REACHING FOR REFORM IN DENTAL EDUCATION

Life, Death and One Man’s Quest to Demystify the Inner Realms of the Human Body
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Consider the following higher education scenario: A curriculum that is not keeping pace with advances in knowledge and technology; an education infrastructure, including academic, clinical, and research space, that does not support the needs and expectations of society; and an educational philosophy that is directed primarily toward addressing today’s issues and challenges, rather than oriented toward the future. That is exactly the situation facing dental education in America.

During the past decade, biomedical research, approaches to the treatment of disease, and the delivery of health care have all undergone profound changes. Although the dental curriculum has been periodically revised and improved, the basic approach to dental education has remained largely the same as it was in 1926, when the publication of the Gies Report argued successfully for changing the dental education paradigm from a trade school/apprenticeship model to a university-based, scientifically supported system designed to be on a par with medical education. The fact that the basic paradigm is nearly 80 years old raises the question: Is the traditional dental curriculum right for our modern world?

Is it really appropriate, considering how much has happened since 1926, that dental education is not interdisciplinary, whereas healthcare clinical practice and clinical research often require explicit interdisciplinary efforts? Is it acceptable that dental students continue to compartmentalize the basic science, preclinical, and clinical phases of their education in neat but separate boxes? Is it appropriate that the dental curriculum is bursting at the...
seams with the addition of more and more major topics, while inadequate time is allocated to subjects designed to educate students to function competently in today’s biologically, pharmacologically, and technologically driven healthcare environment?

As if all that were not enough, consider that the production of dentists is not keeping pace with population growth; that only one percent of dental students show an interest in careers in teaching medicine; and that escalating educational costs and mounting student indebtedness threaten to topple the entire dental education enterprise. The conclusion is inescapable: A crisis in oral health care is imminent and the only way to avert it is to reform dental education.

In this issue of Global Health Nexus we examine the pressing need for change in dental education and some of the varied ways in which this can occur. Over the past several years, NYUCD has made change a strategic priority by introducing a number of innovations designed to improve the quality, efficiency and relevance of dental education, and to help practitioners keep pace with emerging trends and issues so that they can become more successful. These include placing the entire curriculum on DVD; building a high-tech clinical simulation and laboratory technology center; introducing the Invisalign® orthodontic technique, digital radiography, and Diagnodent® into the predoctoral curriculum; creating both an online oral cancer screening and detection course and an online resource guide to bioterrorism preparedness; and offering increasingly sophisticated continuing education programs, including interactive international videoconferences. Still more dramatic developments are underway in anatomy, curriculum design, practice management, and technology, and this issue showcases them. But more important, the College is in active collaboration with other groups to reform the national model for dental education.

In keeping with this theme, you will find a special report on “The Necessity for Major Reform in Dental Education,” which came out of a salon convened last August by the Santa Fe Group to outline the factors that have produced the impending crisis and to plan strategies for major change and reform.

The Santa Fe Group is a nonprofit, nonpartisan group, which seeks to advance the goal of shaping the future of health care through action-oriented pathfinding with a passion for the public good. As one of the founders of the Santa Fe Group, I was privileged to help organize and conduct the August salon, which brought together 60 opinion leaders in dentistry and other healthcare professions at the newly named Arthur A. Dugoni School of Dentistry at the University of the Pacific in San Francisco. Participants included the President of the American Dental Association (ADA); the Assistant U.S. Surgeon General and the nation’s Chief Dental Officer; 14 dental school deans; the Executive Director of the American Dental Education Association (ADEA); corporate and industry representatives, including a number of CEOs, private dental practitioners, dental hygienists, nurses, physicians, educators, and insurers; and officers of public policy organizations.

In addition, this issue brings news of the amazing growth in research activity on our campus, a trend underscored by the quadrupling of our federally funded research to nearly $10 million* in less than four years. Additional points of pride include articles on our flawless accreditation site visit; on our students, faculty, and staff, who were honored with a wide range of awards; and on the impressive progress we continue to make in attracting major philanthropy.

A special feature is this issue’s “Practicing for Life™” column, in which you’ll find the first in a series of practice management columns by Dr. Roger P. Levin, arguably the leading dental practice management consultant in the world. Dr. Levin and his consulting firm, The Levin Group, recently joined forces with NYUCD to help our clinics function efficiently and to design clinical practice management education for our students, faculty, and the practicing profession.

I hope that all of you — dentists, alumni, staff, and friends — enjoy this issue of Global Health Nexus featuring programs and activities designed to keep dental education at NYU relevant and exciting in the 21st century.

*This figure represents funding received after August 31, 2004.
Richard I. Vogel, DMD, Executive Associate Dean for Academic Programs; Professor of Periodontics, Diagnostic Science and Urgent Care and of Oral Medicine

In order to be accredited by the American Dental Association’s Commission on Dental Accreditation (CODA), a specialized body recognized by the U.S. Department of Education, all U.S. dental schools must undergo an intensive evaluation of their education programs every seven years.* In November 2003, NYUCD had its scheduled accreditation site visit, an occasion which resulted in a flawless outcome for all programs evaluated: the DDS program; advanced education programs in endodontics, orthodontics, pediatric dentistry, periodontics, and prosthodontics; the advanced education program in general dentistry; and the education program in dental hygiene. In this article, Dr. Richard I. Vogel, the chief architect of the accreditation site visit planning process, talks about the experience.

*The advanced education program in oral and maxillofacial surgery was not included because it is accredited every five years, rather than every seven years. The program will be site visited in November 2004.
methodologies for evaluating students’ progress in achieving those benchmarks.

For the predoctoral DDS program, the College formulated 32 College-wide competencies and approximately 100 educational objectives. Subsequently, an ad hoc faculty and student subcommittee of the curriculum committee worked together to design a new, four-year, “competency-based” curriculum whose focus would be a more integrated approach to learning and to patient care, and outcomes that would be, among other things, a critical-thinking, problem-solving clinician, who could communicate appropriately with other healthcare providers in providing comprehensive patient care.

The new curriculum emphasizes ethics and professionalism, students’ ability to evaluate literature, health promotion, and humanity, as well as technology.

Although the formal planning process didn’t begin officially until fall 2001, I think it’s fair to say that the mindset required for the Accreditation Site Visit began on the day that Dean Alfano took office, in September 1998. Soon after, he brought together the faculty, students, and staff to develop new mission, vision, and values statements describing who we are, what we do, and what we prize. These newly formulated concepts, in turn, inspired the development of a five-year strategic plan for the College and created the context in which the accreditation planning process could take root.

When I came aboard in January 2000, I initiated an informal assessment of where the College stood with respect to the CODA standards for each of the programs to be evaluated by the site visitors. Based on that assessment, the College developed goals and measurable objectives for the DDS program, the postdoctoral programs that were up for accreditation, and the dental hygiene program. Like the DDS program, the postgraduate and dental hygiene programs totally revised their curricula and came up with competency and proficiency expectations and new 14 group practices, and new, measurable standards of care being implemented so that the College can ascertain progress in patient treatment outcomes. The new curriculum was approved by the faculty, introduced in the 2001-2002 academic year, and put in place over a three-year period.

All of this activity was taking place in the context of overall institutional change that Dean Alfano had initiated early in his tenure, beginning with the naming of NYUCD’s first Quality Assurance Officer and the establishment of an Office of Quality Assurance to ensure that accountability became the watchword for everyone who worked and studied at NYUCD. Also, a new emphasis was placed on attracting the best and the brightest students to all programs.

Simultaneously, NYUCD began an aggressive recruiting campaign. We recruited close to 50 full-time equivalent (FTE) faculty, approximately half of whom are full-time faculty and include many nationally and internationally known scholars.
Together with our outstanding existing faculty, the new recruits have made extraordinary contributions to enhancing the quality of our education program. The College also recruited an associate dean for research, under whose leadership NYUCD has soared to a level of competitiveness that is expected this year to place us among the top 10 dental schools receiving federal research funding.

With respect to infrastructure, since the previous accreditation cycle, which was in 1996, the College had invested close to $30 million in construction and renovation of facilities and has plans to raise and expend $65 million more by 2010. The results speak for themselves: a new clinical simulation and laboratory technology center, the Bluestone Center for Clinical Research, the Rosenthal Institute for Aesthetic Dentistry, and an expanded library technology center and student study center, with more facilities to come.

In September 2001, the Dean charged three steering committees — one for the dental education program, one for the advanced education programs, and one for the dental hygiene program — with initiating the College’s formal self-study of each of these programs in preparation for the November 2003 site visit. Each of these committees organized working committees consisting of well over 100 faculty and students to assess the status of the College with respect to its ability to meet or exceed the CODA standards in the context of our own internal mission, vision, and values. The committees were also charged with looking at the effectiveness of the College in meeting its goals and objectives for students, patient care, faculty, and research, and, if they found deficiencies, with submitting recommendations for an action plan to correct them. In short, not only the College’s curriculum, but everything came under the microscope.

Approximately four months into their tasks, the steering committees delivered their first report, which did identify some deficiencies and included proposals to put appropriate infrastructure in place to correct them wherever they were found. By November 2002, the third draft of the self-study was circulated among faculty, students, staff, and alumni representatives, and two outside consultants were invited to review the self-study and to meet with students, faculty, and staff; in effect, to conduct a “mock” site visit. We collected all suggestions and used them to make additional changes to our programs and to the self-study report.

In May, 2003, Dean Alfano hosted a full-day retreat at the College to ensure that the NYUCD community would be fully acquainted with the submitted self-study report. By summer 2003, the self study was completed and the internal recommendations that we had given ourselves had been implemented. In August we sent the self-study to the 21 consultants and staff who were scheduled to visit NYUCD from November 4 - 6, 2003.

When this process began, we made the determination that we would take an honest look at ourselves from every angle of our education, patient care, and research enterprise so that we would not only be assured of meeting the standards set by CODA, but also our own goals and objectives,

NYUCD RECEIVED ZERO RECOMMENDATIONS FOR IMPROVEMENTS IN ANY OF OUR PROGRAMS AND 27 RECOMMENDATIONS RECOGNIZING THE QUALITY OF OUR CLINICAL CARE AND BASIC SCIENCE PROGRAMS, RESEARCH ENTERPRISE, AND THE COLLEGIATE AND COOPERATIVE MANNER IN WHICH STUDENTS, FACULTY, AND STAFF INTERACT.
which far exceeded those of CODA. By the time we submitted the self-study report, we felt very confident that we had achieved our aim.

Basically, there are four “grades” that the CODA visitors can assign: (1) a recommendation, which means that the institution has not met the standard or substandard; (2) a suggestion, which means that the standard has been met, but that there is room for improvement; (3) an acknowledgement that the standards have been met; and (4) the highest “grade,” a commendation reflecting that the standards have been far exceeded.

NYUCD received zero recommendations for improvements in any of our programs and 27 commendations recognizing the quality of our clinical care and basic science programs, research enterprise, and the collegial and cooperative manner in which students, faculty, and staff interact. The site visitors were enormously impressed by the progress that NYUCD had made since the previous accreditation site visit in 1996. To understand the extent of that progress, consider that, in 1996, NYUCD had received 43 recommendations; a true sea change!

Other site visit report commendations praised NYUCD’s effective leadership role within the University-at-large, its dynamic strategic plan and leadership team, its commitment to the development of its entire community, and its comprehensive and well-coordinated biomedical sciences curriculum, among many others.

Wonderful as it was to achieve a flawless accreditation report, all of us at NYUCD recognize that it was a milestone, not an end product. We view ourselves moving forward along a continuum marked by equally challenging and exciting new goals and objectives. These will include placing a greater emphasis on practice management and on implants in our DDS program; further expanding our research programs; continuing to grow our continuing dental education and faculty-staff development programs; deepening our service commitment and outreach to local, national, and international communities; and partnering with other institutions both in the U.S. and overseas. NYUCD will also continue to leverage its location in the media capital of the world in support of such programs as oral cancer awareness and detection, the links between systemic and oral health, and access to care, utilizing novel and creative healthcare delivery systems. We are on a quest to transform not only our College, but, indeed, the profession, in order to meet the societal challenges facing us in the 21st century. I believe that most people would agree that we’re off to a great start.
Santa Fe Group Salon

Special Report

The Necessity for Major Reform in Dental Education

Impending Crisis in Oral Health Care Prompts Look at Dental Education

In late August, a group of about 60 leaders in dentistry, other healthcare professions, public policy, and the corporate sector met in San Francisco for two days under the auspices of the Santa Fe Group to focus on an impending crisis in oral healthcare education in the United States and to plan strategies that will enable major change and reform to avert the crisis. The salon was designed as an important first step in the journey toward a broad-based national effort to overhaul American dental education.

The rationale for the salon was twofold: 1) Changing societal needs resulting from such factors as immigration, aging and associated chronic diseases have increased disparities in health and in access to care, creating a need for a new type of dentist. Consequently, dental schools must change to reflect these new realities; and 2) Meeting the challenges facing dental education and embracing the astonishing advances in genomics, proteomics, pharmacotherapy, and systems biology will require not simply a change in curriculum, but a reform of the entire dental education process, including changes in prerequisites, admissions, credentialing, and quality assurance.

Calling the salon the beginning of a “revolution from within,” Santa Fe Group President Dr. Larry Meskin explained that “the Santa Fe Group’s objective is to act as a catalyst to influence change by providing a forum in which healthcare professionals, policy leaders, and decision makers from multidisciplinary backgrounds can come together in a neutral environment to share opinions freely, without concern about institutional loyalties and constraints.”

Highlights of the salon proceedings follow.
**Why Reform Dental Education?**

A white paper, “Reforming Dental Health Professions Education,” coauthored by Dr. Dominick P. DePaola, President and CEO of The Forsyth Institute, and Dr. Harold Slavkin, Dean of the University of Southern California School of Dentistry, framed the issues for discussion.

Drs. DePaola and Slavkin noted that because contemporary dental education remains rooted in training models developed nearly a century ago, dental schools are not providing the kind of education modern practitioners need to function competently in today’s biologically, pharmacologically, and technologically driven healthcare environment. The result is a dental delivery system that cannot keep pace with nor be responsive to shifting population demographics, changing patient expectations, evolving interdisciplinary practice requirements, emerging technologies, and demands for quality improvement.

“The fact that 80 percent of dental disease occurs in 20 percent of the population, that 110 million Americans lack dental insurance, and that there is a growing shortage of dentists to treat certain populations, especially children, obligates us to move quickly toward reform,” said Dr. Slavkin, as he urged participants to begin implementing change strategies in their home institutions and organizations. To guide the implementation process, Drs. DePaola and Slavkin presented a series of critical assumptions, shown in the box at the end of this article.

**Potential Dental Education Models**

Participants reviewed five models for dental education from which improvements might be derived, and many other equally intriguing approaches were discussed at the salon. A summary of the formal models follows.

Dr. Jack Dillenberg, Dean of the Arizona School of Dentistry and Oral Health, presenting “Community-based Education: A View From the Trenches,” concluded that dentistry must get students more engaged in communities where they are needed, and that students need to become more representative of the populations they serve.

“The Pipeline Project and Social Engagement,” by Dr. Allan Formicoia, former Dean of the Columbia University School of Dental and Oral Surgery, documented ongoing efforts to engage dental education in promoting social needs by increasing the time that senior students and residents spend providing care to underserved patients in patient-centered community clinics and practices; revising the dental school curriculum to support community-based education programs; and increasing recruitment and retention of underrepresented minority and low-income students.

“Technology and Distributed Education,” by Mr. James F. Galbally, Principal, The Presidential Practice, King of Prussia, PA, focused on the high potential of a more technology-based curriculum, which can be widely distributed via electronic methods, but noted that content must determine the extent to which technology is used.

Dr. Howard Landesman, Dean of the University of Colorado School of Dentistry, presented “Corporate Partnerships,” which addressed the importance of seeking more creative relationships with corporate America in order to improve the education of dental students in new and innovative ways; create an enhanced standard of excellence
for graduates; and develop a more diverse healthcare workforce.

“Medical-Dental Models in Dental Education,” by Dr. David A. Nash, William R. Willard Professor of Dental Education and Professor of Pediatric Dentistry and Bioethics at the University of Kentucky Medical Center, focused on the importance of integration with medicine, nursing, and other health professions education models, either completely, or in hybrid versions.

A common theme running through the papers was that the current dental education system is not serving all of the public, and that the single most important factor responsible is the “silo” approach that has traditionally been the hallmark of the dental education curriculum. By opting for an isolated, insular approach to training future dentists, rather than for integration of dentistry within a comprehensive, interdisciplinary healthcare education and training system, dental schools have created a gap between new scientific and technological advances and incorporation of these advances into dental education and clinical practice.

Other factors cited for this gap were an insufficiently diverse workforce, lack of evidence-based learning and critical thinking/problem solving in the curriculum, lack of a focus on the whole patient/overall health and on integration with and utilization of the larger health professions workforce, a continuing emphasis on surgical/technical skills, and the failure of many continuing education programs in dental schools to become centers of excellence.

Participants noted the need to integrate a number of major topics into the curriculum, including medical approaches, risk assessment/management training, biopsychosocial models and behavior/communication skills, and interdisciplinary care and team approaches, as well as to close gaps in the curriculum, with specific regard to the needs of children, the elderly, and special populations. Moreover, there was consensus on the point that while no one model will work for all dental schools, the outcomes should be similar.

Consensus also emerged that the status quo is no longer desirable or
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acceptable; that closer integration with medical education and training is essential; that collaboration among the health professions is more important than ever; that dentists should be leaders in the healthcare community; that thought leaders in dentistry need to be developed, and that a mechanism is required to make the credentialing process, especially national and regional board examinations, more relevant to the modern practice of dentistry, to scientific and technological advances, and to societal needs and expectations.

The Mission of Dental Education

Looking to the future, participants articulated their vision of an “ideal” oral health education system:

The mission of the oral health education system of the United States is to serve society by educating and training a diverse workforce capable of meeting the nation’s need for oral health care. Members of this workforce should variously be engaged in clinical oral health care, public health practice, biomedical and health services research, education, and administration. Oral health professionals should also contribute to the fields of ethics, law, public policy, government, business, and journalism. The education system will meet its unique responsibilities to educate and train highly competent clinical practitioners by ensuring that they acquire, and sustain throughout their careers, the knowledge, skills, attitudes, and values needed for practice within interdisciplinary healthcare teams. These skilled healthcare providers must have the ability to provide complex, integrative, high-quality care for patients, families, and communities. To do less is an abrogation of the professional covenant extended to dentistry by society.

Recommendations by Participants

The salon concluded with the following recommendations for both short- and long-term strategic actions:

Short-term Actions:
• A pediatric oral health “summit” should be convened to address the shortage of pediatric dental faculty and to develop new models for pediatric oral healthcare delivery, including assessment of the benefits of utilizing oral healthcare providers in medical practices.
• Use more technology in dental education to achieve greater efficiencies.
• Reclaim continuing dental education to enable dental schools to enhance revenue and improve quality.
• Expand best business practices including quality assurance standards within the dental education environment; and continue to look for ways to collaborate with business that leverage both the economic and knowledge capital of business without compromising the integrity of the educational process.
• Develop a fund to support ongoing innovation in dental education; for example, the creation of a uniformly implemented risk assessment model for pediatric oral health.
• Create incentives for regional sharing and consolidation of student, faculty, and curricular resources to make dental education more efficient.

