University, School of Educational Leadership and Change. Her dissertation was entitled “Cultural Competence and the Delivery of Dental Hygiene Services: A Program Evaluation of Curriculum Effectiveness.”

**DR. MARK WOLFF,** associate dean for predoctoral clinical education and professor and chair of the Department of Cariology and Comprehensive Care, on presenting a lecture at the 2011 Caries Management by Risk Assessment Conference sponsored by the California Dental Association Foundation.

**XI PSI PHI BETA CHAPTER OF NYUCD** on receiving the national fraternity’s 2011 Best Chapter Award.

**DR. SEIICHI YAMANO,** assistant professor of prosthodontics, on receiving the American College of Prosthodontists’ Young Prosthodontist Innovator Award for a research project entitled “Novel Gene-Enhanced Bone Tissue Engineering Use of 3-D Printed Scaffolds.”
Dr. Edward Zuckerberg, ’78, AKA “Inspector Gadget,” Talks About Marketing His Dental Practice on Facebook

Dr. Edward Zuckerberg graduated from the NYU College of Dentistry in 1978 and became a fellow of the Academy of General Dentistry in 1984. He has been in private practice for 31 years, the last 29 years in Dobbs Ferry, New York. He and his wife, Karen, a psychiatrist, have four children, including son Mark, the founder and CEO of Facebook, Inc. Dr. Zuckerberg can be contacted at painless.drz@verizon.net or on his Facebook page at http://www.facebook.com/painlessdrz

An early technology adopter, Dr. Zuckerberg’s vision and commitment to technology provided the perfect environment in which to nurture his children, Randi, Mark, Donna, and Arielle, all of whom are high-technology adepts. Dr. Zuckerberg computerized his dental practice in 1984, introduced digital radiography in 1997, and went paperless in 2005, which, among other things, enables patients to fill out medical histories online, receive appointment confirmations and reminders electronically, and access secure patient portals to view their records and request appointments.
Dr. Zuckerberg’s practice slogan is “We cater to cowards.” He has been aided in this approach by his wife, Karen, who formerly managed his office and used her psychiatric training to counsel dentally phobic patients.

Meeting Ed Zuckerberg, it’s impossible not to be struck by the thought that “flow” is an apt metaphor for both his personal and professional life. An openness to all the possibilities of technology and of using technology to improve the way he practices dentistry is combined with a love of deep-sea diving, of photographing seas and oceans, and of all things aquatic, which dominate his office décor. Also contributing to the sense of flow is the fact that his office is located in an annex to his home, allowing easy access between family and practice life.

Recently, Global Health Nexus spoke with Dr. Zuckerberg about his commitment to social media as the chief means of marketing and managing his practice.

Global Health Nexus (GHN): When did you start using social media in your practice?

Dr. Zuckerberg: Because I’m related to the Facebook founder, I was an early user of Facebook. But I didn’t begin to utilize its full potential until about two years ago, when I got a message from Dave Kerpen, whose company, Likeable Media (Likeable.com) specializes in helping businesses develop and grow their Facebook presence. He facilitated setting up my Facebook page and uses it to show prospective clients that Facebook can provide what he calls “word-of-mouth marketing on steroids.”

GHN: How does Facebook help you to market your practice?

Dr. Zuckerberg: The best way to build a practice is by referrals from satisfied patients. With Facebook, you have the opportunity to build referrals by first getting people to like your practice and then letting their Facebook friends know that they like it. My practice is proof positive that, with Facebook, one person with 100 friends can have as much influence as an entire institution.

GHN: What makes Facebook so attractive for advertising a dental practice?

Dr. Zuckerberg: The heart of Facebook’s social network is the free page each person or business can set up, which can include photos, interests, personal information, and anything else they wish to include in their online persona. They link to other friends and acquaintances by inviting each other and accepting invitations to be linked online as friends, thus developing their own network. In addition to personal pages, Facebook allows creation of business pages, which are open to the public, any of whom can subscribe to your business page by “liking” it, thus becoming a “fan” of your page.

Your page may include everything a regular Web page has—articles, biographies of staff members, listing of hours, maps and directions, photos and videos. More important, the page is interactive. There is a “wall” on each page where fans can post comments, ask questions, review your practice, and start discussions. With a little computer know-how, you can easily set up the page yourself, or for a more professional look, you can use an outside company, such as Likeable Media.

