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Thank you for your generosity.
This past year has been an exciting one at the College, beginning with the opening in February 2019 of the NYU Dentistry Oral Health Center for People with Disabilities (OHCPD). In addition to addressing a major public health challenge by redefining dental care for disabled individuals, we are offering a much-needed training opportunity for our students, who will have the benefit of learning to practice with competence, confidence, and compassion in providing quality dental care for this population. Dental students, like many dentists, often have a fundamental fear of treating people with disabilities. By giving our students the skills needed to treat disabled people, we are preparing them to welcome all patients when they enter practice.

Another innovation in the way we educate our students is coming soon with the opening of a federally qualified health center operated by Metro Community Health Centers, Inc. (MCHC). We have built a general medical clinic — to be staffed by physicians from MCHC — within the dental school, which will offer primary and specialty medical care as well as behavioral health services to primarily low-income and underserved patients, including medically and behaviorally complex patients. In addition to expanding access to coordinated healthcare services for patients, it will provide a unique interprofessional education opportunity by making medical care come alive for dental students. This is important for future dentists because the challenge is not how to manage the underlying medical disorder, but rather how dental care must be modified in light of underlying disease.

We are also piloting a new dental education model as the prelude to opening a new patient care facility in Downtown Brooklyn’s City Point in early 2020. Designed to create enhanced educational and patient care learning opportunities for students, as well as to bring high quality, low-cost dental care to residents of Brooklyn and the surrounding area, the program is based on a mentor-protégé model in which a professor-practitioner mentors a very small group of student protégés or associates. The program emphasizes collaborative efforts and synergies among small teams of highly-motivated students, faculty, and support personnel, which results in increased student learning and productivity. Through the Brooklyn expansion, we are reimagining dental education by giving students even more clinical experience, while also providing them with the opportunity to learn how to run a dental practice in a real-world environment.

In addition to stories about these initiatives, this issue of Global Health Nexus brings news of the recruitment of two faculty superstars — Dr. Nigel Bunnett, an internationally known expert on the mechanisms of pain, itch, and neurogenic inflammation, to chair the Department of Basic Science and Craniofacial Biology, and Dr. André Ritter, a distinguished dental educator, clinician, researcher, and executive administrator, to chair the Department of Cariology and Comprehensive Care.

And we highlight the robust grants and philanthropy that are supporting our patient care and research programs, including the largest individual gift in the College’s history — a nearly $7 million bequest from Dr. Milton Friedman, ’55, which will be used to advance faculty recruitment, research, and special projects.

These stories and others remind us how fortunate we are as a community to have so many exceptional people and innovative programs that are enabling us to advance dentistry and transform lives.

Enjoy the issue.

Charles N. Bertolami, DDS, DMedSc
Herman Robert Fox Dean
We can do better. We must do better.”

— Helen Keller
Since opening in early 2019, the NYU Dentistry Oral Health Center for People with Disabilities (OHCPD) has been addressing a major public health need for people whose disabilities or medical conditions prevent them from receiving care in a conventional dental setting.

In the pages that follow, experts in the field of health care for people with disabilities share their perspectives on the need for improved access to dental care for this population and on the promise that the OHCPD holds for redefining the way care is delivered.
Improving Preventive Oral Care for New Yorkers with Disabilities

by

Howard A. Zucker, MD, JD
Commissioner
New York State Department of Health
In New York State, roughly 3 million residents report a disability. That’s about one in five of the noninstitutionalized adult population.

Ensuring that these New Yorkers receive adequate primary healthcare — let alone proper dental care — is a challenge. A significant problem is that the health needs of New Yorkers with disabilities are often considered only in relation to their disability. Management of the primary disabling condition draws attention away from primary care and wellness.

Additionally, people with disabilities are twice as likely to be physically inactive compared to people without a disability and are at higher risk for developing secondary health problems. The bottom line is that New Yorkers with disabilities face barriers to getting annual checkups and are often missing the wellness component of primary care — including oral care.

Barriers to proper oral care for those with disabilities include an inadequate primary healthcare system, lack of financial means, problems with physical access and transportation, and fear and lack of motivation.

Ironically, as New Yorkers with disabilities live more independently, dental care can fall by the wayside. People living within a community don’t have the in-house dental services of institutional care and need to seek out the services of private practitioners. Greater independence may lead to less rigorous daily oral care, less supervision of diet, and less or no preventive care from dental practitioners.

SO WHAT CAN WE DO TO REMEDIATE?

Under Governor Cuomo, the New York State Department of Health has pursued Medicaid policies that emphasize preventive oral care for members with disabilities. Because Medicaid covers 5 in 9 New Yorkers with disabilities, our policies are affecting a sizable portion of this population.

In general, New York's Medicaid program — which serves over 6 million residents — offers extensive dental benefits, including diagnostic, preventive, and restorative services as well as extractions and tooth replacement with dentures and implants if medically necessary.

New Yorkers with disabilities who meet criteria are allowed additional services that can improve preventive care — for instance, an additional prophylaxis (cleaning) over a 12-month period or topical application of fluoride varnish, gel, or foam.

If a patient’s disability prevents a definitive assessment, we allow for a separate “observation” office visit to ensure the best possible treatment plan. We provide dental practitioners a per-visit incentive to compensate for the greater knowledge, skill, sophisticated equipment, extra time, and personnel required to treat this population.

The Department of Health is continually examining our dental policies to fit the needs of vulnerable populations who are at high risk for dental caries and periodontal disease. Staff in the Department’s Office of Health Insurance Programs have worked closely with the New York State Office for People with Developmental Disabilities Taskforce on Special Needs Dentistry and attended its recent meeting at NYU College of Dentistry.

More broadly, New York is committed to transforming New York’s health care system into one focused on wellness rather than crisis management. And getting more New Yorkers insured is the first step to instilling the public habit of preventive care visits, including oral care. Our Essential Plan for lower-income individuals offers comprehensive benefits with low or no premium, no annual deductibles, free preventive care, and low co-payments.

This year we saw record enrollment in each of New York’s 62 counties for high-quality health insurance options through the New York State of Health. Total Marketplace enrollment is now over 4.7 million — an increase of more than 435,000 New Yorkers from 2018.

It remains a challenge to take down all the barriers to proper oral care for New Yorkers with disabilities, but New York State is working to make all primary care accessible to this population. Removing systemic and financial barriers to preventive dental care may even help chip away at the motivational barriers.

Preventive oral care is an important part of primary care and critical to the quality of life of all New Yorkers.

— Dr. Howard Zucker
People with Disabilities and Oral Health Providers: The Importance of Becoming Partners in Health Care Innovation

by

Marco Damiani
Chief Executive Officer
AHRC New York City
Over the past several decades, many individuals with disabilities, especially those with intellectual and developmental disabilities (I/DD), have moved out of large institutions and into smaller, community settings. Yet despite remarkable progress towards community inclusion, these individuals continue to face barriers to receiving appropriate community-based health services, with dental care identified as the most difficult to obtain. Oral health is key to overall health and well-being. Therefore, increasing access to oral healthcare, integrated with medical and behavioral healthcare whenever possible, is critical for ensuring optimal health for children and adults with I/DD.

AHRC New York City (AHRC NYC) is one of the largest human service organizations in the nation, supporting more than 15,000 children and adults with I/DD and their families on an annual basis. With a proud 70-year history and over 150 programs and locations, AHRC NYC’s 5,000+ staff is committed to service innovation and the promotion of civic engagement and opportunity for the people it supports. We work closely with the Arc of the U.S. and the Arc of New York on issues of advocacy and social justice for this often underserved population.

The I/DD provider community strongly advocates for dental education and training to include:

- syndrome-related conditions affecting dental health;
- communication skills for working with people with I/DD and their caregivers;
- practical experience utilizing learned strategies and techniques; and
- interprofessional training and engagement, especially in medical and behavioral health.

**SYNDROME-RELATED CONDITIONS THAT CAN AFFECT DENTAL HEALTH FOR INDIVIDUALS WITH I/DD**

There are many syndrome-related conditions that can increase the risk of dental issues for people with I/DD, but provider awareness can inform assessment, prevention, and treatment strategies that lead to more positive outcomes. For example, abnormal swallowing and holding food in the mouth too long, often a problem with cerebral palsy, can increase bacteria and lead to tooth decay and gum disease. Malocclusion, when teeth are overcrowded and/or not aligned properly, is associated with many developmental disabilities including Down syndrome, making teeth harder to keep clean, which increases the risk of dental caries and periodontal disease. Bruxism, or tooth grinding, is also very common among people with I/DD and can damage teeth and lead to temporomandibular joint disorder (TMD).

There are also medical conditions common among people with I/DD that can affect oral health. For example, many individuals experience gastroesophageal reflux, which increases the amount of gastric acid in the mouth, gradually wearing away tooth enamel and enabling harmful bacteria to damage teeth. Research shows that 26% of people with an intellectual disability have epilepsy and are more prone to seizures than typically developing individuals with epilepsy. These seizures can cause oral trauma that leads to dental complications.

When compared with the general public, those with I/DD are four times more likely to have a chronic disease. To help manage these conditions, it is common for this population to be prescribed numerous medications, which can also impact oral health. Many commonly prescribed medications decrease the production of saliva, increasing the risk of tooth decay and oral infections. Those high in sugar or prescribed in syrup can also cause tooth decay and increase the risk of caries. According to one study, 103 of the 131 (79%) most frequently prescribed medications for individuals with developmental disabilities have oral side effects.

Dental school curricula should include education on these commonly seen medical and dental issues so that providers know the proper regimen and protocol for treating existing conditions and preventing future complications.

**COMMUNICATIONS SKILLS NEEDED FOR WORKING WITH I/DD PATIENTS AND THEIR CAREGIVERS**

Effective communication between dental staff and patients is essential for developing strong partnerships in care. Conversely, poor communication can delay the identification and treatment of various oral health problems. Individuals with I/DD have a wide range of communications challenges, physical limitations, and sensory issues, all of which affect the patient’s receptiveness and the partnership. Some patients may have low-literacy, be non-verbal, or have vision or hearing impairments, while others may have sensitivities to certain sights, sounds, smells, textures, and tastes. Learning how to recognize non-verbal cues and body
language and how to assess different communications capacities and health literacy are important components of training for clinicians. Communications methods (e.g., short, simple sentences, pictures, symbols, rephrasing, and validating understanding) should be tailored to meet the ability and preference of each patient.

Understanding the role of caregivers is also important in providing quality care to patients with I/DD. Caregivers provide substantial support in facilitating access to healthcare, communicating with providers, following up with treatment recommendations, and maintaining the individual’s oral hygiene. It is always important for dentists to speak directly with patients with I/DD about therapeutic instructions and self-care strategies. However, it is equally important that caregivers are fully included and supported.

While curricula on effective communication and partnership building with patients with I/DD and their caregivers is important, practical application of these strategies while in school is even more critical to sustaining learned skills post-graduation.

PRACTICAL EXPERIENCE USING LEARNED STRATEGIES AND TECHNIQUES

Translating theories learned in the classroom into practice with confidence and effectiveness is crucial, and dental education programs are beginning to incorporate this practical application. At the forefront of this important work is the NYU College of Dentistry, which recently opened the Oral Health Center for People with Disabilities, where highly experienced NYU faculty members are the primary dental providers. Students gain hands-on experience treating patients with I/DD by observing, in person or virtually, and by working alongside faculty. This practical experience in assessing, diagnosing, and treating patients provides an in-depth understanding of this population’s treatment needs. By observing and working with NYU faculty, students have the opportunity to gain experience and confidence in their ability to provide quality care for individuals with I/DD, and to continue to do so throughout their professional lives.

Direct clinical care also allows students to practice and master time-intensive techniques such as desensitization. This is a behavioral therapy technique used by trained professionals to help patients overcome fears, phobias, and other anxiety disorders. It teaches relaxation and stress management techniques, while gradually exposing the patient to distressing situations, and enabling them to eventually face the situation without fear or anxiety. One study found a significant correlation between dental anxiety and I/DD; the lower the cognitive functioning, the higher the rate and severity of dental anxiety. Research shows that desensitization techniques can successfully reduce dental anxiety and increase compliance with dental procedures.

INTERPROFESSIONAL TRAINING AND ENGAGEMENT IN MEDICAL, BEHAVIORAL, AND ORAL HEALTH

While people with I/DD have vastly greater opportunities for community inclusion, employment, and access to education than they did decades ago, there is still a significant lack of effective and sufficiently funded bio-psychosocial models of medical, behavioral, and oral healthcare delivery.

Recognizing this unmet need, the NYU College of Dentistry, which educates fully 9% of dentists nationwide, is poised to significantly expand interprofessional educational opportunities. In addition to NYU’s curriculum and new special needs dental suite, Metro Community Health Centers (MCHC), a network of federally qualified health centers specializing in healthcare services for individuals with I/DD, is opening a new center at NYU Dentistry. MCHC will complement NYU’s dental services with primary, specialty, and behavioral healthcare, and is working in partnership with NYU Dentistry to develop hands-on interprofessional learning opportunities for students.

Research continues to link oral health issues with chronic health problems such as heart and lung disease, diabe-
tes, and stroke. Dental disease not only affects physical health, but can also negatively affect one’s psychological and social well-being. For example, studies have found that patients with decayed, missing, or filled teeth who experienced dental pain had higher levels of anxiety and depression and poorer overall levels of mental health.

Disparities in accessing dental care and preventive services can be reduced by integrating comprehensive training and practical experience during dental school and through interprofessional training and engagement to assure optimal health outcomes. Community inclusion means equitable access to quality programs, services, and healthcare. Dental provider confidence and experience in treating patients with I/DD are vital to the community-based services that must be available to meet the needs of this population.

THE CHALLENGE

While the core commitment at NYU Dentistry is to provide a world class and diverse dental education, there is more at work here, perhaps a second, grander purpose, one that is subtler, but equally compelling — disrupting the cycle of low expectations:

- The low expectations of some providers and even academic institutions that are comfortable either shunning or making token efforts to serve people with disabilities when they should instead embrace the opportunity to broaden clinical and academic perspectives and impact.

The NYU Dentistry Oral Health Center for People with Disabilities is an embodiment of a set of core values espoused by the NYU Dentistry leadership that will disrupt the conventions of discontinuous care, strengthen the commitment to interprofessional training and treatment, improve health, and support true community inclusion for individuals with I/DD. Its dental program has the potential to serve as a model to revolutionize oral healthcare for this underserved population by activating a significant and scalable solution to the current state of oral health services for people with disabilities. The worldwide dental community now has an opportunity — and, I would argue, an obligation — to reimagine their roles in a whole person approach to oral health care for people with disabilities. Let’s accept the challenge to enable greater access to quality services for the betterment of patients and providers alike.

REFERENCES

6. Ibid.
Thank you all for your amazing help and care for my son. Alex, who is 28 years old, has autism, and is intellectually challenged. It has been extremely difficult to find quality dental care for him. We felt stressed taking him to countless dentists, as all seemed very uncomfortable and were not knowledgeable about his special needs. Our first visit to the NYU Dentistry Oral Health Center for People with Disabilities was amazing. Everyone was very welcoming to Alex, they were knowledgeable, and his dental team was exceptional. He was treated as a patient, not a “special needs” patient. Alex felt relaxed and so did we. This is the best dental care he has ever received.

— Paul Katz
A Dental Home for Patients with Epilepsy

by
Orrin Devinsky, MD
Director, Comprehensive Epilepsy Center
Professor, Department of Neurology
Professor, Department of Neurosurgery
Professor, Department of Psychiatry
NYU Langone Health

and

Danielle Boyce, MPH
Geraldine Cosgrove-Cataldo is no stranger to arranging complicated medical appointments for her son, Finnian. Now 14 years old, nonverbal and using a wheelchair, Finnian was diagnosed with a stroke in utero. His active health concerns include cerebral palsy, epilepsy, a movement disorder, visual impairment, a feeding tube, and intellectual disability. Finnian lives with his family, including two older siblings and parents, Joe and Geraldine, in an apartment in the Bronx. Geraldine drives him to most appointments in a wheelchair-accessible van, but sometimes taking public transportation is easier because of the challenges of finding accessible parking.

When asked about Finnian’s experiences with dentistry, Geraldine laughs. “You mean our ‘dental drama?’”

DENTAL DRAMA

From the beginning, most pediatric and adult dentists were afraid to see Finnian due to his complex medical history or would not accept Geraldine’s insurance. She finally found a dentist willing to see him every six months for cleaning only, but no X-rays, because the dentist didn’t know how to take X-rays for a child who uses a wheelchair. “They just kept saying they would wait until all his adult teeth were in and everything looked good, that he just had some tartar buildup.”

When Finnian turned 14, they attempted to transition him to an adult dentist who was also very unsure about how best to care for Finnian’s teeth. “He wanted to know if Finnian could stand so he could take an X-ray, which he cannot do. He asked me how the pediatric dentist did his cleanings,” says Geraldine. “As soon as I said the word ‘seizures,’ that was the game changer.” He ultimately decided not to see Finnian and referred him to another dentist.

While Finnian is not “seizure free,” he has fairly good seizure control, so it is confusing to Geraldine that epilepsy alone is a deal-breaker for many dentists. “I don’t know why everyone gets the deer in the headlights look when you say ‘epilepsy.’”

The third dentist was alarmed that Finnian had never had X-rays but also extremely uncomfortable with his medical history. Any examination would need to take place under general anesthesia at a different children’s hospital than the one where Finnian usually receives his medical care. Before the exam, the dentist required a litany of pre-approvals from all of his specialists, a urine sample, blood work, and an EKG. Blood work had to be completed within five days of the procedure, which was difficult to schedule and complete. Geraldine needed to personally coordinate, schedule, and finance all of these tests and consultations between hospitals, departments, and specialists, including all administrative and insurance paperwork, and there would be at least a four-month wait for the next available appointment.

THE SOLUTION

Geraldine has given some thought to the “ideal” dental practice for children with special needs. “We need an office that can see any child with any disabilities and is wheelchair accessible,” she says, “They need to be able to process a variety of types of insurance. They need to have a full-service changing room bathroom, and special waiting rooms, such as a sensory room for kids on the autism spectrum who need a quiet area to hang out in. They need to be comfortable with working with people who have a history of seizures.”

Geraldine’s wish was granted in February 2019 with the opening of the NYU College of Dentistry’s Oral Health Center for People with Disabilities. Patients with cognitive, physical, and developmental disabilities now have a place to receive comprehensive dental treatment.

Finnian’s and his family’s challenges are typical of so many patients in my practice. Dental care can be an enormous source of frustration and fear for these families, as the vast majority of dentists and dental practices have never been adequately educated about how to address their special needs and few practices have the resources to provide outstanding care for these patients and their families.