Long-term Strategic Actions:
• The provider pool must be expanded through the creation of links between dentistry and other health professions, especially with regard to pediatric oral health.
• Continue to explore other models of dental education including integration or hybrid models with medicine, nursing and other health professions.
• Establish selected, evidence-based, multidisciplinary centers to train translational-research faculty, who will become role models for interfacing between patients and student-clinicians, thereby helping to improve the speed with which science is translated into practice.
• Carefully evaluate the benefits and risks of the extreme timelines for dental education including the three calendar year program used effectively at the Arthur A. Dugoni School of Dentistry at the University of the Pacific, and the new approach in New York State that requires a mandatory PGY1 year as a requirement for licensure and replacement for clinical board examination.
• Redefine credentialing of dental professionals: by building national board examinations which are more relevant to the skill set required to practice dentistry at graduation and in the future; by continuing development of a Part III National Board focused on clinical skills; by evaluating alternate modes of
DR. DEPAOLA’S AND DR. SLAVKIN’S ASSUMPTIONS FOR IMPLEMENTING CHANGE STRATEGIES

Assumption 1: Reform of oral health professional education is critical to enhancing the quality of health and well-being for all people in the U.S.

Assumption 2: Academic environments of most health professions education (dentistry, medicine, pharmacy, nursing, allied health sciences) all too often are not interdisciplinary, whereas healthcare clinical practice and clinical research often require explicit interdisciplinary efforts.

Assumption 3: There is no one model or template for dental education that will suffice for all dental schools.

Assumption 4: There must be a unifying vision of what dental education “could be” and what a 21st century practitioner “could be.”

Assumption 5: Adequate resources must be allocated to realize the vision of dental education.

Assumption 6: A common language and core competencies across health professions have not yet been achieved.

Assumption 7: The competencies for dental school graduates and practitioners for the 21st century must be well defined and renewed throughout a lifetime of professional activities.

Assumption 8: Evidence-based core competencies should be established across all health professions and integrated with clinical care services.

Assumption 9: Dental education must enable individuals to learn, re-invent, and to attain contemporary competencies over a lifetime.

Assumption 10: The collaborative role of allied health professionals (dental assistants, dental hygienists, dental technologists) must be expanded significantly, holding open the possibility of developing pediatric oral health therapists, among other new “reconfigurations” of providers.

Assumption 11: Integrative biomedical, population, behavioral, social, and economic sciences must be incorporated into the curriculum at every level.

Assumption 12: There must be regular assessment of curricula and pedagogical outcomes and continual documentation of clinical skills.

Assumption 13: Scientific discovery, coupled with translating science and technology into clinical practice, must be a core value of dental education.

Assumption 14: Critical thinking, problem solving, information management, leadership and teamwork, and lifelong learning must be integral to all dental education models.

Assumption 15: Humanism, professionalism, and communication skills must underpin the education process.

Assumption 16: Innovation, creativity, and the nurturing of ideas must permeate dental education and clinical practice.

Assumption 17: “It will take a village” to reform dental education, including individual faculty members, organized dentistry, industry leaders, funding agencies, insurers, patient advocates, the media, public health advocates and practitioners, regulators, leaders from research, education, and government, state and national licensing boards, accreditation agencies, and the public.

Assumption 18: This conference cannot be the end; it must be a beginning. We must articulate concrete steps and “walk the talk”; we must begin and sustain the journey.

Qualifying dentists including PGY1; and by building a system to ensure that there is continuing competence in dental professionals throughout their professional careers.

- Make the faculty member, not the student, responsible for clinical care.
- A new level of practitioner should be created, one who can expand access to care, especially pediatric dental care.
- Accreditation standards should include diversity in order to help solve the national oral health disparity gap.
- Internal dental school changes should be developed in recognition of community needs and in collaboration with other healthcare professions.

For more information and periodic updates, visit the Santa Fe Group web site at www.santafegroup.org.
Nearly eight decades after the publication of the Gies Report in 1926, dental education is in danger of becoming irrelevant. Despite amazing advances in science and technology, the dental school curriculum continues to reflect the premises of the Gies Report and therefore the thinking of the last century. I submit to you that if dental education and dentistry are to thrive in the 21st century, we must begin now to rethink the entire dental education process: prerequisites, curriculum, program size, national and regional boards, costs, and continued competency.

The Danger of Preserving the Status Quo

Nearly a decade ago, the Institute of Medicine report, Dental Education at the Crossroads, raised the alarm when it stated that:

The problem in reforming dental education is not so much achieving consensus on directions for change but difficulty in overcoming obstacles to change. Agreement on educational problems is widespread. The curriculum is crowded with redundant or marginally useful material and gives students too little time to consolidate concepts and to develop critical thinking skills. Comprehensive care is more an ideal than a reality in clinical education, and instruction still focuses too heavily on procedures rather than on patient care. Linkages between dentistry and medicine are insufficient to prepare students for a growing volume of patients with more medically complex problems and an increase in medically-oriented strategies for prevention, diagnosis, and treatment.

In 2002, the ADA’s Future of Dentistry Report expressed similar concerns. That report pointed out that “expansion of oral and craniofacial science, changes in disease patterns, advances in dental materials, coupled with technological advances, are competing with the traditional elements of dental education for curriculum time.”

The problem was further crystallized in the Surgeon General’s Report on Oral Health, published in 2000. Calling oral diseases a “silent epidemic,” the Report documented that oral and systemic problems are often associated and that oral
diseases and disorders can compromise health and well being over a lifetime. But the Report also concluded that solutions to these problems are hindered by issues involving oral health disparities, the relative inability of the public to benefit from scientific advances, the tenacity of barriers to care for growing segments of the population, and the erosion of the dental workforce by aging and retirements.

**The Biggest Challenge for Dental Education Today**

Dental schools are in a position to attack these problems, but the current dental education system is threatened by escalating educational costs, mounting student indebtedness, and myriad other problems.

The biggest challenge of all, however, is to keep the curriculum relevant; otherwise, we’re cheating our students. Since 1926, we have continued to teach the traditional basic sciences in lock-step sequence with or without integration depending on the school. As a result, the amount of hours students should be getting in other areas is inadequate. Future discoveries in disease prevention, diagnosis, and treatment are almost certain to come from the sciences of genomics, proteomics, microbial genetics, biometrics, and pharmacogenomics. But we do not teach enough pharmacology, nor have we expanded...
Hedge Our Bet or Trim Our Hedge \textit{continued}

\textbf{IS IT ANY WONDER THAT WHEN STUDENTS ARE ASKED THEIR VIEW
OF THE DENTAL CURRICULUM, THIS IS WHAT THEY DESCRIBE?}

the time we allocate in the curriculum for oral medicine, implant dentistry, and aesthetics. In short, we have not been very effective in matching hours of instruction with an optimized curriculum which meets patient expectations and modern quality standards.

We know that not all the topics we teach are absolutely relevant to the development of quality dental practitioners; but we have been reluctant to take things out of the curriculum in order to make room to allot more hours for newer educational needs. The reason is simple: entrenched interests resist change. Some faculty are comfortable teaching what they have always taught. Also, the National Boards, which are very fair in design, do not reflect the science that is most relevant for practice. Even though there is an active mechanism to update the “boards,” I submit that it is not effective. So we add huge amounts of new materials in some areas, while shortchanging our students in other areas. The result is a baggy monster, a bloated dental curriculum that does not
reflect the potential of a dynamically evolving healthcare environment.

To dimensionalize the problem, I recently jotted down the following list of additions to the curriculum over the past 30-plus years since I graduated from dental school. Within the same period, only four topics have been deleted.

A review of the subjects we teach, how we teach, and how we test, is long overdue.

<table>
<thead>
<tr>
<th>Additions to the dental curriculum:</th>
<th>Deletions from the curriculum:</th>
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<tr>
<td>composites (anterior and posterior)</td>
<td>gold foils</td>
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<td>cadcam</td>
<td>denture processing</td>
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<td>glass ionomers</td>
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<td>implants</td>
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<td>Diagnodent®</td>
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*Imagine this. Since I graduated in 1971, almost one new immunologically active molecule has been discovered every month!

The Choice Before Us: Hedge Our Bet or Trim Our Hedge

In May 2004, New York State passed a bill known as “PGY1,” which, beginning in 2007, requires all New York State dental school graduates to complete a clinically based ADA Commission on Dental Accreditation (CODA)-approved post-doctoral general practice or specialty dental residency program of at least one year as a prerequisite for initial licensure in New York State. This new legislation eliminates the clinical exam as a requirement for licensure in New York.

There was great bipartisan support for this legislation, whose stated goal is to elevate the level of training of the profession so that it more closely follows the medical model for licensure. But implicit within this reasoning, I believe, is an acknowledgement that dental educators find it difficult to teach students all they need to know to become competent dental graduates within the four-year dental curriculum as it is presently structured. This thought occurred to me during a discussion with a longtime NYUCD faculty member. “Mike,” he said, “why are you supporting all this PGY1 stuff? Can’t the darn dental schools get it done in four years now? What are you doing, hedging your bet?”

Yes, I thought, we have placed ourselves in a position where we are forced to do that. I would argue that PGY1 can be much more than a hedge; it can be a year of vital service and learning. It can be a period that enables new graduates to transition from competency to proficiency; to
develop deeper experience treating patients with special needs or the medically compromised; to interact with an expanded set of faculty, mentors, and other health professionals; to learn new approaches to treatment; to investigate practice and education opportunities; and to provide increased access to the underserved.

But PGY1 shouldn’t allow us to balance our system failure and access problem on the backs of new, debt-laden graduates. We must bring the curriculum into balance by shrinking some areas of the curriculum and expanding others. The emphasis should be shifted to knowledge and skills that will likely be relevant to new practitioners with projected careers of 40 years. One way to do that would be to transfer some of the first-year dental school requirements to the baccalaureate level. This may mean not only that sciences like biochemistry are reduced in curriculum time in order to add more pharmacology and genomics, but also that certain clinical sciences, such as full denture technique, could be reduced to allow more time for newer techniques like implant dentistry to be taught.

Although there will be a need for full dentures for the foreseeable future, except in certain areas of the country, full denture construction will likely become so rare that the dentures required by the public could be handled by specialists. We have to be strong enough to say, “We’re not dumbing down. We’re doing what is necessary to keep the curriculum relevant.”

Look at what is happening today. We are graduating dentists who are so overwhelmed by advances in pharmacology, and so intimidated by their insufficient preparation in that area, that they are afraid to write prescriptions. To seize the advances that are occurring every day in pharmacology, clinicians will certainly need to write prescriptions, inject biologicals into their patients, AND understand the plethora of drugs that patients may be taking. But the prospects for dentists to perform these services under the present training system are worrisome. We must do a better job in using our prescription-writing skills to maximize our effectiveness as a profession. If we do not, it is possible that physicians will apply some of these advances in oral disease management. To the extent that such physician involvement helps patients, society is served; but the dental profession may be marginalized in the process. As the great former editor of JADA, Larry Meskin, once said in an editorial on a related topic, “Use it or lose it!”

Other areas in the curriculum also reflect failures to match value to cost. For example, when prosthodontics and periodontics specialty programs went from two years to three years in length several years ago, it seemed like a good idea at the time. Certainly the extra year could be used to enhance the educational experience. However, dental graduates determined that it was not worth three years of their life to specialize in these areas and applications to these two programs plummeted. It is past time to add the same kind of price/value assessments to higher education that the corporate world uses.

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**Recent Educational Innovations at NYUCD**

2000:
- **NYUCD makes the decision to scrap its old curriculum.** Work begins on an entirely new curriculum emphasizing health promotion through prevention. The old curriculum consisted of 5,000 hours. Despite adding many new elements and expanding selected areas, the new curriculum consists of 4,500 hours – a 10 percent reduction in time. Highlights of the new curriculum follow.

2000:
- **NYUCD introduces the first completely digitized dental school curriculum.**

2001:
- **A state-of-the-art clinical simulation and laboratory technology center opens.**
- **Predoctoral implant education is expanded.**
- **Digital radiography techniques are introduced into the curriculum.**
New Vistas

There are some encouraging developments on the horizon. The ADEA is beginning to be interested in rethinking the entire dental education enterprise and the ADA also appears receptive to working with dental educators to do something about our overgrown “hedge.” Also, we have the benefit of lessons learned about mismatched price/value relationships. Most exciting of all are technological efficiencies that dental education is only now beginning to embrace. For example, in teaching anatomy, these include videos, 3D modeling, and plastination (see article on p.22), versus traditional methods of dissection that have been mostly unchanged for more than 300 years.

We can continue to “hedge our bet” by playing catch up with the present, tweaking the curriculum, while knowing that we’ll never really get the problem under control. Or we can take the kind of drastic action required to organize a dental education enterprise designed to stay ahead of changing times. At NYUCD and elsewhere (see p. 10, “Santa Fe Group Salon Special Report”), we are working hard to “trim our hedge.”

2002:
A four-year continuing education course on “Assessing the Professional Literature” is added to the predoctoral curriculum.

2003:
The Invisalign® technique is introduced.
NYUCD broadcasts its first international, interactive dental videoconference.
NYUCD becomes the first U.S. dental school to mandate bioterrorism preparedness training for predoctoral students.
An elective in teaching skills gives third-year students the opportunity to teach lab procedures to freshmen.

2004:
NYUCD partners with The Levin Group to design clinical practice management training programs.
Plastination is introduced into anatomy education.
Ergonomic training is mandated for all DDS students.
Diagnodent® technology is introduced.
In 1977, Dr. Gunther von Hagens, a physician and member of the faculty at the Anatomical Institute of Heidelberg University, discovered that by replacing water and lipids in biological tissues with reactive polymers, he could produce and preserve amazingly durable anatomical specimens while eliminating toxic chemicals. He called this process “plastination,” a new technology that produces dry, odorless, perfect specimens that can last virtually indefinitely. “I found it incredible,” says Professor von Hagens, “that before that we were able to go to the moon, but we were not able to preserve bodies properly.”

Dr. von Hagens’ first thought was that plastination had the potential to revolutionize how anatomy is taught and learned. Because his approach to teaching dental anatomy combines layered dissection with slices from the human body that has been plastinated allows Dr. von Hagens to show horizontal slices through the chest at the level of the shoulder.
head and neck, students using these pre-dissected, plastinated specimens can avoid the time-consuming process of peeling back tissue layer by layer and dissecting it into sections to learn where all the important structures are. In fact, the reverse happens. Because students are able to work from the inside out, rather than from the outside in, they can view every structure simultaneously in three dimensions: from top to bottom, from front to back, and from left to right.

But since German universities mandate that all medical and dental students dissect human cadavers as a formal part of their studies, Dr. von Hagens offered the process, which he had patented, to schools outside of Germany. Very quickly he found that his colleagues in Japan and elsewhere were eager to learn how to plastinate.

Today plastination is used at more than 40 medical and dental schools throughout the world as an adjunct to anatomical dissection.

But still more dramatic change is coming. Dr. von Hagens has joined the NYU College of Dentistry as a visiting professor to help design the first non-dissection anatomy curriculum in the U.S. to use plastinated specimens exclusively as an educational model. According to Dr. Louis Terracio, Associate Dean for Research and a trained anatomist, “We expect that when fully implemented, this new approach will transform the way anatomy is taught to dental students. By eliminating the time students spend creating specimens, we can maximize the time they have to learn and assimilate anatomy. In an extremely overcrowded dental curriculum, the advantages of this innovation cannot be overstated. Moreover, because the specimens are permanently preserved and easily available, students are more likely to continue to study anatomy once they get to the clinics and see the relevance of anatomical study to patient care.”
Democratizing Anatomy

Dr. von Hagens discovered that another advantage of plastination is its ability to solidify soft tissue so that specimens can be stabilized and posed in a variety of realistic, attractive, life-like poses. That discovery led to the realization that plastination could not only make anatomy education more efficient and effective for physicians and dentists, but, as he puts it, it could also “democratize” human anatomy by making it accessible to the general public, rather than only to physicians and dentists.

In addition to helping the public to become better educated about their bodies — how and where a disease occurs and how it might be prevented, as well as where things happen during surgery — Dr. von Hagens also wanted to give potential donors a new way to determine their post-mortem existence for themselves — to keep their humanity after death, so to speak. Equally important, he wanted to challenge long-held taboos on death and dealing with dead bodies. He was convinced that, given an opportunity to view the never-before-seen inner realms of the human body, most people would react not with revulsion, but with awe, heightened respect, and pride in the physical facts and functions of their bodies.

The result is a collection of plastinated human bodies, called “Body Worlds,” or “Körperwelton” in German, that appear to combine the stark realities of an anatomy lesson with the stylized construction of an art exhibit.

“When viewing the exhibits,” says Dr. von Hagens, “we become aware of the naturalness of our bodies and recognize the individuality and anatomical beauty inside. Plastination allows viewers to study the entirety of the body, and to understand themselves as a wonderful part of nature. The body is not wet or in fluid anymore. It is colorful, not smelly. With this approach, I can change the way people see themselves.”

“Body Worlds” was first shown in Germany at the Museum for Technology and Labor in Mannheim during the winter of 1977-1978. The exhibition included plastinates of real human bodies posed as if playing basketball, swimming, pole-vaulting, fencing, and even a chess player (also known as The Thinker) staring down at the board with his brain exposed.

Within a four-month period, nearly 800,000 people visited “Body Worlds” — often as many as 4,000 viewers a day — underscoring Dr. von
Hagens’ contention that there was a vacuum of knowledge waiting to be filled. But while 77 percent of visitors acclaimed the exhibition, saying it evoked “a deep reverence for the human body,” others objected, arguing that the display of whole-body plastinates violates the dignity of the deceased.

“On the contrary,” says Dr. von Hagens. “Plastination offers a kind of “secularized burial; a consolation, in that it changes the face of death.”

To date, “Body Worlds” has been seen by nearly 15 million people around the world. At each exhibition site, Dr. von Hagens hosts a body-donors meeting to give people the opportunity to sign up to be plastinates when they die, as he has done.

Approximately 6,000 people have already signed up to donate their bodies to the plastination project, fully aware of how their bodies might be used. In July 2004, “Body Worlds” traveled for the first time to the United States, to the California Science Center in Los Angeles, where it will remain until January 23, 2005.

Global Health Nexus recently had an opportunity to ask Dr. von Hagens about his work and its relevance to both academia and the public. His responses appear below.

Questions for Gunther von Hagens

Global Health Nexus (GHN): More than a quarter of a century after you introduced plastination, most medical and dental schools still insist on using dissection as an educational model. Why do you think that is?

Dr. von Hagens: First of all, change of any kind is often resisted. In anatomy, the teaching power of serial body slices in all three planes in combination with high-quality, dissected plastinates is not easily imagined by teachers who have no experience using them. Moreover, since head and extremity slices sometimes show structures that are difficult to identify, this could make the teacher uncomfortable. Also, plastinates of high quality are not easily available commercially.

GHN: Beyond the educational efficiencies that plastinates can create, are there other benefits to dental students learning anatomy using plastinated cadavers exclusively?

Dr. von Hagens: During dissection courses, many
students are holding a scalpel in their hands for the first time. In the few hours available for dissection, a “massacred” specimen is too often the result. Bloated, discolored, and surrounded by the caustic odor of formaldehyde, wet cadavers for these students are an unpleasant but necessary evil. This can have a critical psychological impact that influences their approach to patients later. Lifelike, dry, and odorless plastinates change this story. Students react like visitors to “Body Worlds” and develop anatomical pride, admiration, and are reconciled to reality, rather than repulsed. This is proven by the comments of many students who become donors for plastination, whereas body donation for conventional anatomy by medical and dental students is virtually unknown.

**GHN:** What are your expectations for your affiliation with the NYU College of Dentistry?

**Dr. von Hagens:** Working with a team of dedicated faculty at NYUCD, I look forward to introducing plastinates as the primary teaching aid for dental students, and ultimately to developing an accepted standard for plastinated teaching specimens.