Facebook lets you target your advertising in ways that no other form of advertising can, and delivers the power of your fans’ social networking connections to create the online version of word-of-mouth referrals. In Facebook’s ad setup page, you can select from a variety of demographics to target your market, including but not limited to age groups, geographic locations, gender, academic levels achieved and any interest or job title listed on an individual’s profile. Of course, the more specific you are
in selecting demographics, the more the target market will decrease, but you will get more bang for your advertising dollar as you assure that your message is only getting out to those you want to receive it.

**GHN:** What challenges does Facebook pose in marketing a dental practice?

**Dr. Zuckerberg:** The hardest part about developing your Facebook presence is getting existing patients and their acquaintances to “like” your page. According to Dave Kerpen, getting fans for your page starts by listing your Facebook Web address on your business cards, stationery, invoices, Web page, newsletter, office signage, and just about everywhere you have office information listed. Also, offer incentives for your patients and other contacts to “like” your page. The incentive may be in the form of free merchandise, discounts on services, or special offers. For example, people who check in three times at my office are eligible to receive a free tooth bleaching.

**GHN:** Once you have developed a nucleus of fans of your page, how do you attract new patients to your practice?

**Dr. Zuckerberg:** What happens on Facebook is that people have “friends,” and you can target your marketing to people who are “friends” of those who already “like” your page. As a result, Facebook—the ultimate social network marketing tool—allows you to do many of the things you are already doing to market your practice, but much more effectively and at significantly lower cost.

An important key to the success of a Facebook marketing program is utilizing a selectable category in the ad selection process on Facebook, called “friends of fans.” For example, John Smith is a fan of your practice. Most people on Facebook have at least 100 friends, some upward of several hundred. Using demographic limitations, assume that 25 of John’s friends fit into your parameters. When your ad appears before John’s friends on their Facebook page, there will also be a thumbs-up graphic along with “John Smith likes your practice!” This is the online equivalent of a word-of-mouth referral. Can you imagine if your direct mail could include references to the recipient’s friends liking your practice? If that person is looking for a new dentist and they value John’s recommendation, you have successfully harnessed a referral without having to ask John to be a missionary for you. This is what is known as the concept of “social search,” which is a type of Web search method that determines the relevance of search results by considering the interactions or contributions of users.

**GHN:** Was the adoption of Facebook a natural fit for you, or was there a learning curve?

**Dr. Zuckerberg:** It was a natural fit because I’ve always been a technology enthusiast. For example, I recognized early that digital X-rays reduce radiation exposure for my patients by up to 80 percent. The instantaneous nature of digital won me over very quickly. I pride myself on my ability to evaluate technology. It improves my ability to help my patients understand my treatment recommendations and also allows me to raise the level of care I provide. In short, technology allows me to reinforce my practice vision, which is priceless. This vision is what led me to adopt CAD/CAM, which allows me to dramatically improve restoration quality and efficiency.

**GHN:** How do patients react to your emphasis on technology?

**Dr. Zuckerberg:** My patients are used to me being state-of-the-art; they’re used to technology. We’ve been collecting e-mail addresses in the practice since e-mail was in its infancy. We use e-mail to send appointment reminders, recall reminders, statements, quarterly newsletters. I’m Inspector Gadget—my patients always expect to see something new in my office. And this includes providing patients with Internet access and iPods to make their time in my office even more efficient and rewarding for them.

**GHN:** Given the prevalence and the power of social media in today’s world, can you envision the inclusion of social media in continuing education courses for practicing dentists and in practice management courses for dental students?

**Dr. Zuckerberg:** Absolutely. But every type of business, not only dentistry, can benefit from marketing on Facebook. More than 600 million people are using
Facebook worldwide. With more than 150 million in the US alone, chances are good that nearly 50 percent of a dentist’s current patient base is not only using Facebook, but is logging on several times a week, if not daily. This is a tremendous opportunity to project your message and reinforce relationships with current patients, as well as tap into a market of new patients.

**GHN:** Have you ever taught or been interested in teaching?

**Dr. Zuckerberg:** I actually teach a lot—but not dentistry. I teach bridge; bridge is one of my passions. I've been playing bridge actively for over 20 years and I'm on the board of the organization that oversees bridge activities in Westchester County. I run their Web site and their Facebook page, and I became a certified bridge teacher about 15 years ago. In fact, I've been teaching one course a semester for the past five years in the adult continuing education program at Westchester Community College. My life is full of bridges—the Brooklyn Bridge, which was the link from my childhood home to study at NYUCD; playing bridge; bridges in a dental sense. And of course, the ultimate bridge: technology as the bridge to the future.