I was honored to deliver a grand rounds presentation to help inaugurate this center at NYU Dentistry. It is a spectacular resource for families and will become the model of how children and adults with special needs — whether they are physical, cognitive, or developmental — can be sensitively and comprehensively cared for. The design of the center has incorporated input from diverse groups of stakeholders — from parents and patients to neurologists and anesthesiologists, as well as dentists. Care has been taken at all levels — from making appointments, streamlining insurance approvals, and, most important, how to best serve “the most special of those with special needs.” No patient is left behind.

This facility is a joy to refer patients to and will become the gold standard of a dental home for those with special health care needs. Having been in practice for 30 years and caring for a wide range of individuals with neurodevelopmental disabilities, including those with cerebral palsy, epilepsy, autism spectrum disorder, neurogenetic disorders and others — many of whom suffer from multiple comorbid disorders — dental care has always been a challenge. I had no good place to refer these patients. Now we all do!

For patients with disabilities, the Oral Health Center for People with Disabilities at NYU will mean one less thing to worry about. “The new center will improve care and make lives so much easier, especially for people with epilepsy,” says Geraldine. “It is a service that is very much needed and appreciated. There is already a lot of talk about it on social media, and I cannot wait to see it in person!”
The NYU Langone Dysautonomia Center and the NYU Dentistry Oral Health Center for People with Disabilities: *Working to Improve the Lives of Our Patients*

by

Horacio Kaufmann, MD  
Director, NYU Langone Dysautonomia Center  
Felicia B. Axelrod Professor of Dysautonomia Research, Department of Neurology  
Professor, Department of Medicine  
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Autonomic disorders are a group of different conditions that affect the function of the autonomic nervous system, which consists of a network of nerves that finely tune the involuntary functions of the body. These nerves control things like our circulation, heart rate, breathing, sweating, gut motility, tears, and sexual function. For most of us, we never have to think about our autonomic nervous system.

At the NYU Langone Dysautonomia Center, we specialize in treating rare autonomic disorders caused by neurogen- erative processes or genetic errors. Many of these disorders fall into the category of hereditary sensory and autonomic neuropathy (HSAN), and the most common among these is familial dysautonomia or FD, an extremely rare and disabling disease. The NYU Langone Dysautonomia Center is the only facility in the United States dedicated to treating FD and other rare genetic diseases.

FD affects the development and survival of certain nerve cells. The disorder disturbs cells in the autonomic nervous system, which, in addition to the involuntary functions cited above, also controls activities related to the senses, such as taste and the perception of pain, heat, and cold. Patients with FD have an extremely rare secondary syndrome known as congenital insensitivity to pain and anhidrosis (CIPA), which, among other symptoms, prevents them from feeling pain. Because of this insensitivity to pain, as well as defects when swallowing and chronic respiratory problems, it is common for patients with FD to have serious dental issues.

Such patients suffer from a range of issues, from rampant decay to maintaining dental hygiene to grinding their teeth down to the bone, to losing all of their teeth because of infection. Moreover, dental hygiene and oral surgery procedures are very complicated because these patients are at high risk for aspiration. As a result, even many simple dental procedures have to be performed under anesthesia, which necessitates protection of the airway. The situation is complicated further by the fact the drugs these patients take can, in some cases, cause excessive salivation and drooling, and in other cases, abnormally dry mouth, which can cause tooth decay.

Historically, there have been few places with the resources, expertise, and willingness required to treat these patients, creating a very great unmet need for dental care.

What NYU Dentistry has done in creating the Oral Health Center for People with Disabilities is to rethink dental care for people with disabilities from scratch. By collaborating with a number of health care professionals, advocacy groups, and support organizations for people with disabilities, the dental school has made certain that every aspect of the new facility caters to the complex needs of the disabilities community — from the spacious treatment rooms to the fully-equipped sedation suites to the reclining wheelchair lift to the multisensory room — every effort has been made to tailor the facility to the particular needs of disabled individuals.

Careful thought has also been given to staffing needs. The care team includes a pediatric dentist and specialist in dental anesthesia, who serves as the clinical director, plus multidisciplinary dental faculty, two nurse practitioners, a patient care coordinator, and social services, all working together to ensure optimal patient care. And the fact that the center provides care for each individual patient across the lifespan is music to my ears and to the ears of all the patients and their families who have waited so long and suffered so much and are now so happy to find adequate dental care.

I’d like to add how personally gratifying it is for me to know that the NYU Dentistry OHCPD is welcoming my patients with open arms, given that many health care professionals are not interested in treating them. This became apparent when Dr. Robert Glickman, associate dean for clinical affairs and hospital relations at NYU Dentistry, and Dr. Ron Kosinski, clinical director of the new center, spoke at our annual “Day of Connection for the FD Community,” which was attended by more than 150 patients, their families, and caregivers. Drs. Glickman and Kosinski discussed the center’s goal to create a dental home for people with disabilities and encouraged attendees to take advantage of its resources. And I’m happy to report that Dr. Glickman also recently placed an implant for a patient with FD, who, due to infection, had lost all of her teeth. This is a first for a patient with FD, and it speaks volumes about the center’s philosophy of providing comprehensive oral healthcare for people despite their disabilities.

Let me conclude by saying how much I look forward to the possibility of collaborating with the new Oral Health Center for People with Disabilities. For example, the Dysautonomia Center and the OHCPD could undertake studies of the oral microbiome to determine if the aspiration in the lungs common to patients with FD comes from the mouth or from reflux from the stomach. Currently, when food goes to the lungs, we do not know if this is coming from the abnormality in swallowing which patients with FD have, or from reflux from the stomach, which they also have. By comparing the microbiome in the mouth with the microbiome in the stomach, we can potentially identify where the problem is coming from. This is just one of the important clinical research studies that the NYU Langone Dysautonomia Center and the NYU Dentistry Oral Health Center for People with Disabilities could undertake together to improve the health and well-being of people with disabilities.
The OHCPD is a blessing. It’s a huge blessing. There were times when I would be at home crying because I couldn’t get my daughter Violette’s teeth cleaned. And that shouldn’t be.

Prior to coming to the OHCPD, our first dental office situation was not optimal. They weren’t accustomed to dealing with children like my daughter. She was apprehensive, she was fearful. And as she got older, it got progressively more difficult for them to work with her.

It’s hard for her going through life being different. So to come someplace that she believes is specifically here to help children like her, it makes her feel like a rock star.

— Laura Kline
Q&A with Dr. Ronald Kosinski

Recently, Global Health Nexus sat down with Dr. Ronald Kosinski, clinical director of the NYU Dentistry Oral Health Center for People with Disabilities (OHCPD). Dr. Kosinski is also clinical associate professor of pediatric dentistry and director of pediatric sedation and anesthesia at NYU Dentistry.
Global Health Nexus (GHN): Please describe the center’s mission.

Dr. Kosinski: The mission of the NYU Dentistry Oral Health Center for People with Disabilities is twofold: 1) to address a major public health challenge by redefining dental care for disabled individuals; and 2) to offer a unique training opportunity for our students to become the next generation of dentists who will practice with competence, confidence, and compassion in providing quality dental care for people with disabilities.

People with disabilities face many barriers to receiving dental care, including physically accessing dentists’ offices, which may not be able to accommodate wheelchairs or other assistive devices. In this country, historically, we have done a very good job of sending the disabled to hospitals, where they may wait as long as six months to get an appointment to be seen in an operating room. These visits are one-off emergencies without follow up or continuous preventive care, which can trigger a cycle of recurring dental problems. By contrast, the OHCPD is providing much-needed comprehensive, compassionate dental care across each patient’s lifespan, and thereby breaking the vicious cycle of neglect and repeated hospitalization that many disabled people experience.

In addition, we are committed to educating our students to embrace this population rather than to send them to hospitals for care. Just as children are afraid of the unknown, dental students often have a fundamental fear of treating the disabled population. By investing in curriculum changes and in clinical rotations at the center, we are giving our students the opportunity to learn how to treat this population with confidence and skill, which not all dentists have and so they may not be prepared or willing to welcome disabled patients.

One important way in which we are training future dentists to care for the disabled is by scheduling longer appointment times so that students have extra time to understand the patient’s needs from a medical and a psychological perspective, as well as a dental perspective. The additional time also allows students to collaborate with faculty with experience and expertise in treating disabled individuals in integrating all that information into their approach to the patient. Since NYU Dentistry is the largest dental school in the nation, the prospects for having an exponential effect on the oral health needs of people with disabilities across the U.S. are extremely strong. In fact, we anticipate that, over time, many fewer people with disabilities will be referred to hospital ORs and many more will be treated in a conventional way.

Global Health Nexus: How did the design for the OHCPD come about?

Dr. Kosinski: After visiting a number of facilities in the Northeast that provide dental care for the disabled, we made the decision to create a facility that would go beyond what already existed — one that would incorporate the most advanced design and technology available to meet the specific needs of people with a full range of physical, cognitive, acquired, and developmental disabilities.

We also collaborated with a number of healthcare and advocacy groups which provide general healthcare and support for people with disabilities, including Cerebral Palsy Associations of New York State, Metro Community Health Centers, Family Health Centers at NYU Langone, the New York State Office for People with Disabilities, NYU Langone Health, and the Viscardi Center, in addition to conducting focus groups of people with disabilities.

As a result of our research and consultation, we were able to design the OHCPD to provide a full range of dental services for patients whose disability or disabilities prevent them from receiving care in a conventional dental setting. The center features nine spacious treatment rooms; two fully equipped sedation suites to provide both inhalational and intravenous sedation administered under the supervision of anesthesiologists; and one of only two-dozen special wheelchair recliners in the U.S., allowing patients to remain in their wheelchairs for treatment and avoid making a laborious (and in some cases impossible) transfer to a dental chair. Another special feature is a multisensory room, which offers an immersive environment designed to calm anxious patients — especially patients with autism. The room was developed in partnership with the NYU Ability Project, an interdisciplinary team of health specialists, engineers, and artists at NYU’s Tandon School of Engineering, Tisch School of the Arts, and Steinhardt School of Culture, Education, and Human Development.

GHN: How have you been building awareness of the center?

Dr. Kosinski: Thanks to the extensive social media presence created by organizations that provide services and advocacy for the disabled population, news of the center went viral on social media immediately after we opened without requiring us to do any external marketing. We also attracted a great deal of media attention, including from The New York Times and CBS, and physicians who treat people with disabilities have been referring their patients to us for care.
GHN: What services does the center provide and who provides them?

Dr. Kosinski: The OHCPD provides a full range of general and specialty dental services for patients with disabilities. In addition to the clinical director, the center is staffed by multidisciplinary faculty in general dentistry and all of the dental specialties, as well as a nurse practitioner, social services, two patient service representatives, a clinic manager, a patient care coordinator, and four dental assistants. Working to ensure that the center runs efficiently on a day-to-day basis and that all patients are happy and have a good experience from the time they make their appointment through the exit interview, every member of the clinical care team — a group of remarkably dedicated individuals — considers it a privilege to provide care for these patients.

GHN: How many patients do you see at the center and what is the age range?

Dr. Kosinski: When we opened in early February 2019, we were seeing 10 to 15 patients a day, and now we are seeing between 30 and 40 patients a day, ranging from newborns with recently diagnosed syndromes to the elderly. We expect to provide 8,000 patient visits this year and 10,000 visits next year. The need is so great.

GHN: What has been the reaction of patients and their families to the center?

Dr. Kosinski: The reactions have been pretty spectacular. When you see patients who have been met with resistance their entire lives and watch them having their first X-ray — people who’ve never before had an X-ray taken or had anyone try to take an X-ray, or even look in their mouths — it’s exhilarating for the patient, their family, and the provider. We’re beginning to remove the roadblocks they’ve encountered their entire lives.

GHN: What has been most personally gratifying to you as clinical director of the center?

Dr. Kosinski: As a pediatric dentist and dental anesthesiologist who has treated many disabled children, I have been extremely frustrated not to be able to provide care for these people as they grow older. So it makes me incredibly happy that we are offering lifelong access to comprehensive, compassionate dental care to disabled people of all ages instead of referring them to hospitals, and that we are training the next generation of dentists to be able to treat this population. It’s also immensely gratifying to know that what we’re doing at NYU to implement a paradigm change in providing dental care to disabled people has spurred other dental schools to create their own facilities for the treatment of disabled individuals. Indeed, former NYU Dentistry faculty members who are now deans of dental schools elsewhere are considering building centers of their own. My hope is that their actions will be replicated across the nation.
My son is a very visual individual. It was beautiful. He sat down in the multisensory room and relaxed. He didn’t want to get up! He’s usually very hyper. Thank you!

— Donna Agoncillo

Just the option of *not* having to get out of my chair was the reason I chose to come to the OHCPD. It definitely was a pleasant change.

— Christine Mace

My prayers were answered at NYU. They were always careful because of all the meds I was on.

— Jay Raskin

For parents of children with disabilities, there is overwhelming anxiety in seeking dental care for them. You have eliminated that anxiety and are providing families with the dental home they thought they would never find. You are changing lives and providing hope!

— Barbie Vartanian
Look who’s headed to
brooklyn
NYU Dentistry
Brooklyn Patient Care

NYU College of Dentistry will open a new dental care facility in Downtown Brooklyn’s City Point in spring 2020, to bring high quality, low-cost dental care for adults and children to the Brooklyn community and its surrounding area.

“We are delighted to bring our services to Brooklyn, along with our commitment to providing affordable care for local residents and learning opportunities for our dental students,” said Dean Charles N. Bertolami. “Our presence in downtown Brooklyn provides a welcome opportunity both to build on the services we currently provide to people living in Brooklyn through our existing outreach programs and to further strengthen NYU’s commitment to one of the most culturally diverse, bustling, and iconic neighborhoods in New York City.”

NYU Dentistry currently provides screenings and health promotion services to more than 1,000 children, adults, and seniors annually at 30 community-based sites in Brooklyn, and treatment aboard the Smiling Faces, Going Places dental van to approximately 700 children and seniors at 14 sites in Brooklyn.

NYU has leased a 15,000-square-foot space in City Point, a mixed-use commercial and residential complex in Downtown Brooklyn in close proximity to mass transit, making it easily accessible to residents throughout Brooklyn and Staten Island. Construction on the space began in June and will be completed in early 2020.

The dental practice — which will see roughly 20,000 to 25,000 patients a year — will be staffed by NYU Dentistry faculty and advanced dental students. Like the main campus at 345 E. 24th Street in Manhattan, which provides dental care to approximately 75,000 New Yorkers each year, NYU Dentistry’s Brooklyn outpost will offer services at reduced cost and will accept Medicaid.

An Growing Commitment to Brooklyn

NYU Dentistry’s new practice is the latest illustration of NYU’s growing commitment to the Brooklyn community. In the past decade, NYU merged with Brooklyn’s Polytechnic University to create NYU’s Tandon School of Engineering, partnered with Lutheran Medical Center to create NYU Langone Hospital-Brooklyn, and is in the final stages of transforming the former MTA headquarters at 370 Jay Street into an academic hub for technology, emerging media, and the arts that is also home to the Center for Urban Science and Progress (CUSP).

“NYU’s presence in Brooklyn has been one of the most exciting developments in the university’s recent history. Our academic programs, Brooklyn’s culture of innovation, and its diverse community have provided many opportunities for synergy, and we are pleased to now bring affordable dental care to the borough,” said NYU President Andrew Hamilton.

Regina Myer, President of the Downtown Brooklyn Partnership, said, “NYU’s new dental care facility will offer a convenient, essential service for the growing Downtown Brooklyn population, and further strengthens NYU’s presence in the neighborhood. We look forward to the completion of the facility, which is a win for our health and our local economy.” She added, “We’re calling on all Brooklynites to clean their pearly whites to help light up magical downtown nights.”
Putting a New Dental Education Model to the Test

A Pilot Program Precedes the Opening of NYU Dentistry Brooklyn Patient Care

Dr. Suzette Stines and Andrew Hopkins, '20, with a patient in the pilot program.
Nearly 100 years after the 1926 publication of the Gies Report — which established the importance of dentistry as a science, a learned profession, and an essential component of higher education in the health professions — and despite amazing advances in science and technology, the clinical-care component of dental education continues to reflect the thinking of the last century.

Dean Bertolami has long believed that there is a better way to educate future dentists. In an article written in 2001, “Rationalizing the Dental Curriculum in Light of Current Disease Prevalence and Patient Demand for Treatment: Form vs. Content,” he argued that “Large, inhospitable ward-like dental school predoctoral clinics are hugely inefficient and often run in a state of deficit.” He continued:

They minimize the amount of dentistry students are able to do. The dedicated faculty who run such clinics have sometimes, unfairly, been called “checkers” — they check student work, teaching as best they can in the process. A possible improvement might be to partially reconfigure the way dental care is delivered in the educational setting by transferring patient care from the student to the faculty member for a defined percentage of time. This would create an additional category of mentored clinical training for students. Counterintuitively, it would actually increase the clinical experience of students and would allow clinics to run more efficiently and productively. The change in culture would be enormous because additional instructors would be needed who want to practice dentistry while teaching students. The proposed model — call it the mentor-protégé model — is not new; it is well established in hospital-based medical practice where students and professors are colleagues, all engaged in taking care of the same patients. Under the mentor-protégé model, a professor practitioner mentors a very small group of student protégés or associates. The professor is identified as the patient’s dentist, remaining so from year to year and engendering the patient’s loyalty to the faculty member-dentist and to the system. Insofar as practical, faculty and students would treat patients side-by-side. The efficiency and productivity of a private practice would not be attained nor expected, but efficiency would be much greater than it is now in most dental school clinics.

Believing that dental schools hold the key to reforming dental education in a meaningful way, NYU Dentistry has taken the first step in bringing Dean Bertolami’s mentor-protégé vision to life. In June, the College launched a four-month pilot program that has the potential to reinvent the current clinical education model. The pilot represents the first phase of a plan to expand the College’s patient care services to people in Brooklyn and the surrounding area. Designed to create new educational and patient care learning opportunities for students, the pilot program emphasized collaborative efforts and synergy among teams of highly motivated students, faculty, and support personnel.

Starting June 1, 10 rising D4 students participated in the pilot program, which originated at the Bluestone Center for Clinical Research and then moved to the Rosenthal Institute from July through September. Six to seven students a day worked closely with two dental assistants, a part-time hygienist, and four general practice faculty members, two of whom were present every day. Using a private practice model, the students participated in patient and financial management, including scheduling and revenue collection, and learned to work as an interprofessional team and to deal with unanticipated challenges, such as treating emergency patients. Their educational experiences were further enriched through weekly seminars and group and individual mentoring.

Since as many as four students were on rotations or had days off each week, students had the benefit of a 3 to 1 student-faculty ratio, compared to a 6 to 1 ratio in the group practices. This enabled a more interactive and collegial relationship between students and faculty, one in which the faculty member works directly alongside the student, not as a checker, but as a hands-on, active teacher. The dynamic is very similar to what occurs on global outreaches. Given the success of the global outreach model in accelerating student learning and productivity, the 10 students were selected primarily from the cohort of students who participated in global outreaches during the 2018-2019 academic year. In addition to a closer, more collaborative and more comfortable relationship between students and faculty, there is also more interaction among students, the dental assistants, and the dental hygienist, who facilitates patient care.