**GHN:** In 2002, you conducted the first public autopsy in Britain in 170 years. Your argument was that public autopsy was important in order to educate people about their bodies and about death. Why was the actual autopsy process necessary since you already had whole-body plastinates available as educational models?
Dr. von Hagens: The aim of public autopsies is to show the taxpayer and the potential subjects of autopsies this important medical procedure first-hand. If members of the public are to agree to autopsies of their loved ones, they must have the right to witness the procedure. The audience should be able to grasp the process from the first incision to the removal and examination of organs, formulation of a cause of death based on available evidence, sampling of tissues for microscopic examination, replacement of the organs, and reconstruction of the body.

GHN: Now that the exhibition has traveled to so many cities throughout the world, do you feel that the controversy initially surrounding it will fade?

Dr. von Hagens: In Germany, it took 40 years for the controversy concerning nudity in public art forms to fade. Today it is normal for a model or actor to undress if a particular aesthetic effect requires it. I am confident that one day, when permanent plastination museums are established in many cities, people will find it unbelievable that plastinates were not universally accepted initially.

GHN: Is there a difference in the reception shown to “Body Worlds” overseas and in the U.S.?

Dr. von Hagens: The reaction to “Body Worlds” differs from country to country. In Asia, a non-European country, it was never controversial as it was in Switzerland, Austria, Britain, and Germany, probably because of the historical memory in those countries of dissection as the ultimate death penalty, rather than as a route to knowledge. In the U.S., the exhibition has been especially positively received. I attribute this to the fact that for Americans freedom to access any form of knowledge is considered a fundamental right. Moreover, Americans are health conscious, curious, and not overly superstitious.

GHN: Do you have plans to bring “Body Worlds” to New York?

Dr. von Hagens: Hopefully in 2005, but a lot depends on finding a suitable venue in time.

I AM CONFIDENT THAT ONE DAY, WHEN PERMANENT PLASTINATION MUSEUMS ARE ESTABLISHED IN MANY CITIES, PEOPLE WILL FIND IT UNBELIEVABLE THAT PLASTINATES WERE NOT UNIVERSALLY ACCEPTED INITIALLY.
The workshop is funded by all the major implant companies, plus the American Academy of Prosthodontics, the American Academy of Periodontology, the International Congress of Oral Implantologists, and the American Association of Oral and Maxillofacial Surgeons, and will be attended by the dean, the associate dean, and a representative of the departments of periodontics, prosthodontics, and oral surgery from every dental school in the U.S. The premise is that widespread adoption of an implant overdenture by dental schools will help to generate momentum for a national consumer-driven campaign to secure insurance reimbursement for this treatment approach. The campaign is expected to follow the model pioneered by NYUCD in its highly successful “Ask Your Dentist” campaign to raise consumer awareness of the importance of oral cancer prevention and early detection.

The impetus for a national campaign arose following a televised news report in 2003, in which WNBC TV healthcare reporter Dr. Max Gomez interviewed Dr. Dennis P. Tarnow, Professor and Chairman of the Ashman Department of Implant Dentistry, and spoke to NYU Dental Clinic patients who described their retention problems with conventional dentures, making them, in effect, “dental cripples.”

As millions of viewers watched, Dr. Tarnow explained that even well-fitting dentures cause the jawbone to be resorbed, leading to loosening. As a result, the maximum efficiency patients have is about 25 percent of the biting power that their natural teeth had. But a growing body of evidence now
suggests that an overdenture attached with just two implants can significantly improve bone retention in a patient’s jaw for life. And NYUCD’s experience confirms that when a pair of titanium screws are carefully driven into the mandible, in a few months they will serve as anchors for a full lower denture, which can simply be snapped into place. Moreover, what used to be a major procedure can now be done in the dentist’s office under local anesthesia.

The tide began to change approximately two years ago, when leading oral health researchers meeting at McGill University issued a consensus statement recommending that two-implant mandibular dentures should replace conventional dentures as the first choice for edentulous care.

NYUCD has incorporated this standard of care into its predoctoral curriculum and beginning in fall 2005, every third-year student will be required to assess an edentulous patient for possible implant overdenture treatment. NYUCD has also created a model for successfully partnering with implant manufacturers to make the treatment affordable by clinic patients.

Dr. Tarnow recalls being taken aback by the overwhelming response to the Dr. Max Gomez broadcast. “Although many of the callers were retirees or working people with fixed incomes, they said they were willing to invest a modest sum in a treatment that would significantly improve their health for years to come.”

Adds Dr. Tarnow: “Since there is now overwhelming evidence that a two-implant overdenture should become the first choice of treatment for the edentulous mandible, we are determined to make the benefits associated with this treatment accessible to as many people as possible.”
NYUCD has entered into a collaborative agreement with Levin Group, Inc., the leading practice management consulting firm in the U.S., to identify and implement a more comprehensive approach to practice management in dental education. Levin Group will provide NYU faculty, students, and alumni with the necessary business skills to establish and run a successful, profitable private practice.

According to Dean Alfano, “Like every dental college, NYU wants its alumni to continue to be successful. Success in dentistry is a combination of high ethical standards, diagnostic acumen, clinical prowess, and business skills, culminating in high-quality care for patients and great fulfillment for dentists. Notably, when new dental graduates across the nation are asked what additional training they wish they had received in dental school, their number-one answer is business training.

“If a dentist is struggling to make ends meet, he or she will have less opportunity to take continuing education courses, may not be able to support an adequate staff, and may feel increased pressure, all of which will have an unfavorable impact both on patient care and on the dentist’s personal life. The NYU/Levin Group collaboration provides a unique opportunity to merge NYU’s excellent clinical training with a proven practice management method aimed at effectively optimizing practice performance and ensuring professional success.”

NYUCD is collaborating with the Levin Group in the following areas:

• Developing practice management curricula for pre-doctoral and postdoctoral programs that incorporate the techniques developed by the Levin Group;
• Developing a customized, comprehensive training program for the entire NYUCD faculty. This program will cover key aspects of practice management;
• Assessing and providing “best-model” solutions to optimizing all aspects of the NYU Dental Clinics operations, including scheduling, treatment delivery efficiencies, patient management, financial performance, case presentation, and team effectiveness;
• Delivering an exclusive series of continuing education programs taught by Levin Group founder Dr. Roger P. Levin, focused on general practice and specialty practice management and marketing; and
• Periodic articles by Dr. Levin in Global Health Nexus.
As the principal investigator on a mobile medicine technology grant awarded by leading PDA manufacturer Palm, Inc., Dr. Elise Eisenberg, Director of Dental Informatics, has learned a lot about the usefulness of PDAs in dental education. So much so, in fact, that she was selected as one of 35 volunteers to develop a new series of Palm-Powered “Expert Guides” covering a range of professions, including dentistry, engineering, law, medicine, and psychology, among others. The “Expert Guides” are designed to turn any Palm-Powered handheld or smartphone into the ultimate personal and professional resource by offering the Web’s most comprehensive directory of Palm applications, online resources, e-books, and user stories.

“While a PDA is a great calendar and address book, it also holds enormous potential to access concise information needed in classrooms, clinics, and dental offices,” says Dr. Eisenberg. “With the ‘Expert Guide,’ someone like myself, who is extremely familiar with a particular field, has already done the job of searching through a variety of sites to find information and programs, thereby relieving the user of this burden.”

Dr. Eisenberg’s “Expert Guide for Dentists” is available at www.palmsource.com/interests/dental. The guide includes details on an eclectic range of useful sources, including a mobile patient information program that stores dental health information, drug data, a concise medical dictionary, and a handbook on coping with emergencies that includes a guide to bioterrorism agents.

NYUCD has become the second dental school in the United States to require predoctoral students to become experienced in the Invisalign® technique, a method of straightening teeth without wires and brackets that has built a large following among U.S. orthodontists and general dentists.

Originally offered as an elective to the Class of 2003, the course attracted virtually the entire class, who became certified in the technique upon graduation. Students in the Classes of 2004 and 2005 were also offered the course as an elective, and the course became mandatory for sophomores beginning in spring 2004.

The curriculum was developed through a partnership forged by Dr. Mitchell J. Lipp, a Clinical Assistant Professor of Orthodontics and Director of the Predoctoral Curriculum in Orthodontics, and Dr. Louis Shuman, Vice President of Clinical Education for the manufacturer, Align Technology, Inc.

“Invisalign® gives students an unprecedented opportunity to diagnose and treat minor tooth movement problems affecting function and esthetics,” Dr. Lipp said.

“It takes sharp diagnostic skills to determine if Invisalign® is appropriate for a patient, and students have to learn to critically evaluate special software that simulates how it will affect tooth movement. So learning Invisalign® is an exciting challenge that compels students to take ownership of treatment outcomes,” he concluded.
NYUCD Introduces
Ergonomics Training
for Students, Faculty, and Staff

A N  E F F O R T  T O  R E D U C E  P H Y S I C A L  S T R E S S
I N  C L I N I C S ,  L A B S ,  A N D  O F F I C E S

Most members of the dental team know from personal – and painful – experience that musculoskeletal stress tends to come with the territory. Now, NYUCD has moved to take positive action to address this problem by introducing a new program that incorporates ergonomics training into the curriculum for all DDS students – more than 1,200 men and women. In addition, all preclinical and clinical faculty, hygiene faculty, postgraduate faculty, and clinical staff – nearly 1,000 individuals – will be invited to take part in training to identify and correct the performance of tasks in clinics and offices that may put them at risk for fatigue, discomfort, or musculoskeletal stress. The program represents a major expansion of NYUCD’s ergonomics education efforts, which previously were limited to lectures for first- and second-year students.
Directing the program is Dr. Denise C. Murphy, Clinical Associate Professor of General Dentistry and Management Science, and the author of an influential textbook on dental ergonomics, *Ergonomics and the Dental Care Worker* (American Public Health Association, 1998).

According to Dr. Murphy, studies have shown that dentists have a high incidence of musculoskeletal disorders in the neck, shoulders, upper extremities, and lower back, caused by biomechanical factors such as remaining in the same fixed posture for prolonged periods or bending, twisting and contorting the body in an attempt to get closer to patients. In fact, a study published in 1997 by the *British Dental Journal* found that musculoskeletal disorders were the most frequent cause of dentists’ early retirement. For Dr. Murphy, the lesson is clear: “Ergonomics, like infection control, is an important part of health and safety at the College.”

During the program’s initial phase, first-year students will get an overview of ergonomics principles, such as the need for variety in tasks and movements in order to avoid muscle tension caused by remaining in the same position for excessive amounts of time. In addition, students will be monitored and corrected as they practice simulated dentistry in a lab setting in their first two years. Second- and third-year students will learn about dealing with more specific situations encountered in patient care, such as choosing alternative grips for certain instruments to account for individual practitioners’ differences. A lecture for the senior class will focus on how private practitioners incorporate ergonomically-designed equipment into four-handed dentistry, a method for increasing productivity that emphasizes synergy between the dentist and the hygienist or dental assistant. All DDS students will be monitored annually in their clinical setting, and every clinic at NYUCD will be monitored three times a year through formal rounds.

“The earlier you can identify and correct biomechanical problems, the better it is,” says Dr. Andrew I. Spielman, Associate Dean for Academic Affairs. “By raising awareness of these problems among students, we will reduce the potential for injury and increase efficiency and productivity early in their careers. Indeed, there has been increasing attention to ergonomics issues affecting dentists since the ADA announced last April that it will cooperate with the U.S. Occupational Safety & Health Administration (OSHA) on voluntary ergonomics training and education for its members.”

Faculty will use an ergonomics checklist developed by Dr. Murphy to evaluate whether preclinical and clinical faculty and staff are using proper posture techniques and avoiding excessive repetitive movements and forceful exertions. If the information gathered reveals that certain tasks may create a risk for physical stress, the faculty, working in conjunction with Dr. Murphy, will develop written recommendations for correcting those tasks or replacing them with alternative procedures.
News from the College

U.S. Surgeon General Tells NYU Dental Graduates They Have Key Role to Play in Bioterrorism Preparedness and Response

“Dentists have a critical role to play in national preparedness.” That was the message brought by the Surgeon General of the United States, Vice Admiral Richard H. Carmona, to nearly 3,000 guests attending the NYU College of Dentistry Graduation Ceremony on May 13 in The Theater at Madison Square Garden.

Vice Admiral Carmona was the keynote speaker at the 2004 graduation ceremony, which celebrated the achievements of over 300 candidates for the DDS degree, plus candidates for the AAS degree in dental hygiene, the BS degree in dental health education, MS degrees in clinical research and in biomaterials, and certificates in the postgraduate dental specialties.

“Today’s graduates are part of an unprecedented era in New York’s history,” he said. “Many of you were at Ground Zero in the hours and days following 9/11.”

The Surgeon General paid special tribute to NYU College of Dentistry for its role in spearheading what has become a national plan of action to address dentistry’s role in responding to catastrophic events, including possible acts of bioterrorism. “You have worked hard to educate the profession and your peers, and have helped local dental societies develop a response plan that is being integrated into larger mass disaster plans. We need you to continue these efforts.”

In recognition of Vice Admiral Carmona’s contributions to safeguarding the health of all Americans, Dean Alfano presented him with the David B. Kriser Medal, the NYU College of Dentistry’s highest honor.

**DENTISTS HAVE A CRITICAL ROLE TO PLAY IN NATIONAL PREPAREDNESS.**

Vice Admiral Richard H. Carmona
Surgeon General of the United States
With those words, Dr. Katz presented Dean Alfano with a unique piece of commissioned art created by a New York City artist, Tom Matt: A pastel rendering of NYUCD drawn on an original front page of *The New York Times*, shown below. Visibly moved by this tribute, Dean Alfano expressed his thanks and vowed his continuing dedication to the goal of making NYUCD the dental education institution with the greatest impact in the world on the health of society.

Dean Alfano subsequently invited artist Tom Matt to visit NYUCD and see the framed piece of art, which hangs in the Dean’s office. Tom, who studied art at Boston University and the School of Visual Arts in Manhattan, switched two years ago from doing creative graphic design work to being a street artist, working on commission, because he felt the need to return to his first love – old-fashioned representational drawing. He uses New York Times newspapers as his canvas because he feels that they give his works a time-relevant, special feel.

In addition to the painting of NYUCD, Tom counts among his favorite streetscapes a painting of the Verrazano Bridge for a woman who ran in the New York City Marathon last November, and a painting of a West Village apartment for the girlfriend of actor Jason Patric.

Anyone interested in obtaining a print of the streetscape created for Dean Alfano, or for more information about Tom’s work, should contact him at 212-674-7882, or e-mail tmcityscapes@hotmail.com.

A Surprise for the Dean

Just as Dean Alfano was about to bring the Graduation Ceremony to a close, an unscripted moment occurred when Dr. Ralph Katz, Professor and Chairman of the Department of Epidemiology & Health Promotion, stepped to the podium to announce a special presentation. “Dean Michael Alfano,” he intoned:

“We, your entire faculty, staff, and student body, are privileged to present you with this token of our esteem, and with our heartfelt thanks for being our Dean. We want you to know that you are fully appreciated by us for your leadership, your vision, your intellect, and your management style, but most of all, for your humanity, both in terms of the big picture and on the personal level. We all appreciate being part of ‘Mike’s Moment’ at NYUCD. We thank you from our heads and from our hearts, and we trust that you will enjoy this gift from us.”
Dean Alfano has announced the establishment of a four-year, $100,000 scholarship in the name of Gerald W. Deas, MD, a physician, patient advocate, media personality, social activist, and public health crusader. The Gerald W. Deas Scholarship in Dental Education seeks to increase the number of underrepresented young people pursuing careers in dentistry by working with community leaders to identify highly qualified individuals from underrepresented groups and to motivate them to choose dentistry as a career option.

“This new award mechanism,” said Dean Alfano, “is designed to begin to change the demographics within dental education so that the profession can be more diverse.”

The award operates on the premise that key community leaders are heroes to the young people they interact with and can positively influence their career choices. To be eligible for the program, an applicant must be identified and personally recommended by an invited community leader who has demonstrated a commitment to increasing the diversity of the dental profession. The applicant must then be accepted by NYUCD on the basis of strong academic credentials and financial need. If these criteria are met, the applicant becomes eligible to receive a scholarship in the community leader’s name.

In addition to maintaining a solid academic record, the program requires each scholarship recipient to spend a specific number of hours doing outreach and mentoring high school students in underrepresented groups.

The first recipient of the Gerald W. Deas Scholarship is Marcus Johnson, a graduate of Rutgers University, who began his dental studies at NYU in fall 2004.

For over 40 years, Dr. Deas has been one of New York City’s most respected and dedicated physician-educators and an icon within the city’s African-American community. A professor of preventive medicine and director of health education communication at Downstate Medical Center in Brooklyn, Dr. Deas was the first black medical reporter for television’s “McCready Report,” and continues to write a weekly medical column for the Amsterdam News.

He has devoted several TV shows to championing dentistry as an attractive career option for young people and has also sponsored outreach led by minority NYU dental students to local high schools.
Serving Our Community in New Ways

Last April, NYUCD participated in an important training exercise conducted by the New York City Department of Health and Mental Hygiene (DOHMH) to strengthen our city’s preparedness to respond to a public health emergency, including the possibility of terrorist acts.

The DOHMH conducted Point-of-Distribution (POD) clinic training at NYUCD. A POD is used to rapidly provide treatments such as vaccines and antibiotics to large numbers of people at a central point. NYUCD had been selected as a training site because of its high-profile, rapid response to the events of September 11 and its long tradition of service and commitment to the safety and well-being of the community.

To find out what you, personally, can do to help safeguard your family members, friends, and colleagues, go to www.nyc.gov and read Ready New York: A Household Preparedness Guide online or download it in one of seven languages. You’ll find a comprehensive set of tips and information designed to help New Yorkers and other Americans better prepare for all types of emergencies.

NYUCD and Nova Southeastern University College of Dental Medicine in Fort Lauderdale, FL, have entered into a cooperative agreement that will allow the two institutions to collaborate in a number of areas, including the exchange of faculty, students, and information, clinical training, research, and continuing education. “This agreement,” said Dean Alfano, “creates a framework within which students and faculty members with diverse interests and expertise at our two campuses can interact. We look forward to a vibrant partnership with Nova Southeastern and to expanded opportunities and resources to help shape positive change in health care.”
Teeth Hold Clues to Cancer Development, Says NYU Dental Professor

Dr. Timothy G. Bromage, a paleoanthropologist whose discovery of a 2.4-million-year-old jaw in equatorial Africa 12 years ago unearthed the oldest known remains of the human genus, believes that insights about tooth and bone biology gleaned from his expeditions in Africa’s savannahs can be valuable to cancer researchers.

“We know from studying the evolution of young humans and animals, that teeth and bones grow incrementally, a bit every day. But environmental stressors, such as carcinogens in air or water, can alter that growth. Those alterations may provide clues to questions about how to prevent and treat cancers linked to environmental factors,” says Dr. Bromage, who recently joined NYUCD as an Adjunct Professor of biomaterials and biomimetics and of basic science and craniofacial biology.

One of Dr. Bromage’s projects will be to study tooth and bone development in animals living in areas with polluted air and groundwater, such as in sections of Long Island, for clues that could help identify which carcinogens contribute to high human cancer rates reported in those areas. By analyzing certain animals, such as mice and frogs, that can easily be observed in a laboratory, Dr. Bromage hopes to gain insights that could form the hypotheses for more complex research on human cancer victims from those polluted areas. At the same time, the analyses of modern-day carcinogens’ effects on animal development will contribute to a broader understanding of the impact that environmental changes have had on the evolution of entire ecosystems from early through modern times.