**GHN:** Your son Mark recently announced the formation of a $100 million foundation to improve education among underserved students in Newark, New Jersey's, struggling school system. What are your thoughts about his decision?

**Dr. Zuckerberg:** I’m extremely proud of him for starting the philanthropic part of his career so early in life.

"I pride myself on my ability to evaluate technology. It improves my ability to help my patients understand my treatment recommendations and also allows me to raise the level of care I provide. In short, technology allows me to reinforce my practice vision, which is priceless."
Dr. Martha J. Somerman, ’75, Named Director of the National Institute of Dental and Craniofacial Research

Dr. Martha J. Somerman, a 1975 graduate of NYUCD, has been appointed director of the National Institute of Dental and Craniofacial Research (NIDCR). Dr. Somerman is currently dean of the University of Washington School of Dentistry, Seattle, a position she has held since 2002. She began her duties as NIDCR director on August 29, 2011.

As director of NIDCR, Dr. Somerman will oversee a budget of $410 million and lead a staff of more than 400 researchers and administrators on the NIH campus, as well as hundreds of grantees at universities, medical schools, dental schools, and other research institutions.

An internationally known researcher and educator, Dr. Somerman has focused her research on defining the key regulators controlling development, maintenance, and regeneration of oral-dental-craniofacial tissues. Her work has been recognized with numerous honors and awards.

“Dr. Somerman’s appointment brings great pride to her alma mater and to the dental profession,” said Dean Bertolami. “Martha is a scholar, researcher, and clinician of rare distinction, as well as a superlative leader. Her appointment as director of NIDCR marks yet another example in a life of outstanding professional achievements. NYUCD offers Dr. Somerman hearty congratulations and best wishes for success in her new position.”

SAVE THE DATE

Reunions for Quinquennial Classes of 1946 through 2006 to Be Held on October 22

Alumni in the Spotlight

‘70s
DR. KENNETH ALLEN, Class of 1973, assistant professor of cariology and comprehensive care, on coauthoring an article entitled “Comparative Use of Podcasts vs. Lecture Transcripts as Learning Aids for Dental Students,” for the Journal of Dental Education.

‘80s
DR. STUART DELMAN, Class of 1981, on being featured in a New York State Dental Association News article about finding an antidote to professional stress in photography.


‘90s
DR. PETER GLAVAS, Class of 1997, clinical assistant professor of prosthodontics, on becoming program director of the general practice dental residency program at Staten Island University Hospital.

DR. MANUEL JOHN MATOS, Class of 1995, on being elected president of the Union County, New Jersey Dental Society.

‘00s
DR. PATRICIA L. SUKMONOWSKI, Class of 1991, on being installed as president of the New York County Dental Society.

DR. MICHAEL APA, Class of 2003, on being featured in a story about aesthetic dentistry in Harper’s Bazaar.

DR. RONALD J. SAFFAR, Class of 2002, on being elected president of the Hudson County, New Jersey Dental Society.

DR. VINCENT J. CALAMIA, Class of 2011, on winning the Empire State Academy of Cosmetic Dentistry’s Student Clinician Award.

DR. JOSEPHINE CHANG, Class of 2011, on being interviewed by Fox News about NYUCD’s dental care program for survivors of torture.

DR. MICHAEL FLOMAN, PG, Orthodontics Class of 2004, on coauthoring an article entitled “Diagnosing Early Interceptive Orthodontic Problems” for Dental Economics.

DR. MICHAEL WILSON, ’05, on being quoted in an article about Medicaid payments for dentists in the Syracuse, New York, Post-Standard.

In Remembrance

Dr. Seymour Amazon, Class of 1957
Dr. Saul Bax Asnis, Class of 1941
Dr. Norman Cranin, Class of 1951
Dr. Marvin B. Engel, Class of 1942
Dr. Donald L. Everhart, former chair, Department of Microbiology
Dr. Eugene Hittelman, associate professor, Department of Cariology and Comprehensive Care
Dr. Anatole Karmen, Class of 1956
Dr. Steven B. Ross, Class of 1966