After just two months, the pilot program saw more than three times the number of patients as the traditional DDS program and the participating students and faculty had what they described as optimal learning and teaching experiences.

Austin Le, ’20, who participated in an NYU Dentistry Henry Schein Cares Global Student Outreach Program in Machias, Maine, in March 2019, was one of the 10 students in the pilot program.

“From the student’s perspective, the pilot model offered a more strategic approach to learning than the traditional clinical model,” he says. “There was greater efficiency, which meant..."
that we were able to see more patients. We also learned time management skills and had greater autonomy, which made the experience challenging but not overwhelming, and the faculty supervising our work looked at it holistically, rather than piecemeal,” he adds.

Aida Hamdy Shalan, ’20, learned about the Brooklyn pilot as a member of Dean Bertolami’s “Reading for Value” group. She was thrilled about the concept and knew that she wanted to be part of it. “Initially,” she says, “I felt that because I had not participated in global outreach, I might lag behind the other students. But I quickly realized that if I worked hard and really wanted to succeed, I would not have a problem.

“My high expectations for the program were met,” she adds. There’s so much to like about it, especially working so closely with faculty. When you’re on the ‘traditional’ clinic floor, there are so many instances when faculty are not able to explain things to you fully, because there are so many students vying for their attention. I like the experience of having a real mentor next to me, not just a faculty member, and that’s what the pilot provides. The experience has convinced me that I want to go into dental education — to give something back,” she says.

Rebecca Renelus, ’20, who participated in an outreach to Cambodia in November 2018, agrees with her fellow students’ comments and adds that “in contrast to the traditional clinics, in which we see two patients a day for two-hour appointments, in the Brooklyn pilot I was able to decide on the best way and time to treat my patients, which gave me greater flexibility to accommodate their schedules. And they appreciated that very much. The experience allowed me to grow and to measure my own growth. Yes, we cultivate our hand skills, but dentistry is so much more than that.”

Andrew Hopkins, ’20, who was recruited based on his performance on an outreach trip to Ecuador in January 2019, says that “If there was a procedure that I was not yet comfortable with, the faculty member sat right next to me and assessed what I did every step of the way, which provided me with a tremendous growth opportunity. That’s very different from completing a procedure and looking for a faculty member to check it. I also received great feedback from my patients, who loved the speed with which their treatment proceeded. And the time-management training I received is preparing me for real-life practice. In a typical day, for example, I saw eight patients and provided a range of procedures. That’s the number of patients I would typically see in a week. Initially, it was a challenge for me, but I more than tripled the number of patients I see in a day. And making sure that I’m staying on schedule is making me a better dentist.”

Dr. Suzette Stines is one of the faculty members who participated in the pilot program. Dr. Stines, a clinical assistant professor of cariology and comprehensive care, calls the program “a truly remarkable concept, a dream come true for a faculty member.” She says that “it provided an optimal way to teach DDS students because you got to work with them so intimately. You had the opportunity to assess the student’s knowledge base and to discuss their foundational understanding of the overall treatment plan for the patient before you began, so that they had a comprehensive view of the case with the outcome in mind, which is a fantastic opportunity in terms of teaching. As they work, if there was something they weren’t proficient in, you could coach them and then let them work independently. As a result, the students gained proficiency at an astounding rate. I believe that this concept has the potential to change the entire dental education paradigm in an extremely positive way.”

Dr. Kay Oen, clinical assistant professor of cariology and comprehensive care, says that the main thing that made the program so special is that it was very individualized and interactive. “We were able to teach chairside and to teach actively,” he says. “Because we didn’t have long lines of students waiting for us to check their proce-
dures, students got more attention and learned more easily. Also, depending on the complexity of the case, and where appropriate, general practice faculty who have extensive experience and training in specialty procedures such as prosthodontics, oral surgery, and endodontics were able to show students when it would be proper to perform such procedures.

Patients are also very excited about the program. Amy Antenucci said that as a Medicaid recipient, she looked for dentists in her neighborhood who would accept her form of payment, but had a very unsatisfying experience. In April 2019, she decided to come to NYU and was invited to participate in the pilot program on the day of her initial visit. “It has been a fantastic experience,” she says. “I have never cancelled an appointment; I have never needed pain medication. Everyone is wonderful — my student doctor, the faculty, they are all marvelous people, they work together so well, and I know that they have my best interests at heart. I just want to say ‘thank you, thank you, thank you.’ I tell people all the time, you need to get to NYU.”

Thelma Genrette first began receiving dental care at NYU in 2011. “After that,” she says, “I didn’t come back. Then, last February, I decided that it was time to see the dentist, and when I returned to NYU, they greeted me warmly and told me that I was eligible to receive care in this new program. After having X-rays and receiving a treatment plan, I started treatment in June. I love that everyone confers with me about my treatment. Even though I don’t understand the technical terms, I’m happy that they ask what I think. I feel very comfortable and enjoy every visit.”

The College will launch an expanded version of the pilot program in early 2020, when a new comprehensive dental care facility in Downtown Brooklyn’s City Point area will open to bring high-quality, low-cost treatment to adults and children in the area.

“Through the Brooklyn expansion,” says Dean Bertolami, “we are reimagining dental education by giving students even more clinical experience than they have traditionally had at NYU, along with learning how to run a dental practice in a real-world environment. At the same time, we are empowering both the students and the faculty to work together as a true team. If this approach succeeds, and I am confident that it will, our plan is to adopt this educational model for other selected clinical teaching at the College, which will improve the dental education experience for all of our DDS students, as well as for our patients and faculty. In short, we will have proven that a different approach to dental education can work.”

“I am writing to you because I have been compelled for some time to tell you about this graduate of your school. He is, in my opinion, the best prepared recent graduate that we have had to date.

Dr. Dobbala’s skills from day one were commensurate with those of a dentist who had practiced for several years.”

— Ronald J. Luchini, DDS
Dental Director,
Erie County Community Health Center/
Erie County Health Department
Imagine a world where everyone smiles™
Metro Community Health Centers
To Open Health Facility at NYU Dentistry

Federally Qualified Health Center will provide medical and behavioral health care for patients and interprofessional education opportunities for dental students.

Metro Community Health Centers, Inc. (MCHC) is partnering with NYU Dentistry to open a new federally qualified health center. The center will offer primary and specialty medical care as well as behavioral health services to primarily low-income and underserved patients, including medically and behaviorally complex patients.

The health center, scheduled to open in early 2020, will be located on the first floor of the College of Dentistry, and will be operated by MCHC. MCHC currently has five federally qualified health centers throughout New York City; the new center at NYU Dentistry, its sixth, will be the first in Manhattan. Like NYU Dentistry, the new MCHC facility will accept Medicaid coverage and will treat those without insurance.

MCHC is recognized by the National Committee for Quality Assurance as a Level 3 Patient-Centered Medical Home and specializes in supporting patients with intellectual and developmental disabilities. This specialization complements the care provided at the new NYU Dentistry Oral Health Center for People with Disabilities, a treatment center dedicated to providing dental care for people with disabilities across the lifespan. (See stories starting on page 4).

“Metro Community Health Centers’ new facility at NYU Dentistry will benefit many New Yorkers, but particularly our patients,” said Dean Bertolami. “The center will reduce barriers for NYU dental patients in accessing medical and behavioral health care, as our students and staff can help to ensure smooth transitions from our dental clinics to these critical services.”

Having dental care and medical care under one roof is uncommon but logical, given that oral health and physical health are fundamentally intertwined. Poor oral health has been linked to increased risk for heart disease, diabetes, and other chronic diseases. In addition, systemic disease such as hypertension and diabetes also increase the risk for periodontal disease.

In addition to expanding access to coordinated services for patients, the health center will provide a unique interprofessional education opportunity for NYU dental students that integrates dental and medical care. Two of MCHC’s centers already have training programs for NYU dental students, and the new health center will provide an additional training opportunity where students currently learn and care for patients.
Peer Review Board Members Honored at Dean’s Luncheon

Dean Bertolami hosted a luncheon in April to welcome new members of the student-led Peer Review Board on Ethics and Professionalism (PRB) and to thank the entire Board for their service. The members of the PRB are responsible for ensuring compliance with the NYU Dentistry Code of Ethics and Professional Conduct.

Back, from left: Andrew Chang, ’21; Mark Fakory, ’20; Maxwell Webber, ’22; William Pepe, ’19; Joseph Geiger, ’19; Front, from left: Kateryna Huz, ’20; Yasmin Ludianski, ’22; Danielle Messina, ’21; Alvin Babu, ’19; Kelly Mastrovito, ’19; Sijia Xu, ’21; Anita Chitnis, ’20

2019 Service Awards Presented

NYU Dentistry hosted its annual Service Awards Ceremony on May 1, 2019, in the Alfano Commons. The ceremony recognized 118 faculty, staff, and administrators celebrating 10, 15, 20, 25, 30, 35, 40, 45, 50, and 55 years of continuous service to the College.
Dean’s 2019 Student Awards

More than 700 students, faculty, staff, and administrators attended the Dean’s BBQ on Friday, May 10, 2019. Student Affairs staff and volunteers transformed the 25th Street parking lot into a festive carnival-like atmosphere, featuring barbecue, Mister Softee trucks, cotton candy, carnival games, and music. There was even a guest appearance by the NYU Bobcat. The first 500 guests to arrive received a commemorative Dean’s BBQ tote bag, which included a beach ball and sun screen with the Dean’s BBQ logo.

Sixty-two Class of 2019 DDS students, and one DDS ’20 student, received Dean’s Student Awards on Friday, May 3, 2019, in recognition of their outstanding academic and public health achievements. Nearly 350 peer mentors, peer tutors, admissions ambassadors, and teaching assistants were also recognized at the awards ceremony held in Septodont Auditorium.
Members of the Advanced Standing Program Class of 2021 were welcomed at a White Coat Ceremony on Friday, June 21, 2019. Faculty, family, and friends joined the event, marking the start of the Advanced Standing students’ clinical and didactic dental education at NYU. The Class of 2021 consists of 30 internationally-trained dentists hailing from 15 different countries. Upon completion of the program, graduates will receive a DDS degree.
11th Strategic Planning Plenary Draws Over 250 Faculty, Students, and Staff

The College held its 11th Strategic Planning Plenary event on Wednesday, October 30, 2019, in the Kimmel Center’s Rosenthal Pavilion, drawing over 250 faculty members, students, and staff for an open discussion on the direction in which the NYU Dentistry community would like to move.

The afternoon opened up with remarks by NYU President Andrew Hamilton, followed by Dean Charles N. Bertolami’s welcome. Dr. Michael O’Connor, executive vice dean for administration, development, finance, clinical, and student services, provided an update on strategic initiatives at the College and invited comments from the participants. As in previous sessions, open discussion from the participants addressed “What’s not working at the College,” “What is working,” and “What we need to do to improve as a College.” The event concluded with a reception.

Dean’s Guest Lectures

The Dean’s Guest Lecture Series for 2018-2019 was presented by eight speakers. They were:

- **Muhammad F. Walji, PhD**, associate dean for technology services and informatics and professor of diagnostic and biomedical sciences at UTHealth School of Dentistry, on “Using EHR Data to Improve Oral Healthcare Quality and Safety”;
- **Wenbo Yan, PhD**, clinical assistant professor of basic science and craniofacial biology, NYU Dentistry, on “Improving Knowledge Retention and Clinical Relevance in Dental Students’ Pharmacology Courses”;
- **Victoria Raveis, PhD**, research professor in the Department of Cariology and Comprehensive Care; director, Psychosocial Research Unit on Health, Aging, and the Community (PRUHAC) at NYU; and co-director, NYU Aging Incubator, on “Live Long and Prosper: Longevity in the 21st Century”;
- **John D. McIntosh, MPA**, associate dean for clinical administration and clinical revenue cycle management, on “Organizational Leadership,” parts one and two;
- **Alonso Carrasco-Labra, DDS, MSc, PhD**, director of the ADA Center for Evidence-based Dentistry, on “Network Meta-Analysis to Inform Clinical Practice”;
- **Joel Strom, DDS, MS**, fellow, Jesse Unruh Institute of Politics at USC and president of Strom Political Strategies, on “Political Leadership for the Healthcare Professional”; and
- **David C. Johnsen, DDS, MS**, dean, College of Dentistry and Dental Clinics, University of Iowa, on “Critical Thinking for Educators.”
Oral Cancer Walk Raises Over $30,000 to Support Research and New Patient Care Initiatives at the NYU Oral Cancer Center

More than 500 people participated in the College’s annual Oral Cancer Walk on Sunday, October 6, 2019. The walk, which raised over $30,000, began at NYU Dentistry then made a loop around the East Village and ended with a family-themed reception on East 25th Street featuring donuts, pumpkin decorating, and free oral cancer screenings. The College plans to use the funds raised to support research and a wellness center to combat pre-surgery anxiety in patients. In addition to coverage of the event by The Villager and Washington Square News, WABC Radio’s Katz’s Corner broadcast an interview with Dr. Brian Schmidt, director of the NYU Oral Cancer Center, about the importance of early detection and prevention of oral cancer.
In November 2019, the student chapters of the Academy of General Dentistry (AGD) and the American Student Dental Association (ASDA) hosted a town hall featuring newly-elected president of the American Dental Association, Dr. Chad Gehani, adjunct clinical associate professor in the Dr. I.N. and Sally Quartararo Department of Endodontics. (See related story on p. 88.)

Following introductory remarks by Young Hwan Kim, ’20, AGD Chapter president; Brenda Shah, ’20, ASDA District 2 trustee; and Andrew Chang, ’21, AGD Chapter co-vice president, Dean Bertolami introduced Dr. Gehani, who spoke about his path to becoming ADA president, as well as workforce trends, student advocacy, and organized dentistry. A Q&A with students, faculty, and staff followed. AGD Student Chapter faculty advisors, Dr. Seung-Hee Rhee, clinical associate professor in the Department of Cariology and Comprehensive Care; Dr. Analia Veitz-Keenan, clinical professor in the Department of Oral and Maxillofacial Pathology, Radiology and Medicine; Dr. James Keenan, clinical assistant professor in the Department of Oral and Maxillofacial Pathology, Radiology and Medicine; and Dr. Kay Oen, clinical assistant professor in the Department of Cariology and Comprehensive Care, helped to organize the event.

A delegation of California Dental Association (CDA) officers and California State legislators visited the College on November 1, 2019, marking the 7th consecutive year of CDA visits to participate in an Oral Health Education Forum hosted by Dean Bertolami. This year’s forum included six DDS students who hail from California: Jinzhe Cai, ’22; Mahmoud Abdelhakim, ’23; Roujin Khorramisavoji, ’22; Gee Eun Kim, ’23; Rana N. Sadeghi, ’21; and Michael Shayefar, ’21.

The program began with a presentation by Dr. Stuart Hirsch, former Vice Dean for International Initiatives and Continuing Dental Education, on the Brooklyn project: “High Efficiency Education Experience in Dentistry,” which focused on a four-month pilot program conducted in summer 2019 that was designed to improve clinical learning and decrease the cost of dental education at NYU. Ten rising D4 students participated in the project, which was the prelude to the opening of a new clinical facility in Brooklyn in early 2020. (See related story on p. 24.) In addition to Dr. Hirsch, presenters included two of the students who participated in the pilot program, Sabine Obbad and Andrew R. Hopkins, and clinical associate professor of cariology and comprehensive care, Dr. Gerald Klaczany, one of the supervising faculty during the pilot.

Following the presentation, Dean Bertolami discussed NYU Dentistry's plans with Metro Community Health Centers, Inc. (MCHC), to open a new branch of Metro federally-qualified health center (FQHC) within the College of Dentistry. The center will offer primary medical and behavioral health care to primarily low-income and underserved patients, and interprofessional opportunities for dental students. (See related story on p. 31.)

The dental students and legislators then participated in a Q&A, followed by a presentation by Executive Vice Dean Michael O'Connor on the NYU Dentistry Oral Health Center for People with Disabilities (OHCPD). The program concluded with a tour of the OHCPD.

The California delegation included Assembly Member Wendy Carrillo; Assembly Member Vincent Fong; Assembly Member Sydney Kamler-Dove; Assembly Member Chad Mayes and his guest, NYU Dentistry Alumna Dr. Andis Almasi; Assembly Member Kevin McCarty; Senator Anthony Portantino; Peter A. Dubois, CDA executive director; Marissa Allen, CDA public affairs specialist; Robert Hanlon, DMD, chair of the CDA Political Action Committee and a member of the Government Affairs Council; Brianna Pittman-Spencer, CDA legislative director; John Blake, DDS, executive director and dental director of the Children’s Dental Health Clinic in Long Beach, CA; Todd Robertson, CDA public affairs director; Richard Stapler, CDA vice president for public affairs; Eric Sung, DDS, CDA member and professor of clinical dentistry at UCLA School of Dentistry and inaugural holder of the UCPLA Endowed Chair in Special Patient Care; and CDA member Elisa Chavez, DDS, associate professor of dental practice at The University of the Pacific, Arthur A. Dugoni School of Dentistry.
The College’s 2019 Research Days event showcased the work of 181 pre- and postdoctoral dental students, dental hygiene students, international programs students, master’s degree students, and research scholars.

The three-day event concluded on Friday, April 12, with a keynote lecture, awards ceremony, and reception. Keynote speaker and Kathleen C. Killiany Outstanding Scientific Achievement awardee Dr. Deepak Saxena, associate professor of basic science and craniofacial biology, gave a talk entitled “Pancreatic Cancer and Gut Microbiome: From Bench to Bedside.”