Dr. Bromage, who holds a PhD in biological anthropology from the University of Toronto, has already received a $400,000 grant from three private Spanish foundations to establish this project as a formal partnership between cancer and human evolution researchers in the United States and Spain. His plan calls for NYUCD to partner with New York’s Memorial Sloan-Kettering Cancer Center to facilitate results-sharing from this and other cancer-related studies. The two institutions are already collaborating on an $8.3 million, NIH-funded NYU College of Dentistry grant entitled “Research for Adolescent and Adult Health Promotion (RAAHP) Center.”

Dr. Bromage also hopes to share his insights on tooth and bone development with NYUCD colleagues working on stronger, more efficient biomaterials for dental implants and other applications, such as artificial bone used to correct facial deformities.

An array of hardware and software has arrived at the College of Dentistry along with Dr. Bromage, including computer programs for three-dimensional reconstruction similar to the one he used 13 years ago to reverse anthropologist Richard Leakey’s claim that he had discovered the skeletal remains of an ancestral species of the genus Homo with
His laboratory will have New York City’s only two microscopes capable of providing three-dimensional imaging in real time (other microscopes rely on software to reconstruct images in three dimensions).

features related to those of modern man. Dr. Bromage’s simulated reconstruction of the skull, based on fundamental principles of craniofacial development and architecture, showed more ape-like characteristics, illuminating a flaw in Dr. Leakey’s reconstruction, which was performed by hand, according to Dr. Leakey’s preconceptions that earliest Homo should have looked more like today’s humans.

Dr. Bromage also brings with him the world’s only portable confocal microscope, which he built himself, for analyzing microscopic details below the surface of teeth and bones (conventional microscopes can only illuminate such details after they have been ground into very thin sections).
Using the Microscope to Create Art

Dr. Timothy G. Bromage, an NYU College of Dentistry Adjunct Professor of Biomaterials and Biomimetics and of Basic Science and Craniofacial Biology, is proud of the attention he pays to the aesthetics and emotion of scientific imaging. His exhibit, “Óseos Cosmos” (roughly translated as the “Skeletal Cosmos”), opens in Greece this November on the first leg of a planned world tour. A highlight is a side-by-side display of two of the world’s largest micrographs — each nine feet by nine feet — showing images of a fish scale. In one image, the scales, have a predictable, rhythmic pattern; in the other, the pattern is chaotic and disturbed. The two fish are the same species, except that the latter lived in a lake polluted by fallout from Chernobyl.

Dr. Bromage uses microscopes to analyze hard tissue patterns occurring in bones, teeth, fish scales, and other structures for clues about an organism’s life history. Analyzing hard tissue to solve the mysteries of skeletal development was once a struggle, but with digital imaging, researchers today can creatively alter colors to highlight miniscule but important features or apply computer formulas (algorithms) to calculate the tissue’s growth rate. By employing artistic principles as they manipulate color and structure, researchers create images startling in their beauty as well as scientifically important.

A microscopic view of the tooth surface of a southern African zebra (Equus burchelli). Black represents holes in the surface, yellow is the densest part of the tooth, and blue is the least dense section. The number of holes and the proportion of yellow to blue may characterize certain species and relate to their feeding habits.

Information obtained from the analysis of such imaging is expected to highlight the effects of environmental change, disease, and possibly the stresses related to living in protected game reserves (e.g., overcrowding and tourism). The results are also expected to be useful for environmental reconstruction of sites of importance to ancient human life.
Dr. Bromage uses microscopes to analyze hard tissue patterns occurring in bones, teeth, fish scales, and other structures for clues about an organism’s life history.

Researchers developing new treatments for bone disorders would like to better understand how human collagen grows. This view of a human femur (thigh) bone, which was re-created with three-dimensional imaging software, represents one of the first attempts to chart typical collagen growth patterns in 3D. The red and yellow areas represent collagen that grows parallel to the bone surface, while the blues and greens show collagen that grows from the surface down. Different growth patterns affect the bone’s mechanical competence.

How does microgravity affect bone development in astronauts? Dr. Tim Bromage seeks to answer this question by observing changes to the bone of a growing rat that spent time on the space shuttle Columbia. He concludes that bone loss progresses with each day that astronauts are in outer space. This image, created with the help of special image-processing software, is the first known illustration of microgravity’s day-to-day effect on bone, with each horizontal line representing incremental changes to the bone over a 24-hour period. The period between the large central and upper thin blue horizontal bands represents the time that the rat spent in space and experienced bone loss. The area immediately above the upper blue horizontal band marks the day that the bone loss reversed itself and the bone increased, when the rat returned from outer space.

Food for thought: To examine how fish could become a renewable food source for astronauts, Dr. Tim Bromage generated this microscopic view of the scale of a fish that spent time on the space shuttle. This image suggests that the fish adapted well to gravity changes: The growth of the scale, as illustrated by the lines radiating from its center, follows an orderly pattern, indicating that the scale continued to grow normally while in space.
On August 28, Dean Alfano joined 1,600 guests from across the nation, including 22 deans of U.S. dental schools and other leaders in the profession, public officials, corporate executives, and faculty, students, and staff, in celebrating the naming of the University of the Pacific School of Dentistry in honor of Dr. Arthur A. Dugoni, its Dean for 26 years. In naming the Arthur A. Dugoni School of Dentistry, Pacific became the first university in the U.S. or Canada to name its dental school after a current dean.

“To describe Art Dugoni as a ‘dean’s dean,’ is an understatement,” said Dean Alfano. “Art’s intellect, integrity, and commitment to innovation in dental education have made him a living legend. Throughout his 56-year career in dentistry and dental education, Art, a native of San Francisco, has educated and inspired more than 6,000 dental students and countless dental professionals. By combining a focus on humanism with excellence in clinical education, research, and care, he has led the School of Dentistry at Pacific to national renown. In the process, he has succeeded in fostering extraordinary alumni devotion, attracting impressive private and public philanthropy, and earning the immense gratitude of the citizens of San Francisco. Art has been president of the California Dental Association, the American Dental Association, the American Dental Education Association, and several other organizations. And, in the event anyone thinks he is slowing down, he is now President of the ADA Foundation, fast at work on his dream of raising $1.0 billion for dental education. I am extremely proud to be among his numerous professional colleagues, friends, and family in saluting him on this wonderful occasion.”
From Tuesday, September 28, through Saturday, October 2, the NYU College of Dentistry opened its doors to over 1,500 New York adults and children for five days of free oral health screenings, plus oral cancer exams, blood glucose testing, sealants and mouth guards for children, and full denture replacements for senior citizens. An on-site panel of experts provided screening participants the opportunity to “Ask the Experts” any question at all about oral health.

The College’s long-time screening partner, ABC 7, once again promoted the screenings with public service announcements, and popular ABC 7 meteorologist Sam Champion broadcast stories describing the screenings and highlighting oral health advances, such as preventive techniques to keep children cavity-free and help for denture wearers by anchoring lower dentures with implants to prevent bone loss and avoid eating and speaking problems that occur when dentures slip and slide.

“With so many people in need,” said Dean Michael C. Alfano, “NYU, ABC 7, and Colgate-Palmolive felt it essential to join forces once again in order to offer as much free care as possible to New Yorkers.”
This is the first of three articles that will appear in Global Health Nexus on dental practice management. The articles are designed to help dentists build long-term career success by using proven business models to optimize practice performance during changing times. In this article, I will discuss five mega-trends in dentistry today that have the potential to make or break a dental practice.

These are:

1. **Government Regulations**,
2. **Dental Insurance**,
3. **Comprehensive Diagnosis and Treatment**,
4. **Biomedical Advances and Dentistry**, and
5. **Practice Staffing**.
First, a word about the difference between micro-trends and mega-trends. Micro-trends are minor developments that affect the way dentistry is practiced, but do not necessarily change the fundamentals of practice. For example, if dentists begin to use a new composite material or start performing all-ceramic restorations on a broad basis, these would be micro-trends, because a change in materials for one procedure represents an evolution in how the treatment is performed, not a transformation of the very nature of dental practice.

Conversely, a mega-trend has the potential to change dentistry forever. Mega-trends include major regulatory shifts such as OSHA compliance, HIPPA implementation, dental insurance, decreasing availability of trained staff, and reduced state funding for dental school education. While dentists need to be aware of micro-trends and to keep up with subtle changes in the profession, they have a life-or-death obligation to understand and be responsive to mega-trends, because if the dentist has not identified a mega-trend early on and adapted the practice to it, the results could be disastrous.

MEGA-TREND #1: GOVERNMENT REGULATIONS

The role of government regulation in dentistry has gradually increased over the last 20 years. This increase is largely due to the Occupational Safety and Health Administration (OSHA) regulations regarding conditions of the practice environment. These regulations resulted from fears that developed in the mid-1980s, when AIDS was first identified as a major, national public-health problem. Levin Group research shows that two-to-three percent of all practice overhead is now associated with OSHA compliance.

Another set of government regulations that has become a mega-trend in dentistry is HIPPA. Many practices are lagging behind in understanding this mega-trend, whose ramifications cannot be overstated. Clearly, when two-to-three percent of overhead is tied to compliance with HIPPA regulations (in addition to two-to-three percent of overhead already associated with OSHA compliance), a practice’s bottom line is greatly affected.

MEGA-TREND #2: DENTAL INSURANCE

While dental insurance has been affecting practices for a number of years, a new mega-trend looms on the horizon. Levin Group projects that in the next five years, an additional 10 percent of Americans will be covered by dental insurance. This trend derives from the recent recessionary period, when employees began to request increased benefits from their employers in lieu of raises that were not forthcoming. Dental insurance is one of the most popular benefits sought by employees.

Most important for dental practices is the fact that these newly insured patients will seek out practices that participate in their plans. Patients will use insurance coverage as a key factor in selecting a practice, regardless of the dentist’s clinical skills or the ability of staff to provide a positive patient experience. Patients who are referred to specialists for particular types of treatment must also find those who participate in their plan, which could affect a general practice’s relationship with a specialty practice, and vice versa. It is important to note that as more patients become insured, the maximum allowable benefits for most insurance companies are not increasing. All of these factors will have a major impact on practice profitability, and dentists must be prepared to deal with them.
MEGA-TREND #3: COMPREHENSIVE DIAGNOSIS AND TREATMENT

The materials and technologies currently available to dentists to perform high quality clinical care are unprecedented in the history of dentistry. In theory, this should lead to more comprehensive care being performed within a practice, which would lead to greater productivity per patient. However, statistics show that 81 percent of appointments are still for single-tooth treatments, a decrease of only six percent from 20 years ago. The key to turning these numbers around is to adapt to the mega-trend of comprehensive diagnosis and treatment.

If only 19 percent of all appointments feature comprehensive diagnosis and treatment, practices are missing out on a tremendous opportunity to be more productive and more profitable. Levin Group data shows that approximately $750 worth of treatment can be identified for each new patient through comprehensive diagnosis and treatment. Even if a practice takes a year to respond to this trend by reducing its single-tooth appointment percentage to 65 percent, that additional 16 percent of comprehensive diagnosis and treatment can potentially yield hundreds of thousands of dollars in revenue for the practice. Most important, comprehensive diagnosis and treatment are in the best interests of the patient.

With options for aesthetic dentistry, implant dentistry, and occlusal dentistry, along with services such as whitening, there are comprehensive diagnosis and treatment plans that can easily be identified for each patient. A practice with a varied and significant service mix is better positioned to take advantage of this trend and to become more profitable in a shorter time.

MEGA-TREND #4: BIOMEDICAL ADVANCES AND DENTISTRY

Dentistry has evolved far beyond simply “drilling and filling” and aspiring to achieve the desired restorative result. Dentistry will soon become a profession that is at least 30 percent dependent on diagnostic testing and pharmaceutical solutions to yield the best patient outcomes. These pharmaceutical solutions could include oral cancer testing, periodontal antibiotics, chemical treatment of periodontal disease, and even forms of aesthetic dentistry. The biomedical options for healthcare are growing rapidly, and dentistry must keep pace. If dentists do not embrace this mega-trend, they will miss out on a tremendous opportunity to increase productivity and profitability.

Dentists should welcome biomedical developments and be motivated by them to explore new services to add to their practices. Some of these new services will not be covered by insurance, but they will be services that will have a positive impact on the overall oral health of the patient base. Eventually, dental practices will have no choice but to adopt some
percentage of these services if they are to remain optimally productive, while also offering the most advanced, state-of-the-art care for their patients.

**MEGA-TREND #5: PRACTICE STAFFING**

Each year it becomes more difficult to recruit well-trained staff with extensive knowledge of dental practices and how they operate. As in medical practices, where finding trained nurses has become increasingly difficult, dentists are facing major challenges trying to find trained allied-health personnel. As an example, I recently spoke to a new Levin Group client who practices in a rural area and has been advertising a hygienist position for nine months. Obviously, this has resulted in lost productivity and increased stress. Other trends now developing include a potential shortage of dentists and lab technicians.

Hospitals use an array of programs to attract nurses, though with limited success. As a result, they are forced to delegate critical responsibilities to less-experienced personnel. Some in the medical field believe that this significantly lowers the quality of care that patients receive. This same mega-trend is also applicable to dentistry. For regardless of how well clinical dentistry is performed, it does not exist in a vacuum. The staff also contributes to the overall quality of patient care and customer service. Therefore, the practice must have a strong, well-trained staff in order to succeed.

Levin Group data show that this mega-trend can have a particularly distressing effect on a practice. Over the next five years, 70 percent of staff members will have a three-year turnover rate. Considering the loss in productivity from every staff member who leaves (productivity lost from the position being vacated, plus productivity lost while a new hire is being trained), it is entirely possible that dentists will lose $500,000 to $1 million worth of productivity during their careers simply because of accelerated staff turnover. This cost cannot be reduced to zero. However, the implementation of documented business systems covering every operating system of the practice and the cross-training of team members can reduce training time and lower these production losses by 50 percent.

While there are many other mega-trends in dentistry today, the five discussed above require the practicing dentist’s greatest attention. These five trends will continue to develop and reshape themselves in the years to come. A concentrated focus on them now will determine whether their effect on a practice is positive or negative.
Since its opening in November 2002, the Bluestone Center for Clinical Research has conducted nearly three dozen studies in areas ranging from new head and neck cancer treatments to dental implants to the management of hyperglycemia in diabetics with periodontal disease. A complete list of trials appears on pages 50 - 51.

According to the Bluestone Center’s Director, Dr. Jonathan Ship, a Professor of Basic Science and Craniofacial Biology and of Oral Medicine at NYUCD, and a Professor of Medicine at the NYU School of Medicine: “Industry has responded positively to our model of intellectual manpower minus the bureaucracy traditionally associated with academic research, awarding $3.5 million in grants in under two years. As a result, we are well positioned for new growth, particularly in Phase I-IV trials and the development of new drug applications.”

At over 8,500 square feet, the Bluestone Center is the largest clinical research center in a dental school and the only one with overnight facilities for patients participating in 24-72 hour clinical studies. In the past two years, the center has recruited a pharmacotherapy research chief and four new clinical research coordinators, creating a breadth and depth of talent and experience for the conduct of both dental and medical research sponsored by both industry and federal agencies such as NIH/NIDCR.

Dr. Frederick A. Curro, Chief of Pharmacotherapeutic Research, cites the fact that the Bluestone Center offers a full spectrum of regulatory services for drug development as a major draw. Dr. Curro has been responsible for an increase in awards from small biotechnology companies to develop and execute Phase I-IV trials and FDA submissions.

A total of five clinical research coordinators are cross-trained to participate in multiple trials simultaneously. Three of the coordinators are certified by the Association of Clinical Research Professionals and the other two will soon complete their certification. One coordinator is working primarily on trials involving oncology research faculty collaborators from nearby Beth Israel Hospital Medical Center.

Bluestone Center’s Executive Administrator, Rene Lopez, who is responsible for contract negotiation, quality assurance, and overall administrative functions, notes that “Before we opened, a quick turnaround time for contracts was two weeks; now, with a
single contact person and the inroads that we have established with the NYUSM Office of Clinical Trials — we can complete a contract in as little as 24 hours. For example, when one sponsor called to say they had a tight deadline for commissioning new research, we completed the contract in a day.”

Negotiations are currently underway to bring more than 15 new Phase I-IV clinical trials and drug development projects to the Bluestone Center. Dr. Ship said that the growth in part reflected the faculty’s growing familiarity with and eagerness to use the facility.

“We have worked hard to integrate Bluestone into NYUCD’s culture and have provided faculty-to-faculty training in Good Clinical Practice guidelines, clinical research standards, and clinical trial development and conduct,” he said. He added that the Bluestone Center would be able to accommodate future growth by tapping into the graduating classes of NYUCD’s MS degree and Certificate Programs in Clinical Research, which use Bluestone’s facilities to train their students.

In fact, one of Bluestone’s research coordinators, Dr. Hanae Saito, was one of the first two graduates of the MS in Clinical Research program, and another coordinator, Concetta Mangiaracina, received a Certificate in Clinical Research and is studying part-time for her MS degree.

Dr. Ship said he expected that Bluestone would also increasingly tap into faculty from other institutions for collaborative research ventures. Dr. Ship’s appointment as a Professor of Medicine at the NYU School of Medicine is expected to increase cooperation with clinical researchers there.

“At the same time,” Dr. Ship added, “internationally recognized researchers who joined NYUCD’s faculty in the past few years are making connections for us at colleges overseas. We are only beginning to tap into our full potential to make an impact on oral health worldwide.”
### Industry- and NIH-Sponsored Studies Awarded to the Bluestone Center for Clinical Research from November 2002-August 2004*

#### ORAL MEDICINE

<table>
<thead>
<tr>
<th>Study Title</th>
<th>Investigators**</th>
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<tbody>
<tr>
<td>Efficacy &amp; Side Effects of the Topical Application of a Novel Agent in the Treatment of Minor Aphthous Ulcers</td>
<td>A. Ross Kerr (PI)</td>
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<td>Women's Interagency HIV Study (WHIS)</td>
<td>Joan Phelan (PI)</td>
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<tr>
<td>Open-Label, Dose-Escalation, Phase I Clinical Study to Assess the Safety of a Novel Agent in Patients with &quot;Pemphigus Vulgaris&quot; Requiring Daily Corticosteroid Therapy</td>
<td>Bruce Strober (PI), Jonathan A. Ship</td>
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<td>Chemoradiation, Neck Intraoperative Radiation Therapy, and a Novel Agent for Head and Neck Cancer with High-Risk Neck Disease</td>
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<td>A Randomized, Observer-Blind, Cross-Over Design Study Comparing the Effects of Two Commercial Non-Prescription Mouth Rinses on Salivary Flow Rates and Xerostomia</td>
<td>Jonathan A. Ship (PI), Ronald Katz, A. Ross Kerr, Jane A. McCutcheon</td>
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<td>Protocol Development for Phase III Study of a Novel Agent for Xerostomia</td>
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<td>Oral Cancer Detection: Current and Emerging Technologies</td>
<td>David A. Sirois (PI), A. Ross Kerr, Miriam R. Robbins</td>
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<td>Pilot Study of a Novel Agent: Effects of Glycemic Control in Subjects with Type 2 Diabetes and Chronic Periodontitis</td>
<td>Ron G. Craig (PI), Angela R. Kamer, Eva M. Lupovici</td>
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<td>Periodontal Assessment and Rheumatology Arthritis Study (PARAS)</td>
<td>Clifton Bingham (PI), Ron G. Craig, Angela R. Kamer, Denise Estafan, Khalid Almas, Jonathan Ship</td>
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<td>Periodontal Disease and Prematurity</td>
<td>Ananda Dasanayake, Ronald Craig, Douglas Morse</td>
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<td>Calibration Study of Two Commercially Available Dentrific Formulations on the Prevention of Gingivitis and Plaque Formation</td>
<td>Bapanaiah Penugonda (PI), Diana L. Galvis</td>
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<td>IND Development for a Novel Agent for Gingivitis</td>
<td>Frederick A. Curro (PI), Ron G. Craig, Jane A. McCutcheon</td>
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Notes

* Over 15 Phase I-IV clinical trials and IND development projects in a variety of fields are currently in the contract and budget negotiation phase.

** All investigators are NYUCD faculty unless otherwise noted.

1 NYU School of Medicine faculty

2 Beth Israel Hospital Medical Center faculty
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<tr>
<th>NICHTERALS</th>
<th>Study Title</th>
<th>Investigators**</th>
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<tr>
<td>IMPLANTS</td>
<td>Study to Compare A Non-Traditional Implant System vs. Two Traditional Implant Systems with Regard to Changes in Marginal Bone Level</td>
<td>Nicholas Elian (PI), Stuart Froum, Dennis P. Tarnow, Stephen S. Wallace, Sang-Choon Cho, Ziad Jalbout</td>
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<td></td>
<td>Clinical Comparison of Healing Extraction Sockets Following Implantation of a Xenograft Absorbable Bone Graft With or Without an Absorbable Membrane Barrier</td>
<td>Stuart Froum (PI), Dennis P. Tarnow, Nicholas Elian, Stephen S. Wallace, Sang-Choon Cho, Ziad Jalbout</td>
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<td>Post-Approval Study for Evaluation of a Novel Agent for Periodontal Disease After Multiple Treatments</td>
<td>Stuart Froum (PI), Dennis P. Tarnow, Nicholas Elian, Stephen S. Wallace, Sang-Choon Cho, Ziad Jalbout</td>
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<td>Histological Comparison of an Allograft to an Organic Bovine Bone Mineral in Maxillary Sinus Grafting</td>
<td>Stuart Froum (PI), Dennis P. Tarnow, Nicholas Elian, Stephen S. Wallace, Sang-Choon Cho, Ziad Jalbout</td>
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<td>Open, Randomized Study to Compare Two Dental Implant Systems with Regard to Changes in Marginal Bone Level</td>
<td>Dennis P. Tarnow (PI), Stuart Froum, Nicholas Elian, Stephen S. Wallace, Sang-Choon Cho, Ziad Jalbout</td>
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<td>Protocol Development of Comparative Efficacy of a Non-Traditional Implant vs. a Traditional Implant</td>
<td>Farhad Vahidi (PI), Van P. Thompson</td>
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<td>Survival Rate of Novel Direct One Piece Dental Implants When Placed With a Flapless or Flap Protocol</td>
<td>Dennis P. Tarnow (PI), Stuart Froum, Nicholas Elian, Stephen S. Wallace, Sang-Choon Cho, Ziad Jalbout</td>
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<td></td>
<td>Histomorphometric Comparison of Two Materials in Maxillary Sinus Grafting</td>
<td>Dennis P. Tarnow (PI), Stuart Froum, Nicholas Elian, Stephen S. Wallace, Sang-Choon Cho, Ziad Jalbout</td>
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<tr>
<td>PAIN</td>
<td>IND Clinical Development Plan for a Novel Agent for Post-Operative Dental Pain</td>
<td>Frederick A. Curro (PI), Robert S. Glickman, Jane A. McCutcheon</td>
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<td></td>
<td>Dose Response Study on a Novel Agent for Toothache</td>
<td>Jonathan A. Ship (PI), Silvia E. Spivakovsky, Stanley N. Turetzky</td>
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<td></td>
<td>Phase III, Randomized, Multicenter, Parallel-Group, Double-Blinded, Placebo-Controlled Study of the Safety and Efficacy of a Novel Agent in the Treatment of Post-Operative Dental Pain</td>
<td>Robert S. Glickman (PI), Kenneth E. Fleisher</td>
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<td></td>
<td>Phase III, Double-Blind, Randomized, Placebo-Controlled Study of the Effect of a Novel Agent on the Rate of Recovery from Soft-Tissue Anesthesia and on Safety in Dental Patients</td>
<td>Andrea S. Schreiber (PI), Eva M. Lupovici, Kenneth L. Allen</td>
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<tr>
<td>RESTORATIVE</td>
<td>Open-Label Clinical Study of a Novel Bur on Class I Carious Lesions</td>
<td>Kenneth L. Allen (PI), Gerald Klaczany, James T. LoPresti, Van P. Thompson</td>
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<tr>
<td></td>
<td>Microbial Diversity and Characterization of Cariogenic Biota</td>
<td>Page Caufield (PI), Ananda Dasanayake, Yihong Li</td>
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<td></td>
<td>Clinical Evaluation of A Novel Composite Resin and Two Novel Bonding Resins</td>
<td>Benjamin Godder (PI), James T. LoPresti, Gerald Klaczany, Van P. Thompson, Douglas Pollack, Robert Blashka</td>
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<td></td>
<td>Single-Blind Clinical Study of Polymer Dentin Removal Burs on Class V Carious Lesions</td>
<td>James T. LoPresti (PI), Kenneth L. Allen, Gerald Klaczany, Van P. Thompson</td>
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<td></td>
<td>Clinical-Efficacy Determination of Prototype Liquid Whitener</td>
<td>Bapanaiah Penugonda (PI)</td>
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<td></td>
<td>Extrinsic Stain Removal by Chewing Gum</td>
<td>Warren I. Scherer (PI), Alan H. Rattet, Harry G. Meeker</td>
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<td>PROSTHODONTICS</td>
<td>Implant Overdenture Prospective Study</td>
<td>Leila Jahangiri (PI)</td>
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<tr>
<td>EPIDEMIOLOGY AND BEHAVIORAL SCIENCE</td>
<td>Dental Alliances to Reduce Tobacco (DART)</td>
<td>Gustavo Cruz (PI)</td>
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<tr>
<td>EDUCATION</td>
<td>The Effect of an Interactive CD and the Use of Chewing Gum on Learning Dental Anatomy</td>
<td>Kenneth L. Allen (PI), Ralph V. Katz</td>
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</tbody>
</table>
From September 1, 2000, to August 31, 2004, federal research dollars awarded to NYUCD rose from $2.1 million to $8.6 million per year, and continue to climb. This stunning rise in federal funding coincides with the arrival at NYUCD of Dr. Louis Terracio, Associate Dean for Research, who has dramatically revamped NYUCD’s research philosophy and operations. A former Associate Dean for Basic Sciences and Carolina Distinguished Professor of Developmental Biology and Anatomy at the University of South Carolina School of Medicine, Dr. Terracio has made research a priority at NYUCD and has sharpened its focus. He has advanced the research enterprise by encouraging NYUCD faculty to work on multidisciplinary teams with other institutions’ researchers and by recruiting new faculty with proven NIH funding abilities to work at NYUCD and to mentor their fellow faculty here.

As the chart at right illustrates, in the past year alone, the vast majority of NYUCD’s federal funding has come from the National Institute of Dental and Craniofacial Research (NIDCR), whose peer-reviewed studies are considered the gold standard. Moreover, all seven new federal grants were awarded to multidisciplinary, multi-institutional research teams – clear proof that Dr. Terracio’s philosophy is delivering the desired results.

“In the old days, it was hard to involve another college in a research endeavor, but today, with email and the Internet, researchers are expected to make use of the best resources available, regardless of whether they are down the street or in another city,” Dr. Terracio said. “Moreover, our researchers often need to work with colleagues at medical schools in order to fully explore the link between oral and systemic health.” (See sidebar on page 55: “Dental-Obstetrical Team Searches for Clues to Premature Birth.”)

To encourage teamwork and mentoring within NYUCD, Dr. Terracio instituted a weekly meeting for faculty to provide feedback on their peers’ grant proposals. “Nothing is more helpful than having a researcher with a good track record of NIH funding to critique your proposal before you send it to Washington,” Dr. Terracio said.

When he started rebuilding NYUCD’s research infrastructure in 2000, Dr. Terracio said that he expected federal research funding to double over the next five years. It’s been a little less than four years, and research funding has more than quadrupled. “The arrival of several world-renowned researchers helped boost our research engine beyond expectations, not just because of their own outstanding ability to win funding, but also because they encouraged others to get involved in research and devoted time to mentoring junior faculty,” Dr. Terracio said, pointing to the contributions of Dr. Page Caufield, Dr. Ralph Katz, Dr. Kathleen Kinnally, Dr. Dianne Rekow, Dr. Peter Sacks, Dr. Jonathan Ship, and Dr. Van Thompson. “Our longer-serving faculty – particularly Dr. John Evans, Dr. Joseph Guttenplan, and Dr. Racquel LeGeros – also continue to be very successful in winning funding.”

“As we look to the future, I expect that we can at least double our funding in the next five years by continuing to recruit researchers specializing in our most potent growth fields – cancer, biomaterials and biomimetics, tissue engineering, and infectious diseases. We will also launch a strategic planning process in the next few years to identify new research fields with growth potential.”
<table>
<thead>
<tr>
<th>NYUCD Principal Investigator</th>
<th>Grant Name</th>
<th>Sponsor</th>
<th>Award Amount*</th>
<th>Collaborating Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ananda Dasanayake</td>
<td>Periodontal Disease and Prematurity</td>
<td>NIH/NIDCR</td>
<td>$955,000</td>
<td>NYU School of Medicine Forsyth Institute Yale University University of Maryland</td>
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<tr>
<td>John Evans</td>
<td>Acquisition of a High-Resolution Nuclear Magnetic Resonance Spectrometer</td>
<td>U.S. Department of Defense/Army Research Office</td>
<td>$535,000</td>
<td>University of California University of Washington Weizmann Institute of Science (Israel) Japan Foundation for Cancer Research Neijo University (Japan) Lawrence Livermore National Laboratory Brookhaven National Laboratory</td>
</tr>
<tr>
<td>Joseph Guttenplan</td>
<td>Estrogen-Induced Depurination of DNA</td>
<td>U.S. Department of Defense</td>
<td>$670,600</td>
<td>Fox-Chase Cancer Center Mayo Clinic University of Virginia University of Memphis</td>
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<tr>
<td>Ralph Katz</td>
<td>NIDCR National Research Service Award Institutional Training Grant</td>
<td>NIH/NIDCR</td>
<td>$3,306,000</td>
<td>Columbia University Yale University Johns Hopkins University</td>
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<td>Yihong Li</td>
<td>Molecular Epidemiological Approach to Determine S. mutans Infection</td>
<td>NIH/NIDCR</td>
<td>$147,500</td>
<td>NYU School of Medicine Forsyth Institute University of Maryland</td>
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<tr>
<td>Walter Psoter</td>
<td>Oral Health Outcomes of Early Childhood Malnutrition</td>
<td>NIH/NIDCR</td>
<td>$1,675,500</td>
<td>University of California University of Maryland University of Haiti Haitian Health Foundation Yale University University of Connecticut</td>
</tr>
<tr>
<td>Louis Terracio</td>
<td>Tissue Engineering of Skeletal Muscle</td>
<td>NIH/NIDCR</td>
<td>$1,298,000</td>
<td>Columbia University Virginia Commonwealth University University of South Carolina</td>
</tr>
</tbody>
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*Total award amount represents funding for entire length of multiyear grants.
RESEARCH DAY 2004:
USC’s Dean Slavkin Shares Spotlight with NYUCD Students

Ten NYUCD students and the Dean of the University of Southern California School of Dentistry, Dr. Harold Slavkin, were honored at the 2004 NYUCD Student Research Day. Associate Dean for Research Dr. Louis Terracio presided over the student awards ceremony and the presentation of the second annual NYUCD Distinguished Scientist Award to Dr. Slavkin, in recognition of his outstanding scientific contributions to dental and craniofacial research.

ADA/Dentsply Student Research Table Clinic Award
Anthony Kail, D.D.S. ’06
Characterization of Tissue Engineered Striated Muscle
Advisors: Dr. Louis Terracio, Dr. Wentao Yan, Dr. Upinder Fotadar

Omicron Kappa Upsilon, Omega Chapter Award in conjunction with Procter & Gamble
Chia-Yu Sherry Ku, D.D.S. ’05
Analysis of Oral Bacteria Diversity Using PCR-Denaturing Gradient Gel Electrophoresis
Advisors: Dr. Yihong Li, Dr. Page Caufield, Dr. Deepak Saxena

Omicron Kappa Upsilon, Omega Chapter Award in conjunction with Panadent
Philip Zaveloff, D.D.S. ’03
Heteroduplex Analysis of Bacteria Associated with Periodontal and Pulpal Disease
Advisors: Dr. Peter DiFiore, Dr. Upinder Fotadar, Dr. Robert Boylan, Dr. Wentao Yan, Dr. Louis Terracio

Dean’s Research Award
Rozheh Babanian, D.D.S. ’04 and Steven Weiss, D.D.S. ’04
Interleukin-2, Selenium, Vitamin E, and Squamous Cell Carcinoma Progression: The Contribution of the Immune Response to Tumor Eradication
Advisors: Dr. Martin Roy, Dr. Harvey Wishe, Dr. Lidia Kiremidjian-Schumacher

Student Research Group Award for Excellence in Research
Christine S. Calamia, D.D.S. ’07
The Effect of Operator on Bond Strengths Comparing Microtensile Trimming and Non-Trimming Methods
Advisor: Dr. Van Thompson

Postgraduate Resident Research Award
Dong Won Park, PG Implants ’04
Retrospective Study of the Effect of Surgical Experience with Dental Implants on Second-Stage Implant Survival
Advisors: Dr. Sang-Choon Cho, Dr. Nicholas Elian, Dr. Stuart Froum, Dr. Jeffrey Scolnick; Dr. Dennis Tarnow

Postdoctoral Resident Research Award
Deepak Saxena, Division of Diagnostics, Infectious Disease, and Health Promotion
Subtraction Hybridization Approach for Identifying Genes of Potential Relevance to Dental Caries
Advisors: Dr. Page Caufield, Dr. Yihong Li

Dental Hygiene Student Research Award
Rocio S. Ortiz, A.A.S. ’04, Cristina T. Vill, A.A.S. ’04
Panoramic Radiography Foretells the Future
Advisor: Dr. Eva Lupovici

Outstanding Poster by a Research Staff Member
Yelena Nemelivsky, Department of Basic Science and Craniofacial Biology and Department of Biomaterials and Biomimetics
Bone Tissue Engineering via the Endochondral Pathway: The First Steps
Advisors: Dr. Claudia Karkia, Dr. Cristina Teixeira, Dr. Racquel LeGeros
Dental-Obstetrical Team Searches for Clues to Premature Birth

In an innovative collaboration, NYU College of Dentistry and School of Medicine faculty have launched one of the most in-depth studies of preterm birth risk factors to date, with the support of a three-year, $955,000 grant from the National Institute of Dental and Craniofacial Research (NIDCR) of the National Institutes of Health.

In 2002, the grant’s principal investigator, Dr. Ananda P. Dasanayake, NYUCD Associate Professor of Epidemiology & Health Promotion and Director of its MS Program in Clinical Research, invited colleagues at the NYU School of Medicine participating in a four-year, March of Dimes-sponsored study on preterm birth – Dr. Charles Lockwood, then Chairman of the Department of Obstetrics and Gynecology – and the March of Dimes study’s principal investigator, and Dr. Men-Jean Lee, an Associate Professor of Obstetrics and Gynecology, to become coinvestigators on the NIDCR grant proposal, which focuses on periodontal disease and prematurity. Dr. Lee and Dr. Lockwood will provide cervico-vaginal and serum samples from their study to Dr. Dasanayake, who will determine if preterm birth mothers’ samples show significantly different levels of periodontal pathogens and serum antibodies compared to those pathogens from samples of normal birth mothers. Dr. Dasanayake will complete his analysis by comparing periodontal pathogens in dental plaque with cervico-vaginal and serum sample data from an additional 215 pregnant women. The dental-obstetrical teams will ultimately combine their respective findings in a broad appraisal of various preterm birth risk factors.

Additional coinvestigators include Dr. Ron Craig, an Associate Professor of Basic Science and Craniofacial Biology and of Periodontics; Dr. Douglas E. Morse, an Associate Professor of Epidemiology & Health Promotion; and Dr. Anne Tanner, a senior staff member and expert in oral pathogen identification at The Forsyth Institute in Boston, who will perform the microbiological analyses.

Student Summer Research Opportunities Abound

In summer 2003, NYUCD welcomed the first group of five students selected to receive research training annually at NYUCD under a five-year NIH grant for minority predoctoral dental students from NYU, Howard University, Tuskegee University, and the University of Puerto Rico. In addition to repeating the program in summer 2004 with a new group of students, NYUCD also introduced two other student summer research training programs, bringing the number of research students in summer residence from 5 to 18, a more than threefold increase. All three programs are overseen by Dr. Kathleen C. Kimnally, left center, a Professor of Basic Science and Craniofacial Biology.

The two additional programs are:

- an NIH-funded NYU Oral Epidemiology Research Training Program for NYUCD predoctoral students, and
- a Dean’s Student Research Fund Summer Training Program, which gives nine NYUCD students between their freshman and sophomore years an opportunity to learn about clinical, basic, or epidemiological research.
The year is 1918. Following the defeat of the Axis powers, the Austrian-Hungarian Empire collapses and is dismembered into myriad nation-states. Fast forward to 2004, and a remarkable event occurs. After 44 years under Communism and 15 years after the demise of the Soviet Union, Hungary rejoins the European community as a unified nation and full partner.

Last March I was privileged to witness Hungary’s European rebirth first-hand, when I accepted an invitation from Dr. Tivadar Zelles, the two-term Dean of Semmelweis University (SU) Faculty of Dentistry in Budapest, to visit his campus. In addition to presenting several lectures and seminars, I had an opportunity to meet with faculty and students and to learn how SU is adjusting to the new educational standards required for recognition by the European Union (EU), which went into effect following Hungary’s admission into the EU in May 2004.

A relative newcomer compared to other European universities, SU was established in 1769, in honor of Dr. Ignácz Semmelweis, the noted Hungarian physician who became famous as a result of observing that many
women who were dying soon after childbirth had been treated by doctors who were working both in obstetrics and gynecology and in pathology without washing their hands between assignments, thereby becoming cross-infected and transmitting the infection to the new mothers. After that, doctors started washing their hands and the incidence of maternal deaths decreased dramatically.

Approximately 100 years later, in 1854, dental education was introduced at SU as part of medical education. The current Faculty of Dentistry, established in 1955, followed the European model in effect at that time: a post-baccalaureate, five-year dental program, but with a focus still on medical education.

Then came the collapse of the Berlin Wall in 1990, and Hungarian dental educators used their newfound freedom to rethink both the quality and the quantity of curriculum topics. In 1998, Zelles, et al. published a study entitled “Basic Science Teaching in Dentistry in Central/Eastern Europe: Toward Harmonization,” which compared the hours of basic science education taught in Central/Eastern European dental schools with those taught in the EU, and concluded that the EU schools were devoting one-third less time to the basic sciences and to clinical medicine, and a third more time to courses in clinical dentistry.