Thirty-five additional awards were presented by the Office of Research, as listed on the following pages.
Dean’s Award for Outstanding Presentation
GIUSEPPE F. AMODEO
Ion Channel Activity of Synthetic C Subunit of the ATP Synthase
Faculty Advisor: Evgeny V. Pavlov, Dept. of Basic Science and Craniofacial Biology

AADR Dentsply Sirona Student Competition for Advancing Dental Research and Its Application (SCADA) Award
HANNAH LISS, ’20
Tissue Engineering of the Growing Craniofacial Skeleton
Faculty Advisor: Paulo Coelho, Dept. of Biomaterials

The Dr. Joan A. Phelan Oral Medicine Award
YOOON WOON CHRISTINA SUH, ’21
Assessing Conceptual Knowledge Related to Oral Health in the Clinical Setting
Faculty Advisor: Silvia Spivakovsky, Dept. of Oral and Maxillofacial Pathology, Radiology and Medicine

The Violight-Jonathan A. Ship Award for Translational Research
WILLIAM SE-HEE JEONG, ’20
Blocking Epidermal Growth Factor Receptor for Oral Cancer Pain Relief
Faculty Advisor: Yi Ye, Bluestone Center for Clinical Research

The Racquel Z. LeGeros Research Award in Biomaterials Research
GENE PARK, ’20
Evaluation of Bone Regeneration at Socket-filled Post Extraction Sites with PRF
Faculty Advisor: Paulo Coelho, Dept. of Biomaterials

The NYU College of Dentistry Student Research Group Award for Excellence in Research
JONG KIL KIM, ’22
Written Feedback and Red Ink: Effects on Confidence and Performance
Faculty Advisor: Mitchell Lipp, Dept. of Orthodontics

Best Basic Science Presentation by a Student in the DDS Program
HANNAH LISS, ’20
Tissue Engineering of the Growing Craniofacial Skeleton
Faculty Advisor: Paulo Coelho, Dept. of Biomaterials

Honorable Mention: Clinical Science Presentation by a Student in the DDS Program
DANIEL G. SCHINAZI, ’20
Effect of Alveolar Ridge Preservation on Periodontal Healing of Adjacent Teeth
Faculty Advisor: Ismael Khoury, Bluestone Center for Clinical Research

Best Clinical Science Presentation by a Student in the DDS Program
HANNAH LISS, ’20
Tissue Engineering of the Growing Craniofacial Skeleton
Faculty Advisor: Paulo Coelho, Dept. of Biomaterials

Honorable Mention: Basic Science Presentation by a Student in the DDS Program
GENE PARK, ’20
Evaluation of Bone Regeneration at Socket-filled Post Extraction Sites with PRF
Faculty Advisor: Paulo Coelho, Dept. of Biomaterials

Honorable Mention: Basic Science Presentation by a Student in the DDS Program
IAN M. WALL, ’21
Oral Cancer Mouse Model Exhibits Sex Differences in Nociceptive Behavior
Faculty Advisor: Brian L. Schmidt, Bluestone Center for Clinical Research

Best Literature Review Presentation by a Student in the DDS Program
DANIELA BOLDIKOVA, ’19
Two Rare Extraction Cases of Unsuspected and Suspected Congenital Molar Extractions: Case reports with post-surgical specimen radiology
Faculty Advisors: Leslie A. Abraham, Jesse C. Doscher, and Huzefa Talib, Dept. of Oral and Maxillofacial Pathology

Best Educational Scholarship Presentation by a Student in the DDS Program
ANNA WONG, ’19
Dental Education: Analog or Digital? D4 Survey for Effective Learning
Faculty Advisor: Mary Kang, Dept. of Periodontology and Implant Dentistry

Best Clinical Case Report by a Student in the DDS Program
SARA STERNBACH, ’19
Condyloma Acuminatum of the Tongue: A case study and approaches to treatment
Faculty Advisor: Sonal S. Shah, Dept. of Oral and Maxillofacial Pathology, Radiology and Medicine

Outstanding Presentation in Post-Doctoral Research
GIUSEPPE F. AMODEO
Ion Channel Activity of Synthetic C Subunit of the ATP Synthase
Faculty Advisor: Evgeny V. Pavlov, Dept. of Basic Science and Craniofacial Biology

Masters of Science Research Award
TOMOYUKI OKAMOTO, MS ’19
Damage Resistance of Zirconia after Different Chewing Simulations
Faculty Advisor: Yu Zhang, Dept. of Biomaterials
Sonaj Vardhaman, MS '19
Multilayer Translucent Zirconia: Resistance to wear and fracture
Faculty Advisor: Yu Zhang, Dept. of Biomaterials

Cristóbal Rivera Martínez, MS '19
Comparative In Vitro Study of 3D Robocasting Scaffolds Using Beta Tricalcium Phosphate and Synthetic Bone Mineral
Faculty Advisor: Paulo Coelho, Dept. of Biomaterials

Best Presentation by a Research Scholar

Nadège Gouignard
Paracrine Activation of EMT Genes by MMP28
Faculty Advisor: Jean-Pierre Saint-Jeannet, Dept. of Basic Science and Craniofacial Biology

Best Presentation in the Advanced Education Program – Endodontics

Austín Ramsey, PG Endo '20
Outcomes of Patients Referred by Endodontists to Orofacial Pain Specialists: A retrospective study
Faculty Advisor: Lorel E. Burns, Dept. of Endodontics

Best Presentation in the Advanced Education Program – Pediatric Dentistry

Karen King, PG PEDO ‘19
Factors Influencing Child’s Acceptability of Oral Medications for Conscious Sedation in Pediatric Dentistry
Faculty Advisor: Ronald Kosinski, Dept. of Pediatric Dentistry

Honorable Mention: Best Presentation in the Advanced Education Program – Pediatric Dentistry

Sarunphorn Rasamimari, PG PEDO '19
Silver and Fluoride Content and Short-Term Stability of 38% Silver Diamine Fluoride
Faculty Advisor: Yasmi O. Crystal, Dept. of Pediatric Dentistry

Best Presentation in the Advanced Education Program – Pediatric Dentistry

1st Place: Viraj Patel, INTL IMPLANT ’20
Alteration of 3-D Printed Models for Implant Education of a Customized Alveolar Ridge Splitting Technique
Faculty Advisor: Zev Kaufman, Dept. of Periodontology and Implant Dentistry

2nd Place: Martin Leung, INTL IMPLANT ’20
Factors Influencing Interproximal Papilla Shape Before and After Immediate Implant Placement and Immediate Provisionalization
Faculty Advisor: Stuart Froum, Dept. of Periodontology and Implant Dentistry

3rd Place: Motoharu UnoZawa, INTL IMPLANT ’19
A New Approach for the Management of a Sinus Perforation
Faculty Advisor: Sang-Choon Cho, Dept. of Periodontology and Implant Dentistry

Best Presentations by International Dentists – Implant Dentistry

Best Presentation in the Programs for International Dentists – Implant Dentistry

Honorable Mention: Best Presentation by a Research Scholar

Arun Devotta
Dual Function of NPR3 in the Regulation of Neural Plate Border Cell Fates
Faculty Advisor: Jean-Pierre Saint-Jeannet, Dept. of Basic Science and Craniofacial Biology

Honorable Mention: Best Presentation by a Research Scholar

Joao Abreu, Visiting Scholar
Analysis of the Flow Profile and Dimension Accuracy of Die Silicone Materials
Faculty Advisor: Ronaldo Hirata, Dept. of Biomaterials

Best Presentation in the Programs for International Dentists – Pediatric Dentistry

Best Presentation in the Programs for International Dentists – Pediatric Dentistry

Honorable Mention: Best Presentation by a Student in the Master’s in Science Program

Sonaj Vardhaman, MS '19
Multilayer Translucent Zirconia: Resistance to wear and fracture
Faculty Advisor: Yu Zhang, Dept. of Biomaterials

Honorable Mention: Best Presentation by a Student in the Master’s in Science Program

Cristóbal Rivera Martínez, MS '19
Comparative In Vitro Study of 3D Robocasting Scaffolds Using Beta Tricalcium Phosphate and Synthetic Bone Mineral
Faculty Advisor: Paulo Coelho, Dept. of Biomaterials

Best Presentations by International Dentists – Endodontics

Best Presentation in the Advanced Education Program – Endodontics

Austín Ramsey, PG Endo ‘20
Outcomes of Patients Referred by Endodontists to Orofacial Pain Specialists: A retrospective study
Faculty Advisor: Lorel E. Burns, Dept. of Endodontics
Honorable Mention: Best Presentation in the Programs for International Dentists – Implant Dentistry
PARNWARD HENGJEERAJARAS, INT’L IMPLANT ’19
Surgical Strategies for Implant Placement in Medically Compromised Patients: A case report
Faculty Advisor: Stuart Froum, Dept. of Periodontology and Implant Dentistry

Honorable Mention: Best Presentation in the Programs for International Dentists – Implant Dentistry
BHUPESH KIRAN MANDALI, INT’L IMPLANT ’19
Revisiting Immediate Implant Placement and Immediate Provisionalization: Surgical and restorative considerations
Faculty Advisor: Maryse Manasse, Dept. of Periodontology and Implant Dentistry

Best Presentation in the Programs for International Dentists – Comprehensive Dentistry
SHAHRUKH SYED, INT’L COMP. ’19
Radiographic Red Flags for Stage-0 Medication Related Osteonecrosis of the Jaw (MRONJ): A diagnostic dilemma
Faculty Advisor: Siamak Najafi-Abrandabadi, Dept. of Prosthodontics

Honorable Mention: Best Presentation in the Programs for International Dentists – Comprehensive Dentistry
ADRIAN RUDIAK, INT’L COMP. ’19
Effect of a Visual Priming Technique on the Accuracy of Dental Shade Matching
Faculty Advisor: Siamak Najafi-Abrandabadi, Dept. of Prosthodontics

Best Presentation in the Programs for International Dentists – Esthetic Dentistry
DHANNY MEDIANTI, INT’L ESTH. ’18, INT’L ESTH. FELLOW ’19
Multidisciplinary Treatment of Short Tooth Syndrome
Faculty Advisor: Luis M. Brea, Dept. of Cariology and Comprehensive Care

Best Presentation by a Dental Hygiene Team
JESSICA YUK, HYG ’19; LAINEY LAU, HYG ’19; and YIWEN LI, HYG ’19
Efficacy of Using Arginine Formulations in the Treatment of Dentin Hypersensitivity
Faculty Advisor: Kaifin M. Stier, Dept. of Dental Hygiene and Dental Assisting

Honorable Mention: Best Presentation by a Dental Hygiene Team
CRISTINA ADAMES, HYG ’19 and CARINE FRANCK, HYG ’19
Sickle Cell Anemia and Elective Dental Treatments: Your smile is our mission
Faculty Advisor: Harold L. Jennings, Dept. of Dental Hygiene and Dental Assisting
A international team of researchers has used nanoparticles to deliver a drug — one that previously failed in clinical trials for pain — into specific compartments of nerve cells, dramatically increasing its ability to treat pain in mice and rats. The findings were published in *Nature Nanotechnology*.

“We have taken a drug — an FDA-approved anti-vomiting medication — and using a novel delivery method, improved its efficacy and duration of action in animal models of inflammatory pain and neuropathic pain,” said Nigel Bunnett, PhD, chair of the Department of Molecular Pathobiology (formerly Basic Science & Craniofacial Biology) at NYU Dentistry and the study’s senior author. “The discovery that nanoparticle encapsulation enhances and prolongs pain relief in laboratory animals provides opportunities for developing much-needed non-opioid therapies for pain.”

Opioids, a class of drugs used to treat pain, carry a high risk for addiction and overdose. Moreover, their effectiveness diminishes over time, requiring growing doses to manage pain. Side effects of opioids, including constipation and suppressing breathing, only worsen as doses are increased.

“There are many reasons that opioids are not ideal for treating pain. Given the ongoing opioid crisis, which has taken hundreds of thousands of lives, we need safer, more effective alternatives,” said Dr. Bunnett.

Dr. Bunnett and his colleagues study a family of proteins called G protein-coupled receptors, which are the target of one third of clinically used drugs. While it was thought that receptors function at the surface of nerve cells, they discovered that activated receptors move within the cell to a compartment called the endosome. In an endosome, receptors continue to function for prolonged periods. “The sustained activity of receptors in endosomes drives pain,” said Dr. Bunnett.

In their study in *Nature Nanotechnology*, researchers at NYU College of Dentistry, Monash University, Columbia University, and the University of Santiago in Chile focused on a G protein-coupled receptor called the neurokinin 1 receptor.

“Major pharmaceutical companies had programs to develop neurokinin receptor antagonists for chronic diseases, including pain and depression. However, in human trials, things fell apart,” said Bunnett. “The neurokinin receptor is the poster child for failures in drug discovery to treat pain.”

The researchers suspected that these drugs failed to work because they were designed to block receptors at the surface of cells rather than in endosomes.

To deliver drugs to endosomes, the researchers turned to nanoparticles — microscopic vehicles used for delivering drugs. Dr. Bunnett and his colleagues encapsulated into nanoparticles a neuro-
kinin receptor blocker called aprepitant, an FDA-approved drug used to prevent nausea and vomiting that failed clinical trials as a pain medication.

The nanoparticles were designed to enter nerves that transmit pain signals and release their aprepitant cargo in endosomes containing the neurokinin receptor. Nanoparticle-delivered aprepitant treated pain in mice and rats more completely and for longer periods than did conventional therapies, including opioids. Moreover, nanoparticle delivery minimized the dose of medication needed to treat the pain, which could be useful in avoiding side effects.

“The process we’ve developed is essentially like giving a drug infusion into the endosome of the cell,” said Dr. Bunnett. “By delivering a previously ineffective pain drug to the right compartment within the cell, it became highly effective as a pain treatment.”

The researchers are continuing to study the use of nanoparticles in delivering non-opioid pain medication, including developing ways to target them only to nerve cells that sense pain, which would allow for even smaller doses of the drug. They are also exploring encapsulating multiple drugs that block pain receptors, which could further improve the efficacy of treatment. The researchers note that additional studies are needed before nanoparticle-delivered pain medication can be tested in humans.

In addition to Dr. Bunnett, the study’s corresponding authors are Nicholas A. Veldhuis and Thomas P. Davis of Monash University. Additional study authors include Brian L. Schmidt, Nicole N. Scheff, Dane D. Jensen, and Rocco Latorre of NYU College of Dentistry; Luis Constandil and Teresa Pelissier of the University of Santiago de Chile; and the following researchers from Monash University: Paulina D. Ramirez-García, Jeffri S. Retamal, Priyank Shenoy, Wendy Imlach, Matthew Sykes, Nghia Truong, Cameron J. Nowell, Song Y. Khor, Louis M. Layani, Chris Lumb, Daniel P. Poole, TinaMarie Lieu, Gregory D. Stewart, Quynh N. Mai, John F. Quinn, and Michael R. Whittaker.
A mutation in the ORAI1 gene — studied in a human patient and mice — leads to a loss of calcium in enamel cells and results in defective dental enamel mineralization, finds a study led by researchers at NYU College of Dentistry.

The study, published in Science Signaling, identifies ORAI1 as the dominant protein for calcium influx and reveals the mechanisms by which calcium influx affects enamel cell function and the formation of tooth enamel.

Calcium is critical for many cellular functions, including mineralizing teeth and bones. Calcium enters cells via ORAI proteins, which form pores in a cell’s plasma membrane to enable calcium influx when activated.

“Our previous research has shown that deficiencies in the modulation of calcium influx or calcium transport result in dental enamel malformation,” said Rodrigo Lacruz, PhD, associate professor of basic science and craniofacial biology at NYU College of Dentistry and the study’s senior author. “Despite this knowledge, the biology of enamel cells as it relates to the role of calcium signaling remains poorly understood.”

Studies show that several genes, including ORAI (which encode ORAI proteins), are involved in the formation of tooth enamel. Enamel — the hard, outer layer of teeth — first forms as a soft, gel-like matrix. ORAI proteins then help the enamel-forming cells to mineralize.

Mutations in the human ORAI1 gene result in immune dysfunction and immune diseases, but people with ORAI1 mutations also have defects in their tooth enamel. In this study, the researchers investigated the case of a patient with a complex medical history, including combined immunodeficiency and a mutation in the ORAI1 gene. Throughout his childhood, the patient had defects on his tooth enamel, resulting in severe cavities and related dental abscesses. Based on his clinical presentation, the researchers concluded that the ORAI1 mutation likely accounted for the defective enamel mineralization.

Given the lack of dental samples from patients with ORAI1 mutations, Lacruz and his colleagues then developed mouse models to study the role of ORAI proteins in enamel formation, both by observing tooth enamel and examining its influence on the environment inside enamel cells.

The researchers studied the ORAI family of proteins (ORAI1, ORAI2, and ORAI3) and genetic mutations in the corresponding genes to investigate the mechanism by which calcium is modulated by each of these proteins. When mice had a mutation in the ORAI1 gene and were therefore deficient in ORAI1 protein, calcium entry into enamel cells was significantly reduced (by roughly 50 percent), and

“The findings provide a foundational understanding of what happens in enamel cells, which could help create a pathway for researchers interested in regenerating tooth enamel or developing therapies to treat patients with enamel defects.”

— Dr. Rodrigo Lacruz
Tooth enamel was abnormal, including cracks in the outer enamel layer. By contrast, mice with **ORAI2** mutations and ORAI2 deficiency showed an increase in calcium by approximately 30 percent in the enamel cells, which did not result in obvious enamel defects. This suggests that ORAI1 is the dominant channel for modulating the influx of calcium into enamel cells.

To better understand how calcium influx — and conversely, deficiency in calcium — changes the functioning of enamel cells, the researchers examined the activity of cells lacking ORAI1. They found that calcium dysregulation in ORAI1-deficient cells affects their function at multiple levels, including increased mitochondrial respiration and subsequent changes in redox balance. An elevation in reactive oxygen species can be detrimental to cells, and to protect proteins in an intracellular environment that is more oxidizing, a mechanism called S-glutathionylation is promoted.

The findings provide a foundational understanding of what happens in enamel cells, which could help create a pathway for researchers interested in regenerating tooth enamel or developing therapies to treat patients with enamel defects.

“We’ve long observed deficiencies in tooth enamel associated with abnormal calcium levels in the enamel cells, but can now detail a mechanism for how this occurs,” said Lacruz.

In addition to Lacruz, study authors include Miriam Eckstein, Francisco Aulestia, Veronica Costiniti, Serena Kassam, Timothy Bromage, and Amr Moursi of NYU College of Dentistry; Martin Vaeth and Stefan Feske of NYU School of Medicine; Pal Pedersen of Carl Zeiss Microscopy, LLC; Youssef Idaghdour of NYU Abu Dhabi; and Thomas Issekutz of Dalhousie University. This research was funded by the National Institutes of Health’s National Institute of Dental and Craniofacial Research.

**Above: High-magnification of tooth enamel in normal (control) mice (top) and mice with ORAI1 gene mutation (bottom) by scanning electron microscope. Reprinted with permission from Eckstein et al., Sci. Signal. 12, eaav4663 (2019).**

**Dr. Brian Schmidt Appointed Chair of NIH’s Somatosensory and Pain Systems Study Section**

Dr. Brian Schmidt, DDS, MD, PhD, has been appointed chair of the NIH Somatosensory and Pain Systems Study Section, Center for Scientific Review, for the term beginning July 1, 2019, and ending June 30, 2021.

Dr. Schmidt, director of the NYU Oral Cancer Center, is at the forefront of biomedical research into oral cancer from the molecular level to clinical patient studies. Backed by NIH funding, Dr. Schmidt currently researches genetic biomarkers for precancer and cancer, neural pain pathways for new pain control therapies, and novel oral cavity reconstruction techniques. His demonstrated skill and leadership will allow him to determine to a significant extent the effectiveness and efficiency of the study section he is chairing.