With the impending entrance of Hungary into the EU, it became especially urgent that a similar rebalancing at SU be achieved and achieved quickly. Accordingly, new departments, including oral biology, oral medicine, and oral diagnosis, were added to the curriculum, along with such new topics as preventive dentistry and health promotion. Overall, the new curriculum at SU was rebalanced to emphasize more clinical dental practice.

SU’s current dental education curriculum consists of 5,000 hours distributed over 10 semesters. The academic year begins in early September and ends in June. At the end of each academic year, students spend two to four weeks in the summer working in hospitals (as nurses), in dental labs, or in private offices practicing clinical dentistry. Academic courses, which are never less than one full semester in length, are offered every week on a highly structured basis. Overall, basic sciences account for 40 percent of the curriculum. Clinical medical subjects account for another nine percent. Dental foundation knowledge and clinical dentistry account for 47 percent of the total time. The remainder of the curriculum (four percent) is devoted to health promotion and medical informatics (see graph on next page).
Most of the over 100 faculty members at SU are full time. Part-time faculty positions are quite unusual. Collectively, the SU faculty has published 100-plus textbooks and several thousand articles. The 350 students can choose to study a Hungarian-, English-, or German-language curriculum. Each year foreign students from 36 countries apply for the five-year dental programs that are taught in English and German. Tuition is $10,500 per year. This past summer, following Hungary’s admission into the EU, 100 students from Germany alone applied for the 25 to 30 spots available in the German-language program. Since its founding, SU has graduated 5,000 dentists, of whom 800 are graduates of the English- and German-language programs. Most recently, SU received a grant of approximately $22 million to build a new dental school – clear evidence of the importance that today’s Hungary places on dental education.

In the past, students from Hungarian universities were not allowed to practice independently after graduation unless they had completed a two-year General Practice Residency program. At the request of the EU, this requirement has been waived. In addition, in order to conform to specialty requirements across Europe, five official specialties were established in Hungary: restorative dentistry and prosthodontics, pediatric dentistry, orthodontics, periodontics, and dentoalveolar surgery. Although a DMD degree allows a dentist to practice in any area of dentistry, insurance companies require board certification for reimbursement at specialty-practice rates.

The NYU-Hungarian Connection

In addition to finding the experience of visiting modern, democratic Hungary very personally rewarding, I was also on a professional mission to explore the potential benefits of a collaboration between NYUCD and SU. One of the most compelling reasons for choosing that path is that Hungary offers the opportunity to see and treat a significantly larger population of oral cancer patients than one sees in the U.S.
Ironically, while NYUCD is the leader in fostering oral cancer awareness and prevention in the U.S., the lower incidence of oral cancer in our nation means that there is less opportunity to teach our student population as much as we would like them to learn about the disease. In Hungary, however, an unfortunately large segment of the population is at risk for developing oral cancer due to heavy use of alcohol and tobacco. Therefore, NYUCD students, residents, and faculty would benefit greatly from a connection with SU that would expose them to a dental education program that focuses more on oral diagnosis, oral pathology, and oral surgery because of the specific needs of a population with a higher incidence of oral cancer. Indeed, I believe that a “Hungarian Connection” offers a unique opportunity for NYUCD to expand its national oral cancer awareness and prevention campaign to the international level. And what better training ground for our student body than exposure to different cultures, patient populations, and clinical experience? This is particularly true when it can take place in such a pleasant European city as Budapest, with its well-deserved reputation for warm hospitality and great food.
New Initiative Will Allow Indian Dental Students to Complete Their Clinical Requirements at NYUCD

Sathya Kallur, DDS
Clinical Assistant Professor of Endodontics and of Implant Dentistry

After earning a dental degree and a certificate in oral surgery in Bangalore, India, Dr. Sathya Kallur went on to receive a DDS degree from NYUCD (1999), followed by a fellowship in implant dentistry (2000), and a certificate from the Advanced Education Program in Endodontics (2002). In addition to teaching at NYUCD, Dr. Kallur, who practices privately in New York City, is a director of The Dental Forum/NYUCD Global Partners in Dental Education, an organization which he cofounded to create opportunities for student and faculty exchanges between NYUCD and dental schools in India. In March, he joined Associate Dean for Development and International Programs Dr. Stuart M. Hirsch on a trip to India to forge a new cross-cultural initiative that will enable Indian dental students to complete their clinical requirements at NYUCD.
Although dental care remains a luxury for much of India’s vast population, the market for dentistry is expanding as a result of a strengthening economy and an increase in the country’s middle class in major cities such as Bangalore. To prepare themselves to respond to growing consumer healthcare needs and expectations within this population, many Indian dental students seek to add educational experiences that are unique to U.S. dental schools, especially the hands-on clinical training for which NYUCD is well known.

For some time I have been impressed by the desire of friends who work as faculty and administrators at Indian dental schools to find a way to allow these students to complete their fifth and final year of studies – when they are required to train in a clinic or hospital – at NYUCD. Accordingly, I approached Associate Dean Hirsch, who was very receptive to the idea, and we soon began discussions with Dr. K. Bali, the head of India’s dental accreditation organization, the Dental Council. In March, we traveled to Delhi to finalize the details of this initiative, which, beginning in fall 2005, will offer Indian dental students the opportunity to come to NYUCD for added training in general dentistry in fulfillment of their fifth-year clinical requirements. Because of their experiences in treating a diverse patient population under the guidance of world-renowned faculty, these students will graduate with added skill and confidence in practicing general dentistry.

NYUCD has a thriving distance-learning program for Indian dental students, who have already participated in three live, interactive dental video-conferences broadcast from NYUCD. And in December 2004, The Dental Forum/NYUCD Global Partners in Dental Education initiative will sponsor a program on rotary endodontics to be presented by Dr. Kallur at a Dental Forum site in Bangalore.
Using a sophisticated new electrodynamic instrument that simulates the grinding and chewing of teeth, two Brazilian researchers are studying experimental composite materials at NYUCD in an initiative made possible by Dr. Van P. Thompson, Professor and Chairman of the Department of Biomaterials and Biomimetics and Acting Chairman of the Department of Cariology and Operative Dentistry, and Dr. Dianne Rekow, Professor of Basic Science and Craniofacial Biology and of Orthodontics and Director of Translational Research. Drs. Thompson and Rekow have nurtured a close relationship with Brazilian dental educators for several years, including traveling to Brazil to lecture on materials research at the University of Bauru School of Dentistry and encouraging their Brazilian colleagues to identify students to come to NYUCD to conduct research using equipment that is not yet available in Brazil.

Currently, two Brazilian postdoctoral students, Dr. Nelson da Silva, from Bauru School of Dentistry, and Dr. Grace Mendonca Dias de Souza, from the State University of Campinas Piracicaba School of Dentistry, both in Sao Paulo, are conducting research at NYUCD. Dr. da Silva is assisting Dr. Rekow and Dr. Thompson with research on the performance and properties of machinable brittle ceramic materials in a collaborative study with Dr. Ricardo Marins de Carvalho, an Assistant Professor of Operative Dentistry at Bauru School of Dentistry, and Dr. Maria Fidela de Lima Navarro, the Dean and a Distinguished Professor of Operative Dentistry at Bauru School of Dentistry.

Drs. Grace Mendonca Dias de Souza is working on her PhD dissertation on polymerization’s impact on composite restorations in a project overseen by Dr. Thompson and Dr. Mario Fernando de Goes, Piracicaba School of Dentistry’s Vice Dean and a Distinguished Professor of Restorative Dentistry.
Influenced by increasing political and economic integration within the European Union, European dental hygiene educators are seeking ways to bridge various nations’ approaches to teaching the subject. According to Ms. Su-yan Barrow, a Clinical Associate Professor of Dental Hygiene, NYUCD, the world’s most international academic dental center can learn from these efforts to narrow cultural differences in teaching methodologies. Professor Barrow joined dental hygiene educators from half a dozen European countries last March for an educational symposium in Amsterdam, where she presented seminars on advances in U.S. technology for detecting calculus and coronal tooth decay to participants from Sweden, Italy, Portugal, Denmark, Finland, and Slovakia.

Professor Barrow explained that relaxed travel restrictions within the European Union have contributed to growth in the number of dental hygiene exchange students and to debates about the need to standardize certain educational requirements. For example, some European schools require students simply to complete a treatment plan for their patients, while others require a more in-depth report that engages students in critical thinking about outcomes, such as changes in a patient’s oral health habits. She noted that NYUCD is considering mandating in-depth treatment summaries as well.

“While we have valuable educational perspectives to offer to our international friends, with so many international students coming to NYUCD, we also need to closely watch what happens in Europe and elsewhere around the world.”

NYUCD was visited recently by Doctor Augustine Mahiga, UN Ambassador, Tanzania, and some of his colleagues. For the past several years, NYUCD has conducted outreach to Tanzania to establish a dental clinic.

Front row, L-R: Hon. Abeid Mwinimisa, District Commissioner, Songea, Tanzania; Hon. Ambassador Dr. Augustine Mahiga; Hon. Bertha Mende, District Commissioner, Tanzania; and Dr. Mitchell Pines, NYUCD.

Back row, L-R: Dr. Girish Shah, NYUCD; Ms. Shareen Mani, Henry Schein Inc.; Jason Horn ’05; Brent Stanley ’05; Erica Barba ’05; Daniel Kang ’05; Dr. Anthony Vernillo, NYUCD, Coordinator, Miracle Corners of the World (MCW) Dental Outreach Program; Ogo Sow, journalist; and Eddie Bergman, cofounder, Miracle Corners of the World.
The New York City Council, led by Speaker Gifford Miller, has awarded two new grants to NYUCD: a grant of $1.75 million for replacement and upgrading of equipment in the NYU Dental Clinics and a grant of $268,000 in support for the NYU Smiling Faces, Going Places mobile dental care program. The grants will expand access to care for those in need both at the NYU Dental Clinics and in underserved districts throughout the city.

Dean Alfano praised the City Council’s action, saying, “The New York City Council understands the urgency of our need to renovate NYUCD’s treatment facilities in order to preserve quality, affordable care for poor and low-income New Yorkers. While we are raising some of this money privately, we cannot raise it all. In addition, the fact that the City Council increased their support for our van program from $100,000 last year to the current grant of $268,000 reflects their recognition of the importance of providing additional care for the many New York City youngsters in need.”

Added Dean Alfano, “We are extremely grateful to Speaker Miller and the members of the New York City Council for their strong show of support for NYUCD, and we look forward to a new year of working together to reduce the number of New Yorkers who do not have access to essential oral health care.”
The Starr Foundation, one of the most respected philanthropies in the world, has awarded a grant of $500,000 to NYUCD in support of the Smiling Faces, Going Places mobile dental care program to bring care to underserved children throughout New York City and State for the next two years. An additional grant of $250,000 has been awarded by New York State, marking the fourth consecutive year that both The Starr Foundation and New York State have provided major funding to improve the health and well-being of New York’s neediest youngsters through the provision of mobile dental care.

Commenting on the grants, Dean Alfano said, “These very generous grants from New York State and The Starr Foundation demonstrate strong belief in the Smiling Faces, Going Places program’s goals and reaffirm the importance of the public-private partnership in maintaining and expanding New York’s healthcare safety net. We express profound gratitude to the officers and trustees of The Starr Foundation and to New York State Assembly Speaker Sheldon Silver and the New York State Legislature.”

“These very generous grants from New York State and The Starr Foundation demonstrate strong belief in the Smiling Faces, Going Places program’s goals and reaffirm the importance of the public-private partnership in maintaining and expanding New York’s healthcare safety net.”
Imagine if a terrorist strike, natural disaster, or other public health crisis were to overwhelm the capabilities of the very physicians we depend on to treat casualties during a catastrophe. The U.S. Department of Homeland Security, which is responsible for coordinating the federal government’s response to terrorist attacks, currently has only limited contingency plans in place for having other healthcare practitioners step in to help treat the anticipated surge in casualties. But Homeland Security has now taken the first step toward developing a comprehensive plan by awarding NYU a $2.68 million grant to examine how best to prepare additional first responders for a disaster, using NYU dentists as the primary test group. The NYU School of Medicine (SOM) and NYU College of Dentistry (NYUCD) are jointly administering this two-year grant under the direction of principal investigator Dr. Martin J. Blaser, Frederick H. King Professor of Internal Medicine, Chairman, Department of Medicine, and Professor of Microbiology at SOM. Dr. Walter J. Psoter, an Assistant Professor of Epidemiology and Health Promotion at NYUCD, is a coprincipal investigator, as is Dr. Marc M. Triola, the Associate Director of SOM’s Center for Health Information Preparedness (CHIP). Dr. Neal Steigbigel, the Director of CHIP, is also an investigator.

“Most dental procedures do not deal with life-threatening conditions, so dentists can be quickly mobilized in an emergency,” says Dr. Blaser. Adds Dr. Michael C. Alfano, Dean of NYUCD: “We know that with some additional training, dentists could become skilled at recognizing the signs and symptoms of chemical, radiological, and biological attacks, and assist in triage, as they do in the military.”

Under the grant, SOM faculty members will prepare dentists for the medical responses to chemical, biological, and radiological injuries, said Dr. Psoter. Dentists will also be taught advanced
life-support skills to supplement their basic cardiopulmonary resuscitation training. To help address the urgent need for authoritative information in an emergency, the task force will also train dentists to act as a public health information resource. Finally, a model dental continuing education curriculum encompassing these training principles will be developed.

Working under the aegis of NYU’s Center for Catastrophe Preparedness and Response (CCPR), physicians, dentists, and public health experts will conduct mock terror disaster drills, train dentists to administer vaccines and treat bioterrorism-related injuries, and instruct dentists in triage (the process for prioritizing injured people into groups based on their treatment needs). Up to 15 NYUCD faculty members will train as a test group in a plan that could eventually become a model for training dentists nationwide.

CCPR will integrate recommendations from the trial into a broader plan that it will submit to Homeland Security and local government agencies outlining how healthcare practitioners, fire, police, and other emergency personnel can better coordinate their efforts. Podiatrists, veterinarians, and pharmacists are among the other healthcare practitioners who might use the dental model for their own preparedness plans.

The grant comes at a time when dental schools, led by NYUCD, are beginning to incorporate terrorism preparedness training into their predoctoral curricula. In fall 2003, NYUCD became the first dental school in the United States to implement a full, four-year terrorism preparedness training curriculum that all dental students must complete to graduate.

Dr. Psoter, who has dedicated much of his career to serving communities with unmet dental needs, says, “Becoming involved in terrorism preparedness is another way of helping those in need. It gets dentists involved in their community’s broader health.”
A major gift from Dr. and Mrs. Harold Litvak and their friends and colleagues will create the Harold and Sheila Litvak Prosthodontics Wing at NYUCD. The Litvak Prosthodontics Wing will be housed in the Graduate Center for Clinical Excellence (GCCE), which will consist of four full floors designed to enhance interaction and synergy among the various specialties. In addition to prosthodontics, the GCCE will include endodontics, oral and maxillofacial surgery, orthodontics, pediatric dentistry, and periodontics.

“The Harold and Sheila Litvak Prosthodontics Wing recognizes Dr. Litvak’s over 35 years of professional excellence, leadership, and generosity” said Dean Alfano. “Dr. Litvak is dedicated to postdoctoral education and has taught, influenced, and inspired legions of NYU prosthodontics specialty program graduates. Indeed, the name Harold Litvak is synonymous with excellence in prosthodontics. With the creation of this new facility, NYUCD has an enormous opportunity to further advance prosthodontics education, research, and patient care.”

Dr. Litvak, a Clinical Professor of Prosthodontics and a Diplomate of the American Board of Prosthodontics, is an international authority in prosthodontics and occlusion and a past-president of The Greater New York Academy of Prosthodontics and the Northeastern Gnathological Society, and a recipient of the 2004 Greater New York Academy of Prosthodontics Foundation Distinguished Lecturer Award and the 2001 American College of Prosthodontists President’s Award, among many other honors.

For information about gift opportunities to help speed construction of the Dr. Harold and Sheila Litvak Prosthodontics Wing, please contact Dr. Jonathan Ferencz, Co-Chair of the NYU Graduate Center for Prosthodontics Excellence Clinical Fund, at 212-557-1300, or at jferencz@nycpros.com.

“Dr. Litvak is dedicated to postdoctoral education and has taught, influenced, and inspired legions of NYU prosthodontics specialty program graduates.”
In recognition of a major gift from Dr. Stanley N. Turetzky, ’62, Assistant Professor of Diagnostic Science and Urgent Care and Director of Emergency Services, NYUCD will name the Emergency Area in his honor.

Dr. Turetzky has supervised NYUCD’s Emergency Area for many years and knows first-hand its importance to the more than 26,000 New Yorkers who use it annually, many of whom have nowhere else to turn in a dental emergency.

“Without NYUCD, I wouldn’t be where I am,” said Dr. Turetzky. “It’s the reason I’ve been able to live a wonderful life, and it’s a privilege for me to give something back to my alma mater in return for all it has given me.”

“Stan Turetzky is a true champion of urgent care for New Yorkers,” said Dean Alfano. “People come to NYUCD for treatment for acute pain and suffering, much of it free of charge because they are unable to pay for care, are the working poor with no insurance, or are ineligible for Medicaid. With Stan at the helm of this clinic, we are assured that the NYUCD philosophy of never turning away a person in pain is carried out. Stan’s gift also reflects his pride in his alma mater and his conviction that we are moving in the right direction.”

Dr. Francis J. Murphy, Class of 1972, has made a gift of $100,000 in support of NYUCD’s “Transformations” campaign, which aims to transform the way dentistry is taught, practiced, and advanced.

“NYUCD is the school that launched my career,” said Dr. Murphy. “I feel indebted to NYUCD and I want to do as much as I can to help this great institution advance. I am delighted that I can do this by supporting Dean Alfano’s campaign to strengthen NYUCD’s student and faculty body, upgrade our academic programs and facilities, and globalize our resources. I see my gift both as an investment in NYUCD’s future and in the value of my diploma. There’s no question that NYUCD is a “hot” school today, and I feel privileged to be able to advance its aims.”

“From the time I became Dean in 1998,” said Dean Alfano, “Francis Murphy has been both a leader in the profession and a staunch supporter of his alma mater. By making such a wonderful gift, he has gone far beyond his loyalty of more than 30 years.”
The Magic of Planned Giving:  
Looking for High Interest Rates? Try the NYU Charitable Gift Annuity

In these days of low market interest rates, you can get a higher income with the NYU Charitable Gift Annuity – and make a gift to the College of Dentistry.

For a gift of as little as $5,000, the University will pay you a high fixed annual income. The income will be paid to you – and/or another person you designate – for life, after which the College will use the remaining gift assets for the purpose you specify. Your income is secure, backed by the assets of NYU, and it will be paid at an attractive rate, particularly if you compare it to what CDs and bonds are paying these days.

A charitable gift annuity is a tax-wise strategy, too. You obtain an income tax deduction, and if you make your gift with appreciated stock, you avoid up-front capital gains tax. And you will recognize advantageous tax treatment when you receive your gift annuity income in the years ahead.

The NYU Charitable Gift Annuity can help you accomplish personal and family financial objectives. Your gift can pay income to you alone, or to your spouse or another individual as well. Your income can begin immediately or at a specified date in the future, such as your retirement. It’s rewarding, tax-wise and simple, and it adds up to an intelligent investment for you and the College of Dentistry.

HOW HIGH ARE THE NYU GIFT ANNUITY RATES?

NYU pays gift annuity income at a rate determined by the age of the income beneficiary at the time the gift is made. The following chart illustrates our rates for annuities that pay income to one person for life, with payments beginning immediately.

It’s simple to increase your income through the NYU Charitable Gift Annuity. For illustrations of income and tax advantages, please call us at 212-998-6960 or email us at gift.planning@nyu.edu.

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A generous gift from Dr. Gerry Curatola, Class of 1983, and his wife, Georgia, will name the nurses’ station in the Bluestone Center for Clinical Research. The nurses’ station provides personnel and equipment to monitor the well-being of patients participating in clinical studies.

“I am extremely proud of the direction in which NYUCD is moving under Mike Alfano’s leadership,” said Dr. Curatola. “In fact, I have never been prouder of my alma mater. My gift is a token of that pride and, I hope, an example for other alumni who want to show their support for the vibrant educational, patient care, and research environment that exists today at NYUCD.”

In thanking Dr. Curatola for his gift, Dean Alfano said: “Gerry Curatola came back to NYUCD, saw the transformed college we have created together, and decided to become a part of it. By naming the nurses’ station, he is demonstrating his commitment to NYUCD’s future as a research-intensive institution.”
NYUCD in the News
A sampling of recent media coverage of NYUCD:

**ABC-7 Eyewitness News**
meteorologist Sam Champion interviewed Dr. Ross Kerr, Assistant Professor of Oral Medicine and Director of Special Patient Care and Hospital Dentistry, about a patient whose early stage oral cancer was identified during an oral cancer screening at NYUCD. The story was broadcast in conjunction with a series of ABC-7 announcements promoting the Oral Cancer Consortium’s annual free screening day at NYUCD and other area healthcare institutions.

**ABC-7** also interviewed Dr. Andrew B. Schenkel, a Clinical Assistant Professor of Implant Dentistry, about the Diagnodent® early caries detection system.

**WNBC-TV** Health and Science Editor Dr. Max Gomez interviewed Clinical Professor of Pediatric Dentistry Dr. Neal Herman about a partial denture made at NYUCD for an eight-year-old girl who was missing six of her baby teeth and was not developing her permanent teeth.

**WNBC-TV** also interviewed Dr. Robert S. Glickman, Professor and Chairman of the Dr. Anthony S. Mecca Department of Oral and Maxillofacial Surgery, about the dangers of tongue-splitting.

**National Geographic Channel’s “Mummy Road Show”** ran an acknowledgment of Dr. Andrew I. Spielman, Associate Dean for Academic Affairs, citing his expertise in helping to determine that oral cancer may have contributed to the death of a 16th century monk – the mummy – whose remains were discovered in South America.

**Telemundo** broadcast an interview with Dr. Gustavo D. Cruz, Assistant Professor of Epidemiology & Health Promotion and Director of Public Health and Health Promotion, on the under-representation of Hispanics in dentistry.

**FOX-TV** interviewed Assistant Professor of Epidemiology and Health Promotion Dr. Stephanie Russell on tooth decay prevention.

**The New Yorker** reported Assistant Professor of General Dentistry and Management Science Dr. Kenneth L. Allen’s finding that chewing gum and CDs may help students master dental anatomy. The story also ran in The National Education Association’s publication, NEA Today, and in the Vancouver Sun, the Ottawa Sun, and several other Canadian newspapers, including the National Post, Calgary Herald, and Edmonton Journal.

**The Wall Street Journal** quoted Dr. Dennis P. Tarnow, Professor and Chairman of the Dr. Arthur Ashman Department of Implant Dentistry, in an article about poor aesthetic dental results.
Elle magazine featured Dr. Dennis Tarlow and Dr. Larry Rosenthal, ’72, in an article on aesthetic dentistry.

HealthNewsDigest.com quoted Dr. Ngozi N. Etufugh, a Clinical Assistant Professor of Oral and Maxillofacial Surgery, in a feature on oral lichen planus. CNN Money also ran the story.

AGD Impact quoted Dean Alfano in an article describing how changes in dental education affect general dental practice.

ADA News reported on NYUCD’s commemoration of the 2004 Give Kids a Smile Day. The New York State Dental Journal also ran the story.

The New York State Dental Journal (NYSDJ) reported that Dr. Racquel Z. LeGeros, Professor of Biomaterials and Biomimetics, and Leonard I. Linkow, Professor of Implant Dentistry, received $2 million in NIH funding for osteoporosis research. The NYSDJ also reported that Dr. John Evans, Associate Professor of Basic Science and Craniofacial Biology at NYUCD and of Chemistry at NYU’s Graduate School of Arts and Science, has received three federal nanotechnology grants totaling $795,000.

The New York Amsterdam News reported that NYUCD has established a four-year scholarship to increase minority representation in dentistry in the name of Gerald W. Deas, MD. The New York State Dental Journal also carried the story.

Black Issues in Higher Education and Latin Long Island reported that the NIDCR has awarded NYUCD a $100,000 grant to establish an intensive research training program for minority pre-doctoral dental students from NYU, Howard University, Tuskegee University, and the University of Puerto Rico.

Dallas-Forth Worth Doctor of Dentistry quoted Dean Alfano in an article about the importance of oral cancer screening and treatment.

The Villager ran a profile of Dr. Dianne Rekow, Professor of Basic Science and Craniofacial Biology and Orthodontics and Director of Translational Research, which focused on her role in training dental and medical students, dentists, and other healthcare providers to play a role in national bioterrorism preparedness. The Villager also ran a story on street artist Tom Matt, who cited his painting of the exterior of NYUCD as one of his favorite pieces.

Woman’s World cited NYUCD in a story about fighting bad breath.

Dental Economics published an article describing NYUCD’s new partnership with The Levin Group, a leading U.S. practice management consulting firm (see related story, page 44). Registered Dental Hygienist also ran the story.

The Chicago Tribune quoted Dr. Timothy Bromage, Adjunct Professor of Biomaterials and Biomimetics and of Basic Science and Craniofacial Biology, in an article about the connection between dietary changes and human jaw evolution. The Sacramento Bee also ran the article.

Penthouse quoted Dr. Jeffrey Gurian, Clinical Assistant Professor of Diagnostic Science and Urgent Care, in an article about oral hygiene’s impact on sexual attractiveness.
The NYU Distinguished Teaching Award, a gold medal which recognizes faculty members who have contributed significantly to the intellectual life of the university through their teaching, was presented to Dr. Dennis P. Tarnow at the University’s annual Founders Day Convocation in April. Dr. Tarnow was one of only five NYU faculty members to receive the award. The Distinguished Teaching Award is NYU’s highest honor for teaching, a distinction attained only by the finest teachers. It affirms the University’s commitment to teaching and to fostering a positive learning environment at NYU.

Dr. Tarnow, Professor and Chairman of the Dr. Arthur Ashman Department of Implant Dentistry, has been a member of the NYU dental faculty for 27 years. His contributions to the field of implant dentistry and his leadership in introducing innovative implant concepts at NYUCD have revolutionized the way practitioners, students, and patients view this technique.

In his letter nominating Dr. Tarnow for the Distinguished Teaching Award, Dean Alfano wrote, “Dennis Tarnow understands that the secret to success in dentistry is the effective delivery of quality treatment with compassion, caring, expertise and respect for the patient. Dennis is a man of incredible knowledge and skill, but also a man who values, instills in his students, and models the professionalism so necessary for those who pursue careers in healthcare.”

NYUCD congratulates Dr. Tarnow on receiving this wonderful, well-deserved award in tribute to a master of the art of teaching.
Ms. Tamu Al-Islam

Awarded University’s Highest Administrative Honor

Ms. Tamu Al-Islam, Director of Human Resources and Administrative Services, has received the prestigious 2003-2004 Distinguished Administrator Award presented by New York University in recognition of outstanding achievements as an administrator and dedicated service to faculty, students, and staff. The award is a special acknowledgment of the value NYU places on administrative excellence, and a way of formally honoring the significant contributions of administrative and professional staff. It was presented to Ms. Al-Islam at a dinner in April hosted by NYU President John Sexton.

A member of the NYU community for the past 18 years, Ms. Al-Islam joined NYUCD in 1999 after serving as Director of Human Resources at NYU’s Tisch School of the Arts. At NYUCD she is responsible for overseeing operations and establishing goals and objectives for the Offices of Human Resources, Faculty Services, Media Services, and Administrative Services.

Noting that only six individuals received this University-wide recognition, Dean Alfano said, “The Distinguished Administrator Award brings great honor to NYUCD as well as to Tamu, who has redefined her position from one dealing primarily with the mechanics of recruiting, appointments, benefits, and disciplinary actions, to one in which she actively reaches out to our community to make employees feel more valued and our institution more effective. One fine example is the way in which she served as the first administrator to chair the Faculty-Staff Development Center (FSDC). In its early days, faculty members dominated the FSDC’s activities, and administrators and staff believed they were not getting a fair return on its resources. Tamu has worked diligently to give administrators and staff a more active role in programming, and has accomplished this with the full support of the faculty. This was achieved because Tamu is not viewed as an administrator, but as a peer, an advocate, and a resource by faculty, staff, and administrators alike.”
The first newsletter for and about NYUCD’s part-time faculty debuted this spring under the direction of Dr. Robert Allan Danti, founding chairman of the Part-Time Faculty Dean’s Advisory Committee and a Clinical Associate Professor of General Dentistry and Management Science. Part-Time Dent Fac News, to be published quarterly, showcases the key role that part-time faculty play in moving NYUCD forward.

Designed to demonstrate respect for our part-time faculty, the newsletter is one of a series of initiatives that have followed from the establishment, three years ago, of NYUCD’s first formally constituted Part-Time Faculty Dean’s Advisory Committee. In addition to fostering the development of the newsletter, the Part-Time Faculty Advisory Committee’s accomplishments include gaining a seat on the Executive Management Council; representation on all NYUCD committees, except those with full-time membership only as defined in the University Bylaws; full participation in the longer-term service awards ceremony; a new, hi-tech faculty lounge; redefinition of the Part-Time Faculty Appointments and Promotions Committee, with a part-time faculty member as chair; and introduction of part-time faculty receptions and other social events, among other new benefits.

“Bob Danti has been the driving force and inspiration behind all of these initiatives,” said Dean Alfano. “When we first spoke about the need to increase our focus on the important contributions of part-time faculty, Bob outlined various strategic priorities, and he made sure that they were achieved. He deserves great credit for increasing part-time faculty recognition and representation. We congratulate him on completing an extremely successful term as founding chairman of the Part-Time Faculty Dean’s Advisory Committee and founding editor of Part-Time Dent Fac News.”

Part-Time Faculty Newsletter Debuts

Thank You, Dr. Danti

NYUCD owes Dr. Bob Danti a debt of gratitude for inspiring, compiling, and realizing the College’s first newsletter for and about part-time faculty.
Dr. Dianne Rekow to Become President of the American Association for Dental Research

Technology Transfer Expert
Also Named NYU Provostial Fellow

Dr. Dianne Rekow, Professor of Basic Science and Craniofacial Biology and of Orthodontics, Director of Translational Research, and Chairman of the Bioterrorism and Catastrophe Response Task Force, has been elected Vice President of the American Association for Dental Research (AADR).

Having been elected Vice President, Dr. Rekow will automatically move through the AADR offices of President Elect, President, and Immediate Past President.

Dr. Rekow’s objective in her current and future AADR leadership roles is to capitalize on the creativity of researchers from multiple disciplines to develop approaches that will optimize collaborations, reenergize connections between research groups, and expand the dynamics of the AADR to match the needs of science and the membership.

Dr. Rekow also has been named a Provostial Fellow at NYU, an appointment which recognizes her expertise in technology transfer. As a Provostial Fellow, Dr. Rekow will spend time in the University’s Office of Industrial Liaison, located at the NYU Medical Center, where she will work with that office building relationships with outside agencies to encourage inventions and product development. Dr. Rekow will also be working at Washington Square on intellectual property matters and special projects with NYU’s new Vice Provost for Research Dr. Pierre Hohenberg. Her aim is to use the knowledge she gains to build teams from the College of Dentistry and the University-at-large to promote innovation.
After clearing off plates piled high with fettuccine at Monte’s restaurant in Greenwich Village, one evening a dozen NYU CD students were ready to answer some tough questions from their dinner host, Dr. Ralph Katz, Professor and Chairman of the Department of Epidemiology & Health Promotion.

“How do you rate the food?” Dr. Katz asked. “10,” came the unanimous reply.

But the students were less enthusiastic about a scientific study that they had gathered to discuss over dinner. They awarded the research a seven.

The occasion was the monthly dinner of the Spaghetti and Science Society, a group Dr. Katz founded in 2003 to provide extra helpings of science for students who hunger for more discussion than is possible in the classroom.

The dinners, which have become a forum to debate controversial research and public health issues, are open on a first-come, first-served basis to six second- and third-year DDS students from Dr. Katz’s health promotion classes, and six students from the Master’s and certificate programs in clinical research.

Dinner conversation quickly shifted from Parmesan cheese to protocols and p values when Dr. Katz asked the students their views on the methodology of a 1997 study published in the journal Epidemiology, which found that ethylene glycol ethers, a group of organic solvents widely used in the manufacturing of computer chips and other electronic components, may cause female subfertility and increase the waiting time to become pregnant. The retrospective study of 173 female workers in a Taiwanese wafer manufacturing facility relied on safety records, personnel records, and job histories from questionnaires.

“I think the study was limited because the researchers didn’t clearly establish if exposure to the toxic chemicals occurred before pregnancy,” said second-year student Beth Schoeler.

But another class of ’06 student, Bhavini Paraflaveni, disagreed: “I don’t think there’s

Giovanni of Monte’s Restaurant in Greenwich Village welcomes Society members.
any question the pregnancies occurred after exposure; if you look at the “Methods” section of the article, you’ll see the researchers included only women who conceived at least three months after their employment began.”

The conversation stopped briefly as a waiter doled out simmering meatballs.

Then, Dr. Katz added his insight:

“This study is valuable to anyone studying occupational safety and toxic chemicals because the researchers rated a lot of variables and presented issues that could lead to larger, more definitive studies. The fact is, you usually have to start building the case for a large and expensive study by doing a small, relatively inexpensive one like this first.”

While differing on the research, the students all agreed that the dinner stimulated their appetite for debate.

Said second-year student Sumeet Saxena: “While something about lecture halls makes me sleepy, I have no problem staying awake in an Italian restaurant.”

“This discussion has taught me how to critically read a research article,” Ms. Paraflaveni added.

Concluded Ms. Schoeler: “If you don’t use it, you lose it; these dinners encourage us to practice what we learned in class.”
It was an unusual request. Dr. Ralph V. Katz, Professor and Chair of the Department of Epidemiology & Health Promotion, stepped in front of three dozen seventh grade students at Manhattan’s Jonas Salk School of Science and said:

“My friends, please support my plan to put wind-generating turbines in your community, and keep one thing in mind: wind is a clean and reliable energy source – not the noisy, inefficient system that some people say it is.”

He stepped back for a moment and added: “This is just an imaginary scenario. But how would you react if your community were really debating the pros and cons of wind energy?”

Dr. Katz, his wife, Barbara Frey – a librarian who has extensively researched renewable energy – and seven NYU dental students were staging a mock town hall meeting on wind energy for the Salk School students, based on a real-world debate occurring in many communities across the United States and Europe. Government officials in some localities have sought to install the turbines in order to comply with regulations mandating the use of renewable energy sources, and Dr. Katz and Ms. Frey witnessed such a debate in Devon in southwest England, where they have a cottage. Dr. Katz and Ms. Frey thought that staging a similar debate at the Salk School would help the youngsters to evaluate and take an active role in public discussions of controversial scientific issues.

Founded nine years ago as a partnership between New York City Public School District 2 and the NYU School of Medicine (SOM), the Salk School specializes in training students in grades six to eight as part of SOM’s Programs for Preparatory Education in Science and Medicine, which support students who are underrepresented in these fields from middle school through their senior year of college. Committed to excellence and equity, Salk offers all students the opportunity to reach the high academic standards necessary for
for the challenges of the 21st century. NYU dental students first volunteered at Salk two years ago, when they helped Salk students prepare presentations for a science health fair at the school, located on East 20th Street, just four blocks from the NYU College of Dentistry.

“The partnership has blossomed because dental students have a solid understanding of health and biomedical issues and the ability to think through and critically evaluate scientific information,” Salk School coordinator Lisa Kozlowski says.

In the mock town hall meeting, Dr. Katz played the role of a government official sent to a small Devon town to extol wind energy’s benefits.

“As a member of the European Union, England must have 10 percent of its energy coming from non-fossil fuel sources by 2020,” he told the Salk class. “Wind provides a limitless source of renewable energy.”

The students got a different perspective from Daniel Javaheri, a senior dental student assuming the role of an engineer representing townspeople opposed to the turbines. “Wind turbines are not as efficient as conventional energy sources. If the wind speed is too low or too high, no electricity is produced.”

Added a local resident played by second-year dental student Nicole Datny: “I don’t want a 300-foot-high turbine next to my house. The constant thumping and whooshing would keep us on edge day and night. Let’s find a source of renewable energy that won’t damage our environment.”

Other dental students played a variety of pro and con roles. Among them: a local resident who wanted to profit by selling land to the turbine company and another who feared that a turbine next door would drive down his property values.

The junior high students then broke up into discussion groups to review the arguments and formulate their own positions.

Dr. Katz wrapped up the class with a homework assignment: “Think about all the viewpoints you heard, choose the one you like best, and write a letter from that person’s perspective to a local elected official in Devon.” That assignment gave the Salk students an opportunity to refine their views. The students were then presented with another imaginary scenario involving wind energy – this one closer to home, involving Westchester and Putnam, two neighboring counties in New York. They were asked to take sides in a classroom debate over a proposal to put a wind farm in Putnam, opposed by the Putnam residents but favored in Westchester as an alternative to Westchester’s controversial Indian Point nuclear plant. The dental team returned to judge that debate and to help the Salk students with the final part of their lesson in science and civics – a videotaped presentation in which they expressed their views on the Westchester-Putnam debate and a real-life proposal to build a wind farm in the waters off Jones Beach on Long Island.

“The Salk students learned that carefully evaluating science can be important to their communities’ well-being,” Dr. Katz concluded. Added Ms. Kozlowski: “Students gathered conflicting information, established their points of view, and learned how to present it to others.”
City Harvest Volunteer Dr. Denise Murphy

Helps Feed Hungry New Yorkers

Each week Dr. Denise C. Murphy, Clinical Associate Professor of General Dentistry and Management Science and Director of the Ergonomics Training Program, spends one lunch hour as a City Harvest “Street-Fleet” volunteer, helping New York’s only food rescue program fulfill its mission of creating a link between those who have too much food and those who have too little. “In the New York area,” says Dr. Murphy, “millions of pounds of good, edible food are thrown away each year by food businesses, while an estimated 1.5 million people go hungry.” Dr. Murphy’s weekly assignment is to pick up 15-20 pounds of baked goods at a Starbucks Coffee outlet at 23rd Street and Third Avenue; check to make sure that the food is still fresh; weigh it; and bring it to a homeless shelter two blocks away. “There are so many food businesses in the NYUCD area with excess food that could be donated,” she says. “And it only requires a one-hour commitment – one lunch hour – per week. I hope that others from our community will consider joining me.”

NEXUS Wins More Awards

Global Health Nexus has done it again. Three new awards, shown above, maintain the position of Global Health Nexus as the most honored dental school publication in the nation.