We congratulate Dr. Schmidt on this latest recognition of the major role he is playing in advancing the national biomedical research effort.
Certain fungi move from the gut to the pancreas, expand their population a thousand-fold, and encourage pancreatic cancer growth, a new study finds.

Published in *Nature*, the study is the first to offer strong evidence that the mycobiome, the local mix of fungal species, can trigger changes that turn normal cells into pancreatic ductal adenocarcinoma or PDA, a form of cancer usually deadly within two years.

Conducted in mice and in patients with pancreatic cancer, the study found that fungal species travel into the pancreas up the pancreatic duct, a tube through which digestive juices drain in the opposite direction into the intestines. The study authors say this exchange results in abnormal fungal populations in both the gut and pancreas in the presence of PDA.

Led by researchers from the NYU College of Dentistry and the NYU School of Medicine, the study also found that treating mice with a potent antifungal drug reduced their PDA tumor weight over the 30 weeks by 20 to 40 percent.

"While past studies from our group have shown that bacteria travel from the gut to the pancreas, our new study is the first to confirm that fungi too make that trip, and that related fungal population changes promote tumor inception and growth," says senior study co-author George Miller, MD, co-leader of the Tumor Immunology Research Program at Perlmutter Cancer Center at NYU Langone Health.

While viruses, bacteria, and parasites are recognized by the American Cancer Society as causal factors in the disease, say the study authors, no previous study had linked fungi to pancreatic cancer.

To determine whether the mycobiome is reprogrammed as normal cells become cancerous (oncogenesis), the team performed analyses over 30 weeks of fecal samples from mice with and without pancreatic cancer. Researchers used genomic and statistical techniques to identify and count the fungal species present. They also attached glowing proteins to fungi to track their migrations through the gut and pancreas.

By the end of the study period, the researchers observed significant differences in the size and composition of the fungal population in the cancerous pancreas when compared to the healthy organ. The largest population increase in both mice and in human tissues was seen in the genus *Malassezia*, which includes 14 species. The team also detected abnormally higher numbers in the genera *Parastagonospora*, *Saccharomyces*, and *Septoriella*.

"We have long known that *Malassezia* fungi — generally found on the skin and scalp — are responsible for dandruff and some forms of eczema, but recent studies have also linked them to skin and colorectal cancer," says senior co-author Deepak Saxena, PhD, professor of Basic Science and Craniofacial Biology at NYU College of Dentistry. "Our new findings add evidence that *Malassezia* is abundant in pancreatic tumors as well."

To test the effect of changing fungal populations on cancer growth, the team treated the mice with amphotericin B, a strong, wide-spectrum antifungal drug. Along with reducing tumor weight, antifungal treatment also reduced the occurrence of ductal dysplasia, an early cellular step toward pancreatic cancer, by 20 to 30 percent.
“Fungal ablation also strengthened the anti-cancer effect of a standard chemotherapy, gemcitabine, by 15 to 25 percent,” says co-first author Berk Aykut, MD, a postdoctoral fellow in Dr. Miller’s lab.

After the pancreases of the mice had been mostly cleared of fungi by drug treatment, the team then examined the effect on cancer growth if only certain species were allowed to repopulate the organ. They found that cancer grew 20 percent faster in the pancreases of mice repopulated with *Malassezia* — but not in the presence of other oft-occurring fungal species.

The study results argue that fungi increase cancer risk by activating an ancient, first-responder part of the immune system, the complement cascade. Such mechanisms fight infections, but also trigger the healing process (cell growth) as infections wane. Along these lines, complement has been shown by past studies to encourage aggressive tissue growth (cancer) when combined with genetic flaws.

“We have long known that *Malassezia* fungi ... are responsible for dandruff and some forms of eczema, but recent studies have also linked them to skin and colorectal cancer. Our new findings add evidence [that they are] abundant in pancreatic tumors as well.”

— Dr. Deepak Saxena

“Moving forward, one goal for our team is to determine which species are most relevant to cancer, as doing so could guide future attempts to slow tumor growth with targeted antifungal medications, and to avert side effects,” says co-first author Smruti Pushalkar, PhD, a research scientist at NYU College of Dentistry.

Along with Drs. Miller and Aykut, study authors from the Arthur Localio Laboratory in the departments of Surgery and Cell Biology at NYU School of Medicine were Ruonan Chen, Jacqueline Kim, Sorin Shadaloey, Pamela Preiss, Raquel Abengozar, Joshua Leinwand, Emma Kurz, Brian Diskin, Dongling Wu, and Juan Kochen Rossi; as well as Narendra Verma in the Department of Medicine. Along with Drs. Saxena and Pushalkar, study authors from the Department of Basic Science and Craniofacial Biology at NYU College of Dentistry were Qianhao Li, Xin Li, Yuqi Guo, and Mridula Vardhan; as well as Anjana Saxena in the Biology Department of the Brooklyn College and Biology/Biochemistry Programs of the City University of New York.

Left: Two sections of pancreatic tissue, in blue. The one on the right is taken from a mouse with pancreatic cancer. The pink dots are fungi seen only in the pancreas with cancer. Images courtesy of Anjana Saxena, Brooklyn College.
A new method for simultaneous measurement of 71 inorganic elements in liquids — including water, beverages, and biological fluids — makes element testing much faster, more efficient, and more comprehensive than was possible in the past.

The researchers studied samples of liquid from a variety of sources worldwide, including tap water from a New York City suburb, snow from Italy and Croatia, rain from Brazil and Pakistan, lake water from Switzerland and Croatia, and seawater from Japan and Brazil. Testing each sample results in a distinct elemental pattern, creating a “fingerprint” that can help differentiate between substances or trace a liquid back to its environmental origin.

The method — developed by Timothy Bromage, PhD, professor of biomaterials, and his team at the isotope laboratory of NYU College of Dentistry and described in the journal *RSC Advances*, published by the Royal Society of Chemistry — may be used to explore and understand the distribution of inorganic elements beyond the few that are typically measured. It has implications for fields such as nutrition, ecology and climate science, and environmental health.

An analytical technique called inductively coupled plasma mass spectrometry (ICP-MS) is used to measure elements. Historically, ICP-MS instruments have measured elements sequentially, or one by one, but a new type of ICP-MS instrument at NYU College of Dentistry and roughly two dozen other places around the world has the potential to measure the complete range of inorganic elements all at once.

“Because of this new method, our mass spectrometer can simultaneously measure all inorganic elements from lithium to uranium. We’re able to measure the elements in far less time, at far less expense, using far less material,” said Dr. Bromage, the study’s senior author.

This technological advancement may help to fill gaps in our understanding of element distributions and concentrations in substances like water. For instance, the U.S. Environmental Protection Agency monitors and sets maximum concentration limits for 19 elements in drinking water considered to be health risks, yet many elements known to have health consequences — such as lithium or tin — are neither monitored nor regulated.

“The elemental mapping of concentration levels in bottled and tap water could help to increase our understanding of ‘normal’ concentration levels of most elements in water,” said Dr. Bromage.

Dr. Bromage and his colleagues designed a method for using simultane-
ous ICP-MS to detect 71 elements of the inorganic spectrum involving a specific set of calibration and internal standards. The method, for which they have a patent pending, routinely detects elements in seconds to several minutes and in samples as small as 1 to 4 milliliters.

Dr. Bromage and his research team tested the method on waters, beverages, and biological samples. Snow contained the most elements of any water sample: 50 in snow collected in Italy and 42 in a sample from Croatia. "Such evaluations of snow may represent a new and comprehensive means of surveying atmospheric concentrations of elements and for monitoring element patterns in global airflows," Dr. Bromage said.

When testing tap water, the researchers measured 37 elements when the tap was first turned on but only 34 elements after the water was running for five minutes, suggesting that elements such as iron and zinc may be leaching from household pipes into the water.

The researchers also measured elements in bottled water, beer, wine, and milk, as well as in samples of saliva, urine, and blood. Milk was distinguished from the other beverages tested by its high concentrations of titanium, zinc, palladium, and gold.

In each sample, Dr. Bromage and his team found a distinct “fingerprint” or elemental pattern, suggesting that samples can be recognized and differentiated by these patterns. The elemental content of water, for example, typically reflects its natural environment, so understanding the elemental composition can tell us if water had its origins from a source with volcanic rock versus limestone, an alkaline rock. In bottled water, the researchers observed variations that can likely be traced to one being bottled at the source and one being chlorinated for transportation from the source to the bottling plant.

“Water is an arbiter of how a system actually works. If you sample the water from a pond or river and measure the elements, you are measuring the stuff that becomes incorporated into all life — water feeds the plants, animals eat the plants, we eat the plants and animals. We could use this knowledge to study human fossils and potentially retrodict what the nature of the region’s water was hundreds of thousands or millions of years ago,” said Dr. Bromage.

In addition to Dr. Bromage, study authors include Drs. Melanie Bäuchle, Sasan Rabieh, and Khemet Calnek of NYU College of Dentistry and Dr. Tina Lüdecke of Senckenberg Biodiversity and Climate Research Center and NYU College of Dentistry.
While oral appliances such as splints and bite guards are the most common treatment for facial pain from temporomandibular disorders (TMD), patients rate them as less helpful than self-care treatments, such as jaw exercises or warm compresses, finds a new study by researchers at NYU College of Dentistry.

The study, published in the journal Clinical Oral Investigations, suggests that self-care techniques should be the first line of treatment for muscle-related TMD.

TMD (sometimes called TMJ after the temporomandibular joint) is a group of common pain conditions that occur in the jaw joint and surrounding muscles. The muscular condition, called myofascial temporomandibular disorder (mTMD), affects over 10 percent of women. People with TMD often have other pain conditions; research shows that 7 to 18 percent of people with TMD also meet criteria for fibromyalgia, a condition characterized by widespread pain.

Dentists and patients use a variety of treatments to manage facial pain, including oral appliances, such as splints and bite guards; pain medications, such as nonsteroidal anti-inflammatory drugs; and self-care techniques, such as jaw exercises and warm compresses.

“Oral appliances are a common first-line treatment for TMD, despite mixed research results regarding their benefit. Even when oral splints have been found to have some benefit, they have not been found as effective for patients who also have widespread pain in the treatment of mTMD,” said Vivian Santiago, research assistant professor in the Department of Oral and Maxillofacial Pathology, Radiology and Medicine at NYU College of Dentistry and the study’s lead author.

In this study, the researchers examined what non-medication treatments women with mTMD use to manage their pain and how effective patients perceive the treatments to be. The researchers examined and interviewed a total of 125 women with mTMD, including 26 who had both mTMD and fibromyalgia, in order to determine whether treatment differed for patients with widespread pain.

The most common treatments reported were oral appliances (used by 59 percent of participants), physical therapy (54 percent), and at-home jaw exercises (34 percent). Less common treatments included acupuncture (20 percent), seeing a chiropractor (18 percent), trigger point injection (14 percent), exercise or yoga (7 percent), and meditation or breathing (6 percent). Participants often used more than one treatment (2.4 on average).

Participants reported the most improvement in their pain from common self-care activities, including jaw exercises, yoga or exercise, meditation, massage, and warm compresses, with over 84 percent reporting that these activities helped them at least a little. In contrast, only 64 percent of those who
used oral appliances — the most popular treatment — reported that they helped at least a little. A small proportion of women who used oral appliances (11 percent) said that oral appliances made their pain worse, an area that warrants further research.

“Oral appliances did not outperform self-management care techniques in improving facial pain. Our results support the use of self-management as the first line of treatment for mTMD before considering more expensive interventions,” said Karen Raphael, PhD, professor in the Department of Oral and Maxillofacial Pathology, Radiology and Medicine at NYU College of Dentistry and the study’s co-author.

The researchers did not find significant differences between the number of treatments reported by women with and without fibromyalgia. While the use of alternative treatments, such as acupuncture and seeing a chiropractor, was reported more frequently among women with fibromyalgia and mTMD, they did not necessarily find more relief. Interestingly, physical therapy was used equally by women with and without fibromyalgia, but self-reported improvement tended to be higher for those with fibromyalgia.

“In Detecting Self-reported Drug Use among Young Adult Opioid Users,” the researchers examined the utility of hair testing compared to a more common method — urine testing to validate or detect underreported drug use. They found that urine testing is often better than hair testing for detecting past-month drug use, while hair testing is efficacious in detecting recent unreported use of cocaine/oxycodone and that it often adds to the detection power of urine. They concluded that including urine and/or hair testing as an adjunct to surveys can help correct type-in responses for use of 79 new or uncommon synthetic drugs, and 54 were first-ever mentions of these drugs, the majority of which were phenethylamines, which have hallucinogenic, sedative, and depressant effects. They concluded that although type-in responses on surveys are limited and underestimate prevalence of use, such responses can help inform researchers when new compounds are used, and that continued surveillance of use of new and uncommon drugs is needed to inform adequate public health response.

A third study, coauthored by Dr. Palamar, Mr. Le, and Patricia Acosta, a research associate and teaching assistant in the Department of Population Health at NYU Langone Health, and sponsored by the Center for Drug Use and HIV/HCV Research (CDUHR) at the NYU College of Global Public Health, found that, among young adults who use drugs, one third post on social media and half text or make calls while high. The findings, published in the journal Substance Abuse, concluded that while prevention programs have largely focused on physical safety — for example, not driving while drinking, such programs can also stress that using a smartphone while high can increase the risk of someone engaging in regretful behavior, and that tactics such as using apps to prevent texting while intoxicated or delaying posting on social media until one is no longer experiencing drug effects may help to minimize social harm.

A fourth study, “Perceived Risk of Heroin in Relation to Other Drug Use in a Representative US Sample,” coauthored by Dr. Palamar, Mr. Le, and Pedro Mateu-Gelabert, PhD, of the Center for Drug Use and HIV/HCV Research (CDUHR) at NYU Meyers College of Nursing and the National Development and Research Institutes, sought to determine whether a particular risk factor for heroin use — low perception of risk — is affected by the use of other drugs. They concluded that prevention experts should consider that recent prescription opioid misuse in particular is a risk factor for the lower perception of risk, while individuals reporting no lifetime drug use may also require better education regarding harms associated with heroin use. The results were published in the Journal of Psychoactive Drugs.

In two studies coauthored with Joseph J. Palamar, MPH, PhD, associate professor in the Department of Population Health at NYU Langone Health, Austin Le, MSc, DDS Class of 2020, and a research associate in the Department of Population Health at NYU Langone Health, looked at various forms of drug use and misuse among young adults.

In the first study, “A Comparison of the Utility of Urine and Hair Testing in Detecting Self-reported Drug Use among Young Adult Opioid Users,” the researchers examined the utility of hair testing compared to a more common method — urine testing to validate or detect underreported drug use. They found that urine testing is often better than hair testing for detecting past-month drug use, while hair testing is efficacious in detecting recent unreported use of cocaine/oxycodone and that it often adds to the detection power of urine. They concluded that including urine and/or hair testing as an adjunct to surveys can help correct prevalence estimates that are influenced by unreported use. Their research was published in ScienceDirect.

In the second study, “Use of New and Uncommon Synthetic Psychoactive Drugs among a Nationally Representative Sample in the United States, 2005-2017,” published in Human Psychopharmacology, the researchers sought to examine patterns and first mentions of reported use of new or uncommon drugs across 13 years, among nationally representative samples of young adults in the United States. They found that from 2005 to 2017, there were 2,343 type-in responses for use of 79 new or uncommon synthetic drugs, and 54 were first-ever mentions of these drugs, the majority of which were phenethylamines, which have hallucinogenic, sedative, and depressant effects. They concluded that although type-in responses on surveys are limited and underestimate prevalence of use, such responses can help inform researchers when new compounds are used, and that continued surveillance of use of new and uncommon drugs is needed to inform adequate public health response.

“While fibromyalgia is diagnosed by a physician, usually a rheumatologist, TMD is usually diagnosed and treated by a dentist. Our research suggests that dentists should ask patients with facial pain about whether they also have widespread pain, as this could provide more information to help plan their treatment,” said Santiago.

“Although clinical trials are critical for understanding treatment efficacy, our study highlights the importance of listening to people suffering with TMD to understand which treatments are the most beneficial,” added Raphael.
The face: it’s personal, yet universal. It’s how we recognize each other and communicate our emotions — and yet there’s more to it than immediately meets the eye. Beneath the skin and muscles that form our smirks and scowls are 14 different bones that house parts of the digestive, respiratory, visual, and olfactory systems — enabling us to sniffle, chew, blink, and much more.

Thanks to the discovery of fossils, researchers are able to observe how faces have evolved over time, from extinct hominin species walking the Earth millions of years ago, to Neanderthals, to the only remaining hominin species — Homo sapiens, or humans. Analyzing the visages of our ancestors provides clues about why our faces have grown shorter and flatter over millennia. Which environmental and cultural factors influenced the structure of our modern faces, and how might climate change reshape them yet again?

Two years ago, Rodrigo Lacruz, PhD, associate professor of basic science and craniofacial biology, gathered a group of leading human evolution experts at a conference in Madrid, Spain, to discuss the evolutionary roots of the modern human face. Their detailed account of its history — which appeared in *Nature Ecology & Evolution* — covers roughly 4 million years and integrates many different lines of research, given the numerous factors that contribute to facial shape. The researchers conclude that the face’s appearance is a combination of biomechanical, physiological, and social influences.

**NYU News** asked Dr. Lacruz to describe how we came to look the way we do.

**NYU News:** How does the human face differ from that of our predecessors — and our closest living relatives?

**Dr. Lacruz:** In broad terms, our faces are positioned below the forehead, and lack the forward projection that many of our fossil relatives had. We also have less prominent brow ridges, and our facial skeletons have more topography. Compared to our closest living relatives, the chimpanzees, our faces are more retracted and are integrated within the skull rather than being sort of pushed in front of it.

**NYU News:** How has our diet played a role?

**Dr. Lacruz:** Diet has been considered an important factor, especially when it comes to the mechanical properties of foods consumed — soft versus hard objects. For instance, some early hominins had bony structures that suggested the presence of powerful muscles for mastication, or chewing, and they had very large chewing teeth, indicating that they were likely adapted for processing harder objects. These fossils had unusually flat faces. In more recent humans, the transition from being hunter-gatherers to settlers also coincides with changes in the face, specifically the face becoming smaller. However, many of the details of this interaction between diet and facial shape are unclear because diet affects certain parts of the face more than others. This reflects how modular the face is. A raised eyebrow, grimace, and squint all signal very different things.

**NYU News:** Did the human face evolve to enhance social communication?
**Dr. Lacruz:** We think that enhanced social communication was a likely outcome of the face becoming smaller, less robust, and with a less pronounced brow. This would have enabled more subtle gestures and hence enhanced non-verbal communication. Let’s consider chimpanzees, for example, which have a smaller repertoire of facial expressions compared to us, and a very different facial shape. The human face, as it evolved, likely gained other gestural components. Whether social communication by itself was the driver for facial evolution is much less likely.

**NYU News:** Climate also plays a role in evolution. How have factors like temperature and humidity influenced the evolution of the face?

**Dr. Lacruz:** We see that perhaps more clearly in Neanderthals, which adapted to live in colder climates and had large nasal cavities. This would have enabled an increased capacity for warming and humidifying the air they inhaled. The expansion of the nasal cavity modified their faces by pushing them somewhat forward, which is more evident in the midface (around and below the nose). The likely ancestors of the Neanderthals, a group of fossils from the Sima de los Huesos site in Spain that also lived in somewhat colder conditions, also showed some expansion of the nasal cavity and a midface that jutted forward. While temperature and humidity affect the parts of the face involved in breathing, other areas of the face may be less impacted by climate.

**NYU News:** In the Nature article, you mention that climate change could affect human physiology. How could a warming planet change our faces?

**Dr. Lacruz:** The nasal cavity and upper respiratory tract (the area at the back of the nose near the pharynx) influence the shape of the face. Part of this knowledge derives from studies in modern people by some of our collaborators. They have shown that the shape of the nasal cavity and nasopharynx differ between people living in cold and dry climates and those in hot and humid climates. After all, the nose helps warm and humidify inhaled air before it reaches the lungs.

The expected rise in global temperatures could have an effect on human physiology — specifically, how we breathe — over time. The extent of these changes in the face will depend, among other things, on how much warmer it grows. But if predictions of a 4°C (~7°F) rise in temperatures are correct, changes in the nasal cavity might be anticipated. In these scenarios, we should also take into account the high mobility of gene flow, which is an important factor as well, so the effects of climate change can be difficult to predict.

“We think that enhanced social communication was a likely outcome of the face becoming smaller, less robust, and with a less pronounced brow.

This would have enabled more subtle gestures and hence enhanced non-verbal communication.”

— Dr. Rodrigo Lacruz
With support from the NYU Global Seeds Grant for Collaborative Research, NYU Dentistry has been collaborating for the past two years with NYU Abu Dhabi on “The Haptodont Project,” which is designed to improve clinical periodontal education through haptic technology (the science of interactions involving touch). The project focuses on the research, development, and evaluation of a realistic and precise simulator to overcome limitations in training dental and dental hygiene students in periodontal procedures.

While the use of a haptic simulator has been proven to increase patient safety and reduce risk associated with human errors by allowing dental and dental hygiene students to develop skills more efficiently in a shorter period of time, existing haptic simulation tools have numerous limitations. These include less than optimal visualization and tactile sensation, use of a stylus instead of a dental instrument, inability to view positioning of hands in virtual simulation, often only dominant hand used with no training for the non-dominant hand, and inability to practice proper ergonomics and positioning.

The objective of the new technology is to enable the learner to visualize a 3D virtual human mouth and feel physical tactile sensations as she/he touches the surface of teeth, gingiva, bottom of the periodontal pocket, and calculus in addition to the cheek, tongue, and floor of the mouth via virtual dental instruments.

The NYU Dentistry portion of the project is being led by Peter M. Loomer, DDS, PhD, and Dianne L. Sefo, RDH, MEd. Dr. Loomer is a former professor and chair of the NYU Ashman Department of Periodontology and Implant Dentistry, and is currently Dean of the School of Dentistry at UT Health San Antonio and adjunct professor of periodontology and implant dentistry at NYU. Professor Sefo is interim chair of the Department of Dental Hygiene and Dental Assisting and clinical associate professor of dental hygiene at NYU. They are collaborating with Mohaemaed Eid, PhD, of NYU Abu Dhabi, to develop software that uses virtual reality and haptic technologies to create a periodontal simulator that allows learners to acquire tactile skills while performing diagnosis and/or treatment procedures for periodontal diseases. Dr. Eid is assistant professor of electrical and computer engineering and director of the NYU Abu Dhabi AIM Lab.
“Because there are no commercial products currently available for periodontal instrumentation,” explained Dr. Loomer, “it was necessary to identify engineers who could use haptic technology to create this kind of periodontal simulation model, and, once designed, have the model evaluated by periodontal and dental hygiene faculty at NYU, whose feedback would be used to guide further development.

Dr. Eid identified Muhammad Hassan Jamil, a research engineer at NYU Abu Dhabi, and Said Chehabeddine, an engineering student at the University of Toronto currently in a study abroad program at AIM lab, and recruited them to modify the software and hardware portions of commercially-available products.

“With that accomplished,” said Professor Sefo, “it was time to begin faculty testing of the new technology.” Thirty-six clinical and preclinical dental hygiene and periodontology faculty, all experts in assessing the periodontal tissues, participated in the testing to familiarize themselves with haptic technology and virtual reality. They were asked to probe a sextant of the teeth using the modified technology and their probing technique was evaluated to determine the accuracy of the pocket-depth measurements. They were also asked to complete a questionnaire about their experience and to make suggestions for further development.

“The feedback has been extremely positive,” said Professor Sefo. “The majority of faculty participants felt that the new technology provided a more realistic experience than the traditional model and it had the potential to meet the clinical simulation needs of current and future students. They also recommended that the next step should be to develop system guidance for demonstrating correct probing technique.”

The team is currently working on the further development of the model and on preparing a new proposal using data collected from the faculty training program to apply for a National Science Foundation (NSF) grant.

Testing by NYU students will begin soon and the expectation is that the new model will be available for use in the predoctoral and dental hygiene curricula within the next two years. Dr. Loomer noted that in addition to testing at NYU Dentistry, “the new haptic learning tool will be tested at the School of Dentistry at UT Health San Antonio and the dental school at the University of Ajman in the United Arab Emirates. Future plans include using the technology to perform surgical procedures and enabling long-distance education.”

“The majority of faculty participants felt that the new technology provided a more realistic experience than the traditional model and it had the potential to meet the clinical simulation needs of current and future students.”

— Professor Dianne Sefo

From left: Professor Sefo, Kellie Kennedy, clinical assistant professor of dental hygiene and dental assisting, Dr. Loomer, and Dr. Eid, testing the haptic technology.
Friendship, Stewardship, and Love of Alma Mater

Dr. Milton Friedman, ’55,
Leaves $6.7 Million Bequest to NYU Dentistry

The College of Dentistry has received a bequest of nearly $7 million dollars from the estate of Dr. Milton Friedman, Class of 1955. The gift, which is the largest ever received from an individual, is the somewhat unlikely result of a series of events going back nearly 20 years, when Dr. Friedman, a retired dentist living in Commack, New York, contacted NYU’s director of planned giving to request information about naming the College of Dentistry in his will. Over the years, Dr. Friedman repeatedly indicated that he planned to leave a legacy “in the middle seven figures,” but remained steadfast about not signing a written agreement.

Fast forward to 2013, when Marsha Metrinko, recently recruited as associate director of development and alumni affairs, was looking for some viable development leads. Coincidentally, Lauren Siegel, associate director of campaign operations in the Office of Development and Alumni Relations, happened to be going through some old, dusty files, and, despite being told by colleagues to throw them out because “electronic is all that matters,” she decided that you can’t randomly shred without first reading the files because you might find a nugget of gold in them. And when she did read them, she decided that the correspondence with Dr. Friedman dating back to 2000 might contain that nugget. So she flagged it for Marsha, who began weekly phone calls to Dr. Friedman to bring him news of what was happening at the College.

These calls, Dr. Friedman told her, kept his alma mater “alive for him.” He frequently spoke to her about his time at the College as “the best years of his life,” and said that he was going to leave a major gift in his will, but declined to put anything in writing. He asked her if she would still continue to call him, which she did, regularly.

In 2015, Marsha called Dr. Friedman’s home and left a message. His friend Peter Quinn returned the call and told her that Dr. Friedman was seriously ill and in the hospital, where she phoned him. Peter, who is a former New York City police officer and a deeply compassionate person, had grown up across the street from Dr. Friedman in Commack and had been helping him to handle his affairs, told Marsha after Dr. Friedman’s passing that, in 2008, he had received durable power of attorney to operate as Dr. Friedman’s agent. She also learned that he told Peter that while he planned to leave a major portion of his estate to NYU, he was not ready to put anything in writing. Then, in 2013, Dr. Friedman again reached out to NYU’s director of planned giving to request information about making a charitable request, though he didn’t follow up. In fact, Dr. Friedman had written his will in 2012, leaving virtually his entire estate to NYU Dentistry, but didn’t have it notarized until 2015.

Dr. Friedman passed away in May 2018. Several months later, Peter, as executor of his will, informed Marsha that Dr. Friedman’s assets totaled just over $7 million, with nearly all of it going to NYU. A general practitioner,
Dr. Friedman had retired from practice in 1973 as the result of a longstanding injury, but he had kept all his investments in tax free municipal bonds and Treasury notes, which became the source of his wealth.

In his note to Marsha, Peter wrote: “I truly believe that the friendship he had with you, and your commitment to the school, had a direct impact on his decision to leave his estate to the College of Dentistry. He loved speaking with you. You were not only a connection to what he loved — NYU and dentistry — you were a kind friend who genuinely cared. He was always happier on days the two of you would speak, and he would fill me in on what you spoke about. Whenever he was in the hospital, he would ask: ‘Did anyone call?’ I knew you were anyone and you always did.”

“When he was gone,” says Marsha, “and Peter asked me if I had known that he had money. I said no, because nothing would have suggested that. Still, we kept talking about the College and the things he remembered and we developed a real rapport. I knew that he recognized the value of his dental education and wanted very much to give something back.”

Dr. Friedman’s magnificent bequest owes much not only to Marsha Metrinko’s stewardship, but also to her genuine friendship and concern for him; to Lauren Siegel’s diligence and foresight; and to Peter Quinn’s commitment to ensuring that his friend’s legacy would be used as he wished — to advance faculty recruitment, research, and special projects. Dean Bertolami called the bequest “not only the most generous individual gift to the College, but also one of the most meaningful because it so clearly reflects Dr. Friedman’s love for and devotion to the future of his beloved alma mater. It is also a remarkable testament to the conscientiousness, concern, and commitment of Lauren, Marsha, and Peter, each of whom played a pivotal role in making Dr. Friedman’s wishes a reality.”

Marsha Metrinko, Peter Quinn, and Lauren Siegel
Since spring 2017, a group of distinguished leaders from dentistry and related health care industries have been playing a pivotal role in helping the College to identify, analyze, and act upon critical issues facing the profession. They are the members of the Dean’s Strategic Advisory Council, which is co-chaired by Stanley M. Bergman, chairman and CEO of Henry Schein, Inc., and Dean Bertolami.

These issues include high student indebtedness, new players providing traditional dental services, changes in the dentist-payee relationship, our aging population and their increasingly medically-complex needs, and rapidly changing technology. All these issues affect our ability to recruit and educate the best students, who, in turn, will help define the way dentistry is practiced in the future.

The Dean’s Strategic Advisory Council meets twice a year to discuss topics designed to address these issues. Topics have included “The Changing Economics and Dynamics of Dental Education and Practice,” “The Erosion of Alignment Between the Professional, Academic, and Corporate Sectors,” “Reshaping the Importance of Oral Health for the Public — Redefining the Profession for the Future,” “A Regional Approach to Dental Education: Differentiating NYU Dentistry’s Programs, Attracting Superior Candidates and Faculty, and Impacting Dental Education and Patient Care by Establishing Best Education Practices,” “A Year of Launch and Development: The Opening of NYU’s Oral Health Center for People with Disabilities Ushers in a Season of Change for the College, Our Patients, and Dental Education Overall,” and “The Expanding Role of the College as a Collaborative Center Improving Access, Care, and Health Outcomes for our Communities and Beyond.”

Dean’s Strategic Advisory Council member Allan Finkelstein urged us to...
consider overall wellness an important need in the context of the Oral Health Center for People with Disabilities. Working with Mr. Marco Damiani and Drs. Rita Billelo and Vincent Siasoco, the wellness concept is becoming a reality not only for patients of the OHCPD, but for the entire dental school.

We salute the men and women of the Dean’s Strategic Advisory Council for their willingness to help set NYU Dentistry’s overarching strategic direction by generously sharing their time and expertise.

Members of the Dean’s Strategic Advisory Council:

Dr. Craig Abramowitz, Vice Chairman, Dental Care Alliance
Mr. Stanley Bergman, President & CEO, Henry Schein, Inc.
Dr. Charles Bertolami, Herman Robert Fox Dean, NYU College of Dentistry
Dr. Rita Billelo, Dental Director, Metro Community Health Centers
Mr. Steve Boggan, President and CEO, BioHorizons Inc.
Dr. James Bramson, former Chief Dental Officer, United Concordia Companies, Inc.

Mr. Marco Damiani, CEO, AHRC New York City
Mr. Peter DuBois, Executive Director, California Dental Association
Dr. Allen Finkelstein, CEO, Bedford HealthCare Solutions
Dr. Chad Gehani, President, American Dental Association
Dr. Karl Haden, President & CEO, Academy for Academic Leadership
Mr. John Kemp, President & CEO, The Viscardi Center
Dr. Mina Kim, Dentist, Bryant Park Dental Associates
Dr. Howard Lieb, Dentist, Drs. Lieb & Taheri
Dr. Michael Lynch, Global Director of Oral Care, Clinical Strategy & Research, Johnson & Johnson
Mr. Larry McReynolds, Executive Director and Senior Vice President for Community Health, NYU Langone Family Health Centers
Dr. Alex Mikhailov, CEO, StomatCare
Dr. Michael O’Connor, Executive Vice Dean, NYU College of Dentistry
Dr. Edward O’Neil, Owner, O’Neil & Associates
Mr. Steve Pollock, President and Chief Executive Officer, DentaQuest
Mr. Maria Ryan, Vice President and Chief Dental Officer, Colgate-Palmolive Company
Mr. Olivier Schiller, CEO, Septodont
Mr. Ken Serota, President, Hu-Friedy
Dr. Lou Terracio, Vice Dean for Academic Affairs and Research, NYU Dentistry
Dr. Richard Valachovic, former President and CEO of ADEA, former President of the ADEAGies Foundation
Chronic (long-term) pain is a major cause of human suffering. Opioids (narcotics) do not adequately alleviate pain and they produce unwanted side effects. For example, while pain is the dominant symptom of irritable bowel syndrome (IBS), opioids can exacerbate pain and other IBS symptoms. Nigel Bunnett, PhD, and Brian Schmidt, DDS, MD, PhD, will investigate the role of PAR2 and chronic pain secondary to IBS and inflammatory bowel disease (IBD). Previously, they have collaborated on work to reveal the role of PAR2 in cancer pain, headache, nerve injury pain, and pain secondary to infectious colitis.

The PAR2 signaling mechanism plays a central role in chronic pain. PAR2 is a member of a large family of receptors termed G protein-coupled receptors (GPCRs). GPCRs are the target of one-third of all FDA-approved drugs. PAR2 receptors on the surface of neurons are activated by extracellular proteases (molecules outside the cell that sever proteins). These receptors are subsequently internalized in endosomes (structures inside the cell). Knowledge gleaned from the work will provide insight into therapeutic targeting of GPCRs within endosomes.

Patients experience chronic pain when proteases cause sustained activation of the PAR2 receptor. To address this issue Dr. Bunnett developed drugs termed lipidated PAR2 antagonists. These drugs remain bound to PAR2 after the receptor is activated at the cell surface and subsequently internalized in endosomes. The lipidated PAR2 antagonist disrupts the pain signaling mechanism that would otherwise be initiated from the endosome. As a result, drugs that target the endosome can potentially block the signaling mechanism more effectively.

Drs. Schmidt and Bunnett seek to reveal the PAR2 signaling mechanism by investigating colonic pain; IBS and IBD generate proteases that act on PAR2 and cause pain. For this work Dr. Bunnett, professor and chair of the Department of Basic Science and Craniofacial Biology, will analyze tissue samples of human colon obtained during surgical resection of colon cancer.

The Award: $2.7 million, 5-year grant from the National Institute of Diabetes and Digestive and Kidney Diseases (part of the National Institutes of Health).

Research Goal: To confirm the efficacy of lipidated PAR2 antagonist as a pain medication. Experiments that target receptors in endosomes will elucidate the PAR2 signaling mechanism responsible for colon pain.

The Hope: To improve drug efficacy for an array of drugs that currently target GPCRs solely on the cell surface.
TARGETING A GENE LINKED TO ORAL CANCER

Dr. Donna Albertson and Dr. Brian Schmidt Awarded $2.5 Million NIH Grant To Study Oral Cancer Growth and Pain

Donna Albertson, PhD, and Brian Schmidt, DDS, MD, PhD, initiated their investigation of artemin — a protein encoded by a gene of the same name — when a molecular analysis of oral cancers from patients seen at the NYU Oral Cancer Center revealed elevated concentrations of artemin in tumors of the patients with pain. Prior to surgery, Dr. Schmidt, director of the NYU Oral Cancer Center, measures pain with a written patient questionnaire. A sample of the patient’s cancer is collected during surgery and molecularly compared with normal oral tissue. After analyzing the questionnaire and molecular data, Drs. Albertson and Schmidt discovered a strong correlation between artemin levels and pain. Since artemin is overexpressed in oral cancers, it is likely that artemin also promotes cancer growth.

“Out of tens of thousands of genes, the gene that codes for artemin is one that is highly expressed in oral cancer compared with normal tissue,” said Dr. Albertson, professor of oral and maxillofacial surgery. “Artemin became the obvious target to simultaneously address cancer growth and pain.” Following their discovery in the tissues of oral cancer patients, Drs. Albertson and Schmidt undertook experiments in the laboratory to confirm the role of artemin in both cancer pain and cancer growth.

Artemin is one of four members of the glial cell line-derived-neurotrophic factor (GDNF) family of proteins. Neurotrophins are secreted molecules that promote growth, differentiation, and survival of neurons. Artemin contributes to pain by inducing expression of receptors on sensory neurons.

Cancer pain is attributed to secretion of mediators into the cancer environment. Cancer-derived mediators sensitize pain signaling neurons. Cancers also induce growth of neurons in the tumor. Subsequently there is greater interaction between these mediators and neurons. Overexpressed artemin may also act as an oncogene to promote cancer growth.

The Grant:
$2.5 million, 5-year grant from the National Cancer Institute (part of the National Institutes of Health).

Research Goal:
To evaluate how overexpression of artemin, a protein encoded by a gene highly expressed in oral cancer growth and pain, contributes to tumor growth, as well as pain secondary to changes in neuronal function.

The Hope:
To improve oral cancer treatment and alleviate pain by targeting overexpressed cancer mediators.
SEEKING A CLUE TOWARD A CURE

Dr. David Levy Awarded $2 Million NIH Grant to Study HIV Latency

- HIV latency — in which the virus lies dormant in T cells — presents a troublesome barrier to developing treatments that eliminate HIV from the body. It is largely the result of repressive epigenetic changes to the HIV-associated chromatin, the substance within a chromosome consisting of DNA and protein. Understanding the epigenetic changes that result in productive infection versus latency would provide an important clue toward developing a curative treatment.

- “The search for treatments which might cure HIV infection or permanently repress the virus depends upon a thorough understanding of these processes,” said David Levy, PhD, associate professor of basic science and craniofacial biology. “Our research seeks to develop new knowledge of the regulation of HIV-1 chromatin, the installation of nucleosomes, and their histone post-translational modifications.”

- The NIH-funded project will describe both the initial steps in HIV chromatization and the long-term processes that lead to reversible latency and irreversible repression. The researchers are investigating the earliest events in the establishment of HIV-1 chromatin organization, which they have determined occurs soon after reverse transcription and is influenced by both cellular and viral factors. The research will also explore the influence of the viral protein Vpr — a Human immunodeficiency virus gene and protein product — on this process. Previous research by Dr. Levy found that HIV-1 Vpr influences the structure of HIV-1 chromatin, but more research is needed to understand how Vpr functions and the contribution of Vpr to the overall establishment of productive versus latent infection.

- By defining the epigenetic landscape of newly generated HIV-1 genomes and latent proviruses, and the contribution of Vpr to this process, Dr. Levy and his team anticipate gaining useful insights into HIV infection and latency.

The Award: $2 million, 5-year grant from the National Institute of Allergy and Infectious Diseases (part of the National Institutes of Health).

Research Goal: To provide deeper understanding of processes that lead to latency, which will be critical in developing curative HIV therapies.

The Hope: To provide new targets for the development of therapeutics that can purge HIV from the body or permanently repress viral replication with continued antiviral treatments.
TOWARD IMPROVED IMMUNOTHERAPY

Dr. Deepak Saxena Awarded Department of Defense Grant to Target the Microbiome in Treating Pancreatic Cancer

- Immunotherapy — an increasingly important treatment option that fights cancer by activating the immune system — thus far has had little success in treating pancreatic ductal adenocarcinoma (PDA). However, researchers at NYU College of Dentistry and NYU Grossman School of Medicine have shown that targeting the pancreas’ microbiome — the community of microorganisms including bacteria — may be the key to enabling immunotherapy to treat PDA.

- Dr. Saxena, the lead investigator on the grant, and his colleagues at the NYU Grossman School of Medicine have shown that the microbiome plays a role in promoting the development of PDA and in reducing its response to therapy. The team’s 2018 study published in Cancer Discovery found that the microbiome of a cancerous pancreas is expanded by more than a thousand fold compared with a normal pancreas. In addition, the bacteria that are more abundant in PDA help to shift macrophages, the key immune cells in the pancreas, into immune suppression. In their study, eliminating bacteria using antibiotics restored the ability of immune cells to recognize cancer cells, slowed tumor growth, and reduced the number of cancer cells present by 50 percent in mice with PDA.

- “Based on these data, the microbiome is an attractive target in the treatment of pancreatic cancer,” said Dr. Saxena. “Our overarching hypothesis is that targeting pathogenic bacteria using antibiotics will augment innate and adaptive immunity in patients with pancreatic cancer and enable immunotherapy to be successful.”

- The researchers will develop and test the efficacy of specific antibiotic and probiotic cocktails in mouse models of PDA, tumors removed from patients with PDA, and 3D models of human PDA. They will then translate the knowledge they gain from these experiments into a Phase I clinical trial testing the safety and efficacy of antibiotics in combination with checkpoint-receptor based immunotherapy in patients with pancreatic cancer.

The Grant:
$1.6 million, 4-year, Department of Defense (DOD) grant.

Research Goal:
To develop and test the efficacy of specific antibiotic and probiotic cocktails in mouse models of PDA, tumors removed from patients with PDA, and 3D models of human PDA.

The Hope:
To demonstrate that targeting pathogenic bacteria using antibiotics will augment innate and adaptive immunity in patients with pancreatic cancer and enable immunotherapy to be successful.
IMPROVING CHILDREN’S ACCESS TO DENTAL SERVICES

Dr. Shulamite Huang Awarded NIH Grant to Study the Economics of School-based Dental Programs

- School-based programs to prevent cavities — the world’s most prevalent childhood disease — have emerged as an important way to improve children’s access to dental services. Bringing care to children at their schools rather than having them come to a dentist’s office lowers the barriers to treatment, which can include cost and parents having to take time off work for appointments. In addition, in underserved areas, school-based programs are often the sole source of dental care for children.

- While the American Dental Association supports the use of school-based cavity prevention programs, there is also significant variation between programs, and not enough is known about their cost-effectiveness. Health economist Shulamite Huang, PhD, will use oral health outcomes data from a clinical trial — led by Richard Niederman DMD, professor and chair of the Department of Epidemiology & Health Promotion, and Ryan Richard Ruff, PhD, MPH, associate professor of epidemiology & health promotion — of two multi-site school-based cavity prevention programs, as well as New York Medicaid claims data.

The Grant:
$842,400, 5-year grant from the National Institute of Dental and Craniofacial Research (part of the National Institutes of Health.)

Research Goal:
To evaluate how variation in the design of school-based programs and prior use of dental care impacts oral health outcomes and Medicaid spending, and the overall cost-effectiveness and Medicaid budget impact of school-based programs.

The Hope:
To reduce health disparities and improve healthcare delivery and quality.

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STRATEGIES VS. OUTCOMES

Dr. Lorel Burns Awarded NIDCR Grant to Study Prevalence and Outcomes of Root Canal Therapy in Children

- Dr. Huang’s grant is a K25 Mentored Quantitative Research Development Award, designed to foster health research by junior faculty with backgrounds outside of biology or medicine. This research will launch Dr. Huang’s career in oral health services research, integrating her experience in health economics and policy evaluation with additional training in clinical research methods and evaluation of clinical interventions. She will be mentored by Dr. Niederman and NYU Langone’s Heather Gold, PhD, an expert in economic evaluations and behavioral interventions.

The Grant:
$805,000+, 5-year grant from the National Institute of Dental and Craniofacial Research (part of the National Institutes of Health.)

Research Goal:
To address the gap in knowledge between endodontic strategies and their outcomes in children.

The Hope:
By evaluating how public vs. private insurance and clinician decision-making impact outcomes in children, an understudied group, the study hopes to provide broadly generalizable findings on root canal therapy that have the potential to influence clinical practice and dental policy.
While most of the literature on outcomes of root canal therapy — a procedure that treats tooth pain and infection to save natural teeth — focuses on adults, children also undergo the procedure on their permanent teeth. Treating tooth pain and infection in children is different from treating adults due to anatomical differences and behavioral factors. Moreover, as the field of endodontics has advanced, newer, alternative treatments have emerged for treating permanent teeth with immature roots. However, a lack of robust data comparing these endodontic strategies and their outcomes in children makes it difficult for clinicians to make informed treatment planning decisions and evaluate quality of care.

To address this gap in knowledge, Lorel Burns, DDS, MS, assistant professor of endodontics, will use a mixed-methods approach to determine the prevalence, outcomes, and spending related to root canal therapy performed on children’s permanent teeth. She and her team will conduct a quantitative assessment using a large, population-based sample of administrative claims data from New York and Massachusetts. Through qualitative interviews with clinicians, Dr. Burns will also explore whether a variety of factors related to patients and providers influence treatment planning and decision-making.

Dr. Burns’ NIDCR grant is a K01 Mentored Career Development Award. This research will integrate her clinical expertise in endodontics with additional training in the analysis of clinical care processes and outcomes at the population level. Her primary mentor for this grant is NYU Langone Health’s Heather Gold, PhD, a health economist and expert in determining how socioeconomic, racial/ethnic, geographic, and clinical variations in health care affect health and economic outcomes.

While conventional scanning electron microscopes (SEMs) have become a staple of the work of Dr. Bromage and his colleagues — who provide expertise in tissue and synthetic specimen preparation as well as imaging support for the College’s bone, tooth, and oral health research programs — they have found an increasing need for a microscope that offers greater resolution and brightness.

Field emission technology is a new type of electron source that provides a higher signal and very high magnification, resulting in much better resolution. The new microscope — a Zeiss GeminiSEM 300 Field Emission SEM — has as low a resolution as 0.7 nanometer resolution. (For context, a DNA molecule is 20 nanometers in diameter.) In addition, most field emission SEMs require specimens being studied to be covered in a conductive coating, which can affect the image quality and dehydrate the materials. “We can image at variable pressure, which means we can put bone, tooth, or other tissue into the microscope without having to coat it,” said Dr. Bromage. No such field emission SEM exists in any other dental school.

Researchers at NYU Dentistry, as well as collaborators at the Hospital for Special Surgery, will use the field emission SEM to investigate a variety of health topics. These include evaluations of the physical and chemical processes by which dental implants integrate into the body, bone regeneration around severe defects, the role of inflammation in the repair of bone, the role of calcium in regulating tooth development, and fracture-resistant aesthetic tooth implants.

The Grant:
$581,000 National Institute of Health grant and an approximately $150,000 credit for the Zeiss microscope it replaces.

Research Goal:
To use the new field emission scanning electron microscope to visualize details of tooth, bone, and related materials not visible with a conventional scanning electron microscope.

The Hope:
To design better artificial structures like implants that mimic teeth and bone.
The enzyme, matrix metalloproteinase 28, or MMP28, belongs to a family of enzymes known for their activity at the cell surface during development and in a number of diseases, including cancer. MMP28 is involved in wound repair, central nervous system development, and immune system maturation, and faculty regulation of MMP28 has been linked to several cancers.

In the embryo, MMP28 is essential for the formation of the neural crest, the cells that contribute to the development of the peripheral nervous system, pigment cells in the skin, and the bones, cartilage, and connective tissue that make up the face.

Dr. Gouignard’s work shows that MMP28 activity is required in the neural crest cells’ nuclei, but it is still unclear whether MMP28 function in the neural crest is restricted to this nuclear activity or whether MMP28 has a more conventional activity as well.

Furthermore, the mechanisms by which MMP28 is internalized by neural crest cells and eventually shuttles to the nucleus are not known.

The Grant:
$435,875, 2-year grant from the National Institute of Dental and Craniofacial Research (part of the National Institutes of Health)

Research Goal:
To dissect the cellular and molecular mechanisms by which the enzyme MMP28 regulates neural crest formation.

The Hope:
To reveal novel aspects of how MMP28 functions, and its role in controlling migratory cell behavior in normal and pathological situations.

The Award:
$260,000, 3-year grant from the New York State Department of Health.

Research Goal:
To evaluate the curriculum based on changes in nurse practitioners’ knowledge, attitudes, and practice, as well as their satisfaction with content.

The Hope:
To accelerate the tempo of breast cancer survivorship care.
PREVENTING PERIODONTAL BONE LOSS

Drs. Xin Li and Deepak Saxena Awarded NIDCR Grant to Develop Novel Oral Strip and Gel to Prevent Periodontal Bone Loss in People with Type 2 Diabetes

Xin Li, PhD
Deepak Saxena, PhD

Despite advances in breast cancer survival rates, racial, ethnic, and socioeconomic inequalities in breast cancer incidence and survivorship remain. To address these inequalities, a new survivorship curriculum for primary care nurse practitioners will be developed, informed by the engagement of diverse breast cancer survivors.

The patient-informed breast cancer survivorship care curriculum is being developed and piloted by Victoria Raveis, PhD, a research professor and director of the Psychosocial Research Unit on Health, Aging and the Community at NYU Dentistry.

In a pilot study, primary care nurse practitioners in New York State will complete the curriculum as an online professional education course.

“The curriculum will speak to the varied medical concerns, lifestyle issues, and psychosocial concerns breast cancer survivors experience as they finish active treatment,” said Dr. Raveis. “It will also address health issues they are at increased risk of experiencing over the course of their cancer survivorship.”

Periodontitis is a chronic inflammatory disease of the gingiva and supporting structures of the teeth that can gradually destroy the bones that support the teeth. Nearly half (47.2 percent) of U.S. adults 30 and older and more than 70 percent of adults 65 and older have periodontitis. Periodontitis is particularly prevalent in people with diabetes, who are five time more likely to have the disease.

“Current antimicrobial and antibiotic treatments do not target periodontal bone loss,” said Xin Li, PhD, associate professor of basic science and craniofacial biology, and co-investigator on the grant. “There is a major void in therapeutic products for periodontal disease that target the underlying mechanism of disease — and are easy for dentists and patients to use.”

“The development of a biodegradable oral strip or gel formulation that could be administered through less invasive approaches to augment or replace conventional treatment could prove to be a major step forward in the treatment of periodontal disease,” said Deepak Saxena, PhD, professor of basic science and craniofacial biology, and a co-investigator on the grant.

The researchers are working to develop a sustained-release oral strip and gel formulation to target succinate receptor (SucnR1). The formulation will use biodegradable material filled with SucnR1 antagonist, a method protected by a provisional U.S. patent. The strip would be implanted by a dentist, while consumers would apply the topical gel to their gingiva.

The Award:
$224,000, one-year NIDCR grant through the federal government’s Small Business Technology Transfer (STTR) program.

Research Goal:
To develop a sustained-release oral strip and gel formation to target succinate receptor (SucnR1), thought to be a useful target for developing therapies to prevent periodontal bone loss in people with type 2 diabetes.

The Hope:
To fill the void in therapeutic products for periodontal disease that target the underlying mechanism of disease — and are easy for dentists and patients to use.
Welcome!

Dr. André Ritter

has been appointed professor and chair of the Department of Cariology and Comprehensive Care. He holds a DDS degree and a certificate in operative dentistry from the Federal University of Santa Catarina in Florianópolis, Brazil; a certificate in operative dentistry and an MS degree, from the University of North Carolina at Chapel Hill; an MBA degree from Northeastern University; and a PhD from Universidade Positivo in Paraná, Brazil.

Dr. Ritter’s research, publications, and teaching philosophy are focused on motivating and highlighting student interests and making evidence-based decisions with evidence-based resources. He served as lead author of “Root Caries Risk Indicators: A Systematic Review of Risk Models” — published in Community Dentistry and Oral Epidemiology — which has been cited in 87 published articles.

Prior to joining NYU, Dr. Ritter served as the executive dean and COO at the University of North Carolina Adams School of Dentistry and held the Thomas P. Hinman Distinguished Professorship in Restorative Dentistry, which recognizes outstanding achievement as a clinician and educator.

Dr. Nigel Bunnett

has been appointed professor and chair of the Department of Molecular Pathobiology (formerly the Dept. of Basic Science & Craniofacial Biology). An internationally known expert on the mechanisms of pain, itch, and neurogenic inflammation, he was educated at Cambridge University, where he received his PhD in 1981.

Over the past decade, Dr. Bunnett has been awarded more than $20 million in federal and foundation support. He is the editor-in-chief of the American Journal of Physiology — Gastrointestinal and Liver Physiology, and has published more than 350 research articles, reviews, and chapters, which have been cited over 31,000 times. His contributions have been recognized with numerous awards, including the Australia Fellowship, the NIH MERIT Award, the Novartis Neurogastroenterology Award, the Jansen Award for Basic Research in Gastroenterology, and the Victor Mutt Award for Research in Regulatory Peptides.

Prior to joining NYU, Dr. Bunnett served as the Gerald and Janet Carrus Professor of Surgical Sciences, vice chair of research in surgery, and professor of surgery and pharmacology at Columbia University College of Physicians and Surgeons.

Dr. Bunnett has also been involved in numerous research projects and has received grants from various federal and foundation sources. His work has been published in numerous high-impact journals, and he has received several prestigious awards for his research contributions.

GLOBAL HEALTH NEXUS
Dr. Dalal Alhajji has been appointed clinical instructor of oral and maxillofacial pathology, radiology and medicine. She received a DMD from Boston University Henry M. Goldman School of Dental Medicine, and an MS in Oral Medicine and a certificate in Advanced Education General Dentistry, both from Case Western Reserve University School of Dental Medicine. She also completed a fellowship in Dental Oncology at Memorial Sloan Kettering Cancer Center.

Ms. Agata Bien has been appointed a grants administrator for the Department of Basic Science and Craniofacial Biology.

Dr. Jalal Bukhari has been appointed clinical assistant professor of oral and maxillofacial pathology, radiology and medicine. He holds a DDS degree from the University of the Pacific Arthur A. Dugoni School of Dentistry and completed an oral and maxillofacial radiology residency program at Stony Brook University School of Dental Medicine.

Dr. Katerina Georgantza has been appointed clinical assistant professor of periodontology and implant dentistry. She received her dental degree from Aristotle University of Thessaloniki, Greece, and holds certificates in periodontics and in implant dentistry from NYU College of Dentistry.

Dr. Peter Gershenson has been appointed clinical assistant professor of cariology and comprehensive care. He holds a DDS degree from NYU College of Dentistry and completed a general practice residency and an oral and maxillofacial surgery residency, both at Woodhull Medical Center in Brooklyn.

Dr. Pakhshan Ghaderi has been appointed clinical assistant professor of prosthodontics. She holds a DDS degree from Shaheed Beheshti University of Medical Sciences in Tehran, Iran, where she also completed specialty training in periodontics and an implant dentistry fellowship. She holds a certificate in Advanced Education General Dentistry from the Eastman Institute for Oral Health at the University of Rochester and completed a general practice residency program at New York Presbyterian/Columbia University Medical Center.

Dr. Kim E. Goldman has been appointed clinical assistant professor of oral and maxillofacial surgery. She holds a DMD degree from the University of Louisville School of Dentistry and completed the Advanced Education in Oral and Maxillofacial Surgery Program at the Parkland Memorial Hospital in Dallas, Texas.

Dr. Dane Jensen has been appointed assistant professor of oral and maxillofacial surgery. He holds a PhD in neuroscience from the University of Wyoming.
Ms. Kristin Juelson, RN, has been appointed a nurse practitioner for the NYU Dentistry Oral Health Center for People with Disabilities.

Dr. Leonard Kaban has been appointed a visiting scholar in the Departments of Basic Science and Craniofacial Biology and of Oral and Maxillofacial Surgery. He served as chief of oral and maxillofacial surgery at Massachusetts General Hospital and Walter C. Guralnick professor and head of the Department of Oral and Maxillofacial Surgery at the Harvard School of Dental Medicine for 22 years, before stepping down in 2015.

Dr. Young Kwang Kim has been appointed clinical assistant professor of prosthodontics. He received his DMD from Boston University Henry M. Goldman School of Dental Medicine, and a DMSc in oral biology and a certificate in prosthodontics, both from Harvard School of Dental Medicine.

Dr. Jason Kyles has been appointed clinical instructor of oral and maxillofacial pathology, radiology and medicine. He holds a DDS degree from the University of Tennessee College of Dentistry and completed an oral and maxillofacial pathology residency program at New York Presbyterian Hospital in Queens.

Mr. Connor Lillis has been appointed alumni events manager for the Office of Development and Alumni Affairs.

Dr. Marie Mora-Moreno has been appointed clinical assistant professor of endodontics. She received a DDS degree from University of Zulia College of Dentistry in Venezuela and holds certificates in endodontics from Central University of Venezuela College of Dentistry and NYU College of Dentistry.

Ms. Erica Reifer has been appointed director of professional development.

Mr. Edward Rosenbaum has been appointed assistant director for global outreach programs.
Dr. Santvana Vyas
has been appointed clinical assistant professor of prosthodontics. She received a DDS degree and a certificate in prosthodontics from NYU College of Dentistry.

Dr. Alex Thomsen
has been appointed assistant professor of basic science and craniofacial biology. He received an MS degree in human biology and a PhD in molecular pharmacology from the Faculty of Health Sciences at the University of Copenhagen in Denmark.

Dr. Richard Valachovic
has been appointed a visiting scholar in the Department of Epidemiology and Health Promotion. He retired in June 2019 as president and CEO of the American Dental Education Association after 21 years of service to the Association.

Dr. Vivian Santiago
has been appointed research assistant professor for oral and maxillofacial pathology, radiology and medicine. She received an MPH, MPhil, and a PhD in epidemiology, all from Columbia University. She completed a psychiatric epidemiology training program at Columbia University and was a Robert Wood Johnson Health and Society Scholar at the University of Wisconsin-Madison.

We also welcome:
Ms. Grace Blacer
has been appointed director of accounts receivable for the Office of Clinical Revenue Cycle and Clinical Support Services.

We Extend a Warm Welcome to Our Newest Adjunct Faculty

Department of Basic Science and Craniofacial Biology
Dr. Sameer Verma, adjunct instructor

Department of Cariology and Comprehensive Care
Dr. Monica Bebawy, adjunct instructor
Dr. Barry R. Blumenkopf, adjunct clinical assistant professor
Dr. Jerry M. Brown, adjunct clinical instructor
Dr. Yoonil Cha, adjunct clinical assistant professor
Dr. Hsi-Lin Spencer Feng, adjunct clinical instructor
Dr. Gwen Giannina, adjunct clinical instructor
Dr. Jay S. Grossman, adjunct assistant professor
Dr. Sherali Khurshid, adjunct clinical instructor
Dr. Yohan Kim, adjunct clinical instructor
Dr. Douglas H. King, adjunct clinical instructor
Dr. Bard Levey, adjunct clinical instructor
Dr. Michael Margolin, adjunct clinical instructor
Dr. Ellen Pikus-Katz, adjunct clinical instructor
Dr. Jose A. Ravelo, adjunct clinical instructor
Dr. George J. Schmidt, adjunct clinical assistant professor
Dr. Raveena Singh, adjunct instructor
Dr. Shrutti Vaidya-Kane, adjunct instructor

Department of Dental Hygiene and Dental Assisting
Dr. Beheshta Bassam, adjunct clinical instructor
Ms. Maria Dimino, adjunct clinical instructor
Ms. Anaika Forbes, adjunct clinical instructor
Mr. Roy Lee, adjunct instructor
Ms. Stephanie Perkowski, adjunct clinical instructor

Department of Dental Hygiene and Dental Assisting
Dr. I.N. & Sally Quartararo Department of Endodontics
Dr. Farinaz Bokhour, adjunct clinical instructor
Dr. Kim-Phung T. Hoang, adjunct clinical instructor
Dr. Victoria Ra, adjunct clinical instructor
Dr. Allyson Won, adjunct clinical instructor

Department of Oral and Maxillofacial Pathology, Radiology, and Medicine
Dr. Ariel A. Blanchard, adjunct clinical instructor

Department of Oral and Maxillofacial Surgery
Dr. Guido Galletti, adjunct instructor

Department of Orthodontics
Dr. Darren Huang, adjunct clinical assistant professor
Dr. Kristine M. Hyon, adjunct clinical assistant professor

Department of Pediatric Dentistry
Dr. Michael B. Lieberman, adjunct clinical assistant professor

Department of Prosthodontics
Dr. Arthur Bigsby III, adjunct instructor
Dr. Robert H. Fisher, adjunct clinical assistant professor
Dr. Farhad Hakimi, adjunct clinical associate professor
Dr. Wayne Wei-An Hsieh, adjunct clinical instructor
Dr. Calvin Pae, adjunct clinical instructor
Dr. Alan Sezer, adjunct clinical assistant professor
Dr. Philip Buccigrossi, formerly adjunct clinical instructor in cariology and comprehensive care, has been appointed clinical instructor.

Mr. Richard Anchundia, formerly assistant director of admissions, has been promoted to director of DDS admissions.

Mr. Andrew Baez, formerly senior human resources assistant, has been promoted to faculty services administrator.

Ms. Victoria Benvenuto, formerly adjunct clinical instructor in dental hygiene and dental assisting, has been appointed clinical instructor.

Ms. Catherine Aguirre, formerly a dental insurance analyst, has been promoted to clinical applications administrator.

Dr. Habib Benzian, formerly adjunct professor of epidemiology and health promotion, has been appointed research professor.

Dr. Sirlene Billera, formerly adjunct instructor in cariology and comprehensive care, has been promoted to adjunct assistant professor.

Dr. Lorel Burns, formerly an instructor in endodontics, has been promoted to assistant professor.

Ms. Terry-Ann Brown, formerly a patient service representative, has been promoted to clinic manager in the Office of Patient Centered Care Services.

Mr. Richard Anchundia, formerly assistant director of admissions, has been promoted to director of DDS admissions.

Dr. Sang-Choon Cho, formerly clinical assistant professor of periodontology and implant dentistry, has been promoted to clinical associate professor.

Ms. Elyse Bloom, formerly assistant dean for communications and public affairs, has been promoted to associate dean for communications and public affairs.

Ms. Catherine Aguirre, formerly a dental insurance analyst, has been promoted to clinical applications administrator.

Mr. Richard Anchundia, formerly assistant director of admissions, has been promoted to director of DDS admissions.

Mr. Andrew Baez, formerly senior human resources assistant, has been promoted to faculty services administrator.

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Mr. Andrew Baez, formerly senior human resources assistant, has been promoted to faculty services administrator.

Ms. Victoria Benvenuto, formerly adjunct clinical instructor in dental hygiene and dental assisting, has been appointed clinical instructor.
Ms. Liza Khan-Bundrant, formerly a department administrator, has been promoted to department manager for the Department of Endodontics.

Mr. Scott Gautney, formerly an admissions officer, has been promoted to customer relationship management manager.

Ms. Annette Huynh, formerly adjunct clinical instructor in dental hygiene and dental assisting, has been appointed clinical instructor.

Ms. Robin Elliott, formerly assistant director of patient centered care services, has been promoted to director of patient centered care services.

Mr. Christopher Johnson, formerly senior PC support technician, has been promoted to systems administrator for technology and informatics services.

Ms. Gabriela Gonzalez, formerly an administrative aide in the Office of Administrative Services, has been promoted to administrator for special projects in the Office of Financial Planning, Budget, and Strategic Initiatives.

Ms. Olga Gnatovych, formerly adjunct clinical instructor in dental hygiene and dental assisting, has been appointed clinical instructor.

Ms. Annette Huynh, formerly adjunct clinical instructor in dental hygiene and dental assisting, has been appointed clinical instructor.

Ms. Ivianie Exinor, formerly adjunct clinical instructor in dental hygiene and dental assisting, has been appointed clinical instructor.

Dr. Laurie Esposito, formerly adjunct clinical instructor in cariology and comprehensive care, has been promoted to adjunct clinical assistant professor.

Dr. Diyva Khera, formerly adjunct clinical assistant professor of pediatric dentistry, has been appointed clinical assistant professor.

Dr. Edmund Khoo, formerly clinical assistant professor of orthodontics, has been promoted to clinical associate professor.

Dr. Joshua Johnson, formerly adjunct instructor in basic science and craniofacial biology, has been promoted to adjunct assistant professor.

Ms. Liza Khan-Bundrant, formerly a department administrator, has been promoted to department manager for the Department of Endodontics.

Dr. Joshua Johnson, formerly adjunct instructor in basic science and craniofacial biology, has been promoted to adjunct assistant professor.
Dr. Richard Kosofsky, formerly adjunct clinical associate professor of cariology and comprehensive care, has been appointed clinical assistant professor.

Ms. Sharon McLaughlin, formerly clinical instructor in dental hygiene and dental assisting, has been promoted to clinical assistant professor.

Dr. Fabiola Milord, formerly clinical instructor in cariology and comprehensive care, has been promoted to clinical assistant professor.

Ms. Lillian M. Moran, formerly an instructional technologist, has been promoted to senior educational technologist in the Office of Educational Technology.

Ms. Margaret Mary Mullen, formerly a clinical applications administrator, has been promoted to director of dental health informatics.

Dr. Katayoon Noroozi-Leibowitz, formerly adjunct clinical instructor in cariology and comprehensive care, has been promoted to adjunct clinical assistant professor.

Ms. Irene Olshan, formerly director of clinical services administration, has been promoted to senior director of administrative services.

Ms. Ekta Parasher, formerly patient care coordinator for the NYU Dentistry Oral Health Center for People with Disabilities (OHCPD), has been promoted to assistant director for patient care services for the OHCPD.

Ms. Vanessa Perez, formerly executive assistant in the Office of International Initiatives, has been appointed clinic manager for the NYU Dentistry Oral Health Center for People with Disabilities.

Dr. Jarrett A. Pikser, formerly adjunct clinical instructor in cariology and comprehensive care, has been appointed clinical instructor.

Dr. Ryan Ruff, formerly assistant professor of epidemiology and health promotion, has been promoted to associate professor.

Dr. Michael P. O’Connor, formerly adjunct clinical professor of epidemiology and health promotion, has been promoted to clinical professor of oral and maxillofacial surgery.

Ms. Sharon McLaughlin, formerly clinical instructor in dental hygiene and dental assisting, has been promoted to clinical assistant professor.

Dr. Fabiola Milord, formerly clinical instructor in cariology and comprehensive care, has been promoted to clinical assistant professor.

Ms. Lillian M. Moran, formerly an instructional technologist, has been promoted to senior educational technologist in the Office of Educational Technology.
Dr. Andrew Schenkel, formerly clinical associate professor of cariology and comprehensive care, has been promoted to clinical professor.

Ms. Dianne Sefo, associate professor of dental hygiene and dental assisting, has been appointed interim chair of the Department of Dental Hygiene and Dental Assisting.

Ms. Sarah Torosyan, formerly an administrative aide, has been promoted to clinical affairs manager.

Mr. Ryan St. Germain, formerly senior director of development and alumni relations, has been promoted to executive director of development and alumni relations.

Dr. Alan Smolen, formerly adjunct clinical instructor in cariology and comprehensive care, has been promoted to adjunct clinical assistant professor.

Ms. Lisa Stefanou, clinical associate professor of dental hygiene and dental assisting, has been appointed director of dental hygiene and dental assisting.

Ms. Sarah Torosyan, formerly an administrative aide, has been promoted to clinical affairs manager.

Ms. Molly Washburn, formerly a department administrator, has been promoted to assistant director of communications and public affairs.

Dr. Elena Damiano, formerly adjunct clinical instructor in cariology and comprehensive care, has been promoted to adjunct clinical assistant professor.

Dr. Michael Gulizio, formerly adjunct clinical instructor in cariology and comprehensive care has been promoted to adjunct clinical assistant professor.

Dr. Winifred Montuori, formerly adjunct clinical instructor in cariology and comprehensive care, has been promoted to adjunct clinical assistant professor.

Dr. Jaclyn Park, formerly adjunct clinical instructor in cariology and comprehensive care, has been promoted to adjunct clinical assistant professor.

Dr. Nicholas Giannuzzi, formerly adjunct clinical assistant professor of cariology and comprehensive care, has been promoted to adjunct clinical associate professor.

Mr. Steven Lin, formerly application support manager for clinical information management systems, has been promoted to assistant director of application support.

Mr. Corey Neskey, formerly IT security analyst, has been promoted to assistant director of cybersecurity analytics and operations.

Congratulations also to:
A SAMPLING OF RECENT MEDIA COVERAGE

THE NEW YORK TIMES, CBS NEWS, BBC NEWS SERVICE, KAISER HEALTH NEWS, FOX 5 TV, AM NEW YORK, CRAIN’S HEALTH PULSE, THE VILLAGER, AND DIVERSITY IN ACTION all ran stories about the opening of the NYU Dentistry Oral Health Center for People with Disabilities (OHCPD).

THE DENTAL HEALTH SHOW on Sirius XM radio, hosted by Dr. Amr Moursi, professor and chair of the Department of Pediatric Dentistry, broadcast a two-hour special on the OHCPD.

NEWSDAY interviewed Dr. Moursi for a story about efforts to overcome the obstacles to early dental care.

THE NEW YORK TIMES interviewed Dr. Moursi for an article titled “Don’t Worry Too Much About Your Little Thumb-Sucker.”

JOURNAL OF DENTAL EDUCATION featured NYU Dentistry’s Saturday Academy in a story titled “How Pipeline Programs Can Increase Diversity in Dentistry.” The story also appeared in DENTISTRY TODAY, ORAL HEALTH GROUP, and POLITICO NY HEALTH LETTER.

BULLETIN OF DENTAL EDUCATION featured a story titled “NYU College of Dentistry’s Saturday Academy Increases Interest and Diversity in Dentistry.”

WABC-TV Interviewed Dr. Cheryline Pezzulo, ’15, cofounder of Saturday Academy and clinical instructor in the Department of Cariology and Comprehensive Care, and Vanessa Cortinas, ’20, one of this year’s Saturday Academy program leaders and president of the NYU chapter of HSDA, for its Saturday morning program, TIEMPO, which featured a discussion of Saturday Academy and diversity in dentistry.

NEW YORK AMSTERDAM NEWS featured a story titled “NYU College of Dentistry’s Saturday Academy Aims to Diversify Dentistry.”

THE CHRONICLE OF HIGHER EDUCATION featured stories on the appointments, respectively, of Dr. Nigel Bunnett as chair of the Department of Basic Science and Craniofacial Biology, and Dr. André Ritter as chair of the Department of Cariology and Comprehensive Care. (See related stories on p. 68.) The stories were also featured in the NEW YORK STATE DENTAL JOURNAL, the BULLETIN OF DENTAL EDUCATION, and CRAIN’S HEALTH PULSE.

HEALTHDAY/U.S. NEWS & WORLD REPORT reported on a study published in Nature titled “Fungal Invasion of Pancreas Creates Cancer Risk,” which was coauthored by Dr. Deepak Saxena, professor in the Department of Basic Science and Craniofacial Biology. The study was also featured in POLITICO NEW YORK and MEDICAL NEWS TODAY.

HEALTH MAGAZINE featured Dr. Saxena in an article titled “Is Vaping Bad for Your Teeth? Here’s What Dental Experts Have to Say.” FORBES interviewed Dr. Saxena about microbiome testing.

BECKER’S DENTAL REVIEW interviewed Dean Bertolami about what NYU Dentistry is doing to prepare dental students for the workforce.

HEALTH MAGAZINE featured Dr. Vera Tang, clinical professor and vice chair of the Ashman Department of Periodontology & Implant Dentistry, in a story titled “Gum Health Basics: What to Look Out for and How to Prevent Trouble.”

CONSUMER REPORTS interviewed Dr. Tang about powered versus manual toothbrushes.

SELF MAGAZINE interviewed Dr. Tang for a story on water flossers.

WOMAN’S DAY MAGAZINE interviewed Dr. Tang for a story about how to achieve a healthy smile.

DAILY MAIL ONLINE interviewed Dr. Tang for a story about whether or not gum has health benefits and if certain new gums (FLY Gum to combat jet lag, Golf Gum to help golfers stay energetic, etc.) do what they claim.

US NEWS & WORLD REPORT interviewed Dr. Leila Jahangiri, Ira E. Klein Professor of Prosthodontics and chair of the Department of Prosthodontics, for a story on dentures.

ADA NEWS featured a story about a $2.5 million grant awarded to Dr. Donna Albertson, professor of oral and maxillofacial surgery, and Dr. Brian Schmidt, director of the Bluestone Center for Clinical Research and the NYU Oral Cancer Center. (See related story on p. 61). ONCOLOGY TIMES also wrote a story about the grant.

ADA NEWS featured a story on Dr. Analia Veitz-Keenan as the recipient of the 2019 Evidence-based Dentistry Accomplished Faculty Award.

NEWSWEEK interviewed Dr. Rodrigo Lacruz, associate professor of basic science and craniofacial biology, for a story titled “Human Faces Evolved Through ‘Self-Domestication with Ancestors Apparently Choosing Friendly, Less Aggressive Mates.”

NEWS 12 THE BRONX aired a story about the College’s federally-funded cavity prevention outreach program (CariedAway), which brings dental care to kids, rather than kids to dental care. The story focused on the program at PS 140 in the Bronx.

POPULAR SCIENCE interviewed Dr. Richard Niederman, professor and chair of the Department of Epidemiology & Health Promotion, for a story on how best to brush your teeth.

CONSUMER REPORTS spoke with Dr. Niederman about the safety of toothpaste ingredients.
DENTISTRY TODAY ran a story on the NYU Dentistry-Henry Schein Cares Global Student Outreach Program on the 10th anniversary of the collaboration. (See related story on p. 94.)

NY1 broadcast a story on the NYU dental van bringing care to Brighton Beach.

ODONTOLATRIA33 featured an interview with Dr. Habib Benzian, research professor of epidemiology & health promotion, titled “This Is Why Oral Health Is Not Considered a Priority.”

CRAIN’S HEALTH PULSE carried a story on NYU Dentistry’s plan to open a new patient-care facility in Brooklyn. (See related story on p. 24.)

NPR broadcast a story titled “Sugar Rules the World and Ruins Teeth,” about a two-part study, published in THE LANCET, which was co-authored by Dr. Habib Benzian, research professor in the Department of Epidemiology & Health Promotion and associate director of global health and policy for NYU Dentistry’s WHO Collaborating Center. (See related story on p. 91.)

GOOD HOUSEKEEPING asked Dr. Rodrigo Lacruz, associate professor of basic science and craniofacial biology, whether a claim by the magazine in 1969 — that once teeth are fully formed, at about age 13, calcium intake ceases to have any effect — is still correct. Dr. Lacruz’s answer: Overall, the statement is true.

THE NEW YORK TIMES interviewed Dr. Elliott Moskowitz, clinical professor of orthodontics, for a story about teens increasingly using clear aligners.

THE NEW YORK TIMES interviewed Dr. Michael Lorber, a senior research scientist with the Family Translational Research Group, for an article on dealing with aggression in children.

EVERYDAY HEALTH featured Dr. Brian Schmidt, director of the NYU Oral Cancer