Dr. Murphy Honored with Bellevue’s Distinguished Alumna Award

Dr. Denise C. Murphy, a registered nurse, has received the 2004 Distinguished Alumna Award of The Bellevue Alumnae Association Center for Nursing. A 1966 graduate of the Bellevue School of Nursing, the oldest school of nursing in the country, Dr. Murphy is only the seventh recipient of the award. She was honored for her distinguished contributions to nursing at the global level and for her key role in raising more than $1 million for the Bellevue Alumnae Center for Nursing History.
Dr. David Moed, a second-year resident in the Jonathan and Maxine Ferencz Advanced Education Program in Prosthodontics, has become the sixth recipient of the annual Dr. Harold Litvak Junior Fellowship in Prosthodontics.

Dr. Moed earned his DDS degree in 2000 from the State University of New York (SUNY) Buffalo School of Dental Medicine and completed a general dentistry residency in 2002 at North Shore University Hospital in Manhasset, NY, where he served as Chief Resident. He plans to practice privately after completing his specialty training and expects to pursue a teaching career as well.

“My goal has been to become proficient in all aspects of restorative dentistry, including everything from planning treatment for complex cases to executing the most difficult of procedures. The NYUCD program has allowed me to become proficient in all aspects of restorative dentistry,” said Dr. Moed. “I now have the diagnostic and clinical ability to face the most difficult and challenging cases that a dentist may come across in his or her career.”

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. 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.
Sixty-three full- and part-time faculty members were honored last spring at NYUCD’s annual Longer-Term Awards Program, which recognizes individuals for a job well done over an extended period of time. “These people have displayed exemplary dedication and play an important role in our continued success,” Dean Alfano said. “We are tremendously grateful to them and salute their commitment to dental education.”

**35-Year Service Award**
Oral & Maxillofacial Surgery
Dr. Alfred H. Schwartz

Prosthodontics
Dr. Harold Litvak

**30-Year Service Award**
Basic Science & Craniofacial Biology
Dr. Joseph B. Guttenplan
Dr. Gene C. Lavers
Dr. Harvey I. Wishe

Prosthodontics
Dr. Robert E. Wolfe

**25-Year Service Award**
Diagnostic Science & Urgent Care
Dr. Jack Goldstein

General Dentistry & Management Science
Dr. A. Milton Bell
Dr. Bapanaiah Penugonda
Dr. James Soberman

Oral Pathology
Dr. Anthony T. Vernillo

Orthodontics
Dr. Neal L. Kaplan

Periodontics
Dr. Kambiz Afshar Mohajer

Prosthodontics
Dr. Jay Steinberg
Dr. Farhad Vahidi
Dr. Ira D. Zinner

**15-Year Service Award**
Basic Science & Craniofacial Biology
Dr. Sally Frenkel
Dr. Andrew I. Spielman

Cariology & Operative Dentistry
Dr. Benjamin Godder
Dr. James T. LoPresti

Endodontics
Dr. Gregory Browne
Dr. Arthur Kubikian
Dr. Kenneth Liao
Dr. Martin Weiselberg

Hospital Dentistry
Dr. Ian M. Zlotolow

Implant Dentistry
Dr. Igor Gerzon
Dr. Lloyd M. Sara

Oral and Maxillofacial Surgery
Dr. Saul Bahn
Dr. Randal G. Wiston

**10-Year Service Award**
Basic Science & Craniofacial Biology
Dr. Stan B. Dawkins
Dr. Floyd L. Dussetschleger
Dr. Louis Ehrenkrantz
Dr. Kumar Shanmugam

Endodontics
Ms. Rina Napolitano
Ms. Lisa Stefanou

From left: Dr. Marvin Weiss, Dr. Murray Rose, Dr. Parviz Edalat, Dr. Jack Goldstein

Endodontics
Dr. Ignatius N. Quartararo

General Dentistry & Management Science
Dr. Thomas Bracco
Dr. Chih Chang Chung
Dr. Myles S. Held

Dr. Jan M. Levy
Dr. Arnold Rosenstock
Dr. Barry J. Stern
Dr. Herbert S. Westrich

Implant Dentistry
Dr. T. A. Bogart
Dr. Paula N. Small
Dr. Stephen S. Wallace

Orthodontics
Dr. Ana M. Munoz

Pediatric Dentistry
Dr. Gail E. Schupak

Periodontics
Dr. Julie K. Yip
Celebrating Our Community

Congratulations to:

DR. KATHLEEN L. AGOGLIA, ’87, Clinical Assistant Professor of Hospital Dentistry and a Major in the U.S. Army Dental Reserve, on participating in the U.S. Armed Forces Institute of Pathology to perform forensic identification of U.S. military killed in Iraq.

DR. MICHAEL C. ALFANO, Dean of NYUCD, on receiving the American Association for Dental Research’s Jack Hein Public Service Award, which recognizes NYUCD’s leadership in defining a role for dentistry in building national emergency preparedness, and the ADA Health Foundation’s Dr. Edward B. Shils Award for Social Entrepreneurship and the Public-Private Partnership, and on his election as an honorary fellow of the American Academy of Oral Medicine.

DR. KENNETH L. ALLEN, ’73, Assistant Professor of General Dentistry and Management Science, on coauthoring an article entitled “An Overview of the CEREC 3D CAD/CAM System,” for General Dentistry. Dr. Allen’s coauthors are Dr. Andrew B. Schenkel, Clinical Assistant Professor of Implant Dentistry, and Dr. Denise J. Estafan, Associate Professor and Director of Aesthetics, Department of General Dentistry and Management Science and Biomaterials and Biomimetics, and Director of Aesthetics. Dr. Allen also coauthored an article entitled “Clinical Simulation and Foundation Skills: An Integrated Multidisciplinary Approach to Teaching,” for the Journal of Dental Education, with Dr. Frederick G. More, Professor of Epidemiology & Health Promotion and of Pediatric Dentistry.

DR. STEPHEN J. CHU, Clinical Assistant Professor of Implant Dentistry and Director of the Advanced Education and International Study Programs in Aesthetic Dentistry, on authoring an article entitled “Use of Reflectance Spectrophotometer in Evaluating Shade Change Resulting from Tooth-Whitening Products,” for the Journal of Esthetic and Restorative Dentistry. Dr. Chu also coauthored an article entitled “Short Tooth Syndrome: Diagnosis, Etiology, and Treatment Management,” for CDA: The Journal of the California Dental Association.

DR. BRIAN CHADROFF, Clinical Associate Professor of Periodontics and of Implant Dentistry, on receiving a special citation from the American Academy of Periodontology for outstanding work on a special project, the Implant Dentistry Study Club Kit.
of Acculturation on Objective Measures of Oral Health in Haitian Immigrants in New York City,” for the Journal of Dental Research. Dr. Craig’s coauthors included Dr. Racquel Z. LeGeros, Leonard I. Linkow Professor of Implant Dentistry and Professor of Biomaterials and Biomimetics.

MS. LORYMAR CRUZ-SANCHEZ, Dental Hygiene Program Class of 2005 and a member of the Student American Dental Hygienist Association (SADHA), represented all dental hygiene students from New York, New Jersey, Connecticut, and Pennsylvania as a delegate to the SADHA national meeting in June 2004.

DR. RALPH P. CUNNINGHAM, ’72, Clinical Associate Professor of General Dentistry and Management Science, on coauthoring an article entitled “International Outreach Programs: Charity, Education, or Both?” for the Journal of Dental Education. Dr. Cunningham’s coauthors included Dr. Ivy Peltz, ’83, Clinical Assistant Professor of General Dentistry and Management Science; Dr. William J. Maloney, ’92, Instructor in General Dentistry and Management Science; and Dr. Eric Studley, ’85, Clinical Assistant Professor of General Dentistry and Management Science. Dr. Peltz is also the coauthor of an article entitled “Beauty Is a Joy Forever: The Benefits of Teaching Aesthetic Dentistry in a State-of-the-Art Aesthetic Center,” for the Journal of Dental Education. Dr. Peltz’s coauthors included Dr. Cunningham; Dr. Denise Estafan; and Dr. Maureen McAndrew, Clinical Assistant Professor of General Dentistry and Management Science.

DR. NANCY J. DOUGHERTY, Clinical Assistant Professor of Pediatric Dentistry, on becoming a Diplomate of the American Board of Special Care Dentistry.

DR. DENISE J. ESTAFAN, Associate Professor and Director of Aesthetics in the Department of General Dentistry and Management Science and of Biomaterials and Biomimetics, on coauthoring an article entitled “Eliminating Microleakage from the Composite Resin System,” for General Dentistry.

MS. JILL FERNANDEZ-WILSON, Clinical Associate Professor of Pediatric Dentistry, on coordinating
NYUCD’s 11th consecutive participation in the Special Olympic Special Smiles (S OSS) Summer Metro Games in Riverbank State Park. A group of 78 volunteer students, residents, faculty, and alumni provided oral health screenings, education, and referrals to 274 athletes at the June 2004 event.

**MS. WINNIE FURNARI,** Instructor in Dental Hygiene, will be among the 32 members of the New York City Medical Examiner’s Dental Identification Team who will be honored by the German Academy of Forensic Odonto-Stomatology in Mainz, Germany, in October 2004, for their contributions to forensic science through their work following the 2001 World Trade Center attacks. Also to be honored is Dr. James D. Hudson, Clinical Assistant Professor of General Dentistry and Management Science, and 17 NYUCD alumni: Dr. Kenneth Aschheim, ’81; Dr. Jeffrey R. Burkes, ’75; Dr. Kathleen Agoglia, ’87; Dr. Donald Aleksandravicius, ’77; Dr. Dorline Bosboom, ’81; Dr. Stephen Bove, ’75; Dr. Steven DeCrescenzo, ’83; Dr. John Demas, ’78; Dr. Henry Dondero, ’74; Dr. Howard Glazer, ’75; Dr. Mitchell Kirschbaum, ’74; Dr. Daniel Levitt, ’89; Dr. Richard Lewenson, ’72; Dr. Brian Margolis, ’88; Dr. Harvey Silverstein, ’75; Dr. Roy Sonkin, ’76; and Dr. Richard Weledniger, ’72.

**DR. DAVID L. GLOTZER,** ’58, Clinical Associate Professor of Cariology and Operative Dentistry, on coauthoring “Preparing for a Terrorist Event: A Scenario-Driven Approach,” for The New York State Dental Journal. Dr. Glotzer’s coauthors included Dr. Walter J. Psoter, ’79, Assistant Professor of Epidemiology and Health Promotion; and Dr. Dianne Rekow, Professor of Basic Science and Craniofacial Biology and of Orthodontics and Director of Translational Research

**DR. GARY R. GOLDSTEIN,** ’69, Professor of Prosthodontics, on being inducted as President of the American Prosthodontic Society and Vice President of the Academy of Prosthodontics, and on presenting the keynote address at the 2004 World Congress of Prosthodontics meeting in Delhi, India.

**DR. NEAL G. HERMAN,** ’72, Clinical Professor of Pediatric Dentistry, on becoming a Diplomate of the American Board of Special Care Dentistry, and on authoring an article entitled “Radiographic Oddities: Unusual Calcifications in the Dental Pulp,” for The New York State Dental Journal.

**MS. ANGELIE HYMAN,** Administrative Assistant in the Office of Development and Alumni Programs, on being invited to present a paper entitled “Makeover Mania: The Makeover Reality Show and the Democratization of Beauty in the Media” at the 2004 Annual Conference of the New York State Communication Association.
Celebrating Our Community continued

DR. ZIAD JALBOUT, Instructor in Implant Dentistry, and Dr. Gerard Tabourian, the 2003 Clinical Assistant Fellow in Implant Dentistry, on coediting a Glossary of Implant Dentistry, published jointly by the International Congress of Oral Implantologists and the Dr. Arthur Ashman Department of Implant Dentistry, with the assistance of Dr. Dennis P. Tarnow, Professor and Chairman of the Ashman Department of Implant Dentistry.

DR. TRACY E. KAMENS, Director of the Faculty & Staff Development Center (FSDC), on earning her doctorate in education.

DR. HARALD A. B. LINKE, Professor Emeritus of Basic Science (Microbiology), on coauthoring an article entitled “Microbiological Composition of Dental Plaque and Caries Experience in Minority Populations,” for the Deutsche Zahnarztliche Zeitschrift. Dr. Linke’s coauthors included: Dr. Esther O. Kuyinu ’94, Clinical Associate Professor of Prosthodontics; Dr. Bolaji O. Ogundare, ’98, Clinical Assistant Professor of Oral and Maxillofacial Surgery; Dr. Mohammed M. Imam, Clinical Assistant Professor of Oral and Maxillofacial Surgery; and Dr. Racquel Z. LeGeros, Leonard I. Linkow Professor of Implant Dentistry and Professor of Biomaterials and Biomimetics.

MS. EVA M. LUPOVICI, Clinical Associate Professor of Dental Hygiene and Director of the Dental Hygiene Clinic, on coauthoring an article entitled “Assessment of Postgraduate Periodontics and Dental Hygiene Programs Collaboration,” for the Journal of Dental Education. Professor Lupovici’s coauthors included Dr. Robert S. Schoor, Clinical Associate Professor of Periodontics and Director of the Advanced Education Program in Periodontics; Ms. Cheryl M. Westphal, Assistant Dean for Allied Health Programs and Clinical Associate Professor of Dental Hygiene; and Ms. Judith Kreismann, Clinical Associate Professor of Dental Hygiene.

DR. FREDERICK G. MORE, Professor of Epidemiology & Health Promotion and of Pediatric Dentistry, on coauthoring an article entitled “Strategies for Student Services for Lesbian, Gay, Bisexual, and Transgender Students in Dental Schools, for the Journal of Dental Education.

DR. ELLIOTT MOSKOWITZ, ’72, Clinical Professor of Orthodontics, on his appointment as Editor of The New York State Dental Journal.

DR. DENISE C. MURPHY, Clinical Associate Professor of General Dentistry and Management Science, on coauthoring an article entitled “Impact of Underreporting on the Management of Occupational Bloodborne Exposures in a Dental Teaching Environment,” for the Journal of Dental Education.

DR. MILTON PALAT, Associate Professor of Periodontics and Director of Predoctoral Periodontics, on presenting a lecture on periodontics and oral hygiene to members of the New York City Department of Design and Construction.

DR. DIANNE REKOW, Professor of Basic Science and Craniofacial Biology and of Orthodontics and Director of Translational Research, on authoring an article entitled “Informatics Challenges in Tissue
Engineering and Biomaterials,” for Advances in Dental Research.

**DR. PAUL A. ROSENBERG**, ’62, Professor and Chairman of the Quartararo Department of Endodontics and Associate Dean for Postgraduate Programs, on receiving the first annual Dr. George Feldman Award for Endodontic Excellence, presented by District II of the American Association of Endodontists.

**DR. JONATHAN A. SHIP**, Professor of Basic Science and Craniofacial Biology and of Oral Medicine and Director of the Bluestone Center for Clinical Research, on his promotion to Professor of Medicine at the NYU School of Medicine.

**MS. LIDIA S. SIMEONOVA**, ’05, on being awarded an American Association for Dental Research (AADR) Student Research Fellowship, sponsored by Colgate, for her project entitled “Cell-cell Recognition and Sorting in an In vitro Multistage Carcinogenesis Model for Oral Cancer.”

**DR. DAVID A. SIROIS**, Head of the Division of Reconstructive and Comprehensive Care and Associate Professor and Chairman of the Department of Oral Medicine, and Associate Professor and Acting Chairman of the Department of Diagnostic Science and Urgent Care, on co-editing *Nutrition and Oral Medicine*, the first textbook of its kind (Humana Press, 2004). Dr. Sirois also coauthored an article entitled “Sensory Responses from Loading of Implants: A Pilot Study,” for *The International Journal of Oral & Maxillofacial Implants.*

**DR. HAROLD I. SUSSMAN**, ’42, Clinical Associate Professor of Periodontics, on receiving a patent for an implant guide arrangement, a device designed to enable dentists to place implants accurately and correctly in the jawbone.

**DR. LOUIS TERRACIO**, Associate Dean for Research, on authoring an article entitled “Mechano-Electrical Properties of a Novel Collagen Tubular Scaffold Seeded with Neonatal Cardiomyocytes,” for *Circulation.*

**DR. FARHAD VAHIDI**, Associate Professor of Prosthodontics, on his appointment as the Director of the Jonathan and Maxine Ferencz Advanced Education Program in Prosthodontics. Dr. Vahidi had been serving as Acting Director of the program for the past year.

**DR. MEA A. WEINBERG**, Clinical Associate Professor of Periodontics, on authoring articles entitled “Helping Patients Understand Oral Cancer” and “New Applications of Doxycycline Hyclate in Medicine and Dentistry,” for *U.S. Pharmacist.*
Focus on Alumni

ALUMNI ASSOCIATION CELEBRATIONS
HONOR RECENT GRADUATES

Last spring the NYU Dental Alumni Association sponsored two of its largest events in recent years, hosting the Class of 2004 on a yacht cruise around Manhattan in May and reuniting graduates from the past five years with one another and their group practice directors at a young alumni BBQ and dance party in June.

SAVE-THE-DATE:
Alumni Association Meetings for 2004-2005

The NYUCD Alumni Association will meet on the following dates in 2004-2005:
JANUARY 12, 2005
MARCH 16, 2005

Meetings will be held in the Faculty Study, 345 East 24th Street, lobby level. Meetings will begin promptly at 6 pm, following light refreshments from 5:30 pm. Please call Patrick Minson at 212-998-9928 if you plan to attend.
Congratulations to:

30’s
DR. AARON A. MOSS, Class of 1933, on publishing The Moss Method: Self-Analysis for the Psychotherapist. Dr. Moss is also the author of Hypnosis in Medicine and Dentistry.

40’s
DR. LIONEL GOLD, Class of 1948, on being honored on his retirement for more than 20 years of distinguished service as Director of the Oral and Maxillofacial Surgery Program at Thomas Jefferson University Hospital in Philadelphia.

50’s
DR. STANLEY J. ANTONOFF, Class of 1957, on authoring Students with Learning Disabilities at Graduate and Professional School: A Program and Strategies for Success.

DR. LEONARD I. LINKOW, Class of 1952, on the publication of his autobiography, How Green Were My Mountains?

DR. SHELDON WINKLER, Class of 1956, on being reelected President of the American Academy of Implant Prosthodontics.

70’s
DR. MARC BALSON, Class of 1978, on becoming President-Elect of the American Association of Endodontists.

DR. DAVID MARTIN, Class of 1975, on being interviewed by Dental Economics on why he chose to become a dentist for its “Dental Profile” column.

80’s
DR. GERRY CURATOLA, Class of 1983, on cofounding C.S. Bioscience, Inc., an emerging biotechnology company which has identified, developed, and secured a proprietary position for a biologically effective, natural dental formulation called NuPath® Complex.


90’s

DR. CHRIS CHONDROGIANNIS, Class of 1997, on receiving the New Dentist Leadership Award presented annually by the New York State Dental Association Council on the New Dentist. The award recognizes a dentist less than 10 years out of dental school who is actively involved in organized dentistry and the community.

DR. JONG SHIAW LIM, Class of 1997, on becoming a fellow of both the American College of Dentists and the Academy of General Dentistry.

DR. KIEN NGUYEN, Class of 1998, on the publication of his new novel, Le Colonial. Dr. Nguyen is also the author of an earlier novel, The Tapestries, and of a memoir, The Unwanted, which is being made into a feature film.

In Remembrance
DR. IRMA TUCK-WEISS, Professor Emerita of Biochemistry and former Director of Admissions.
We thank our benefactors
alumni, faculty, friends, corporations, foundations, and organizations—for their generous support
of the College. We are proud to recognize your gifts of cash, pledge payments, planned gifts, gifts-in-kind, and pledges over $25,000, which were made between September 1, 2003, and August 31, 2004.

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The Starr Foundation

$250,000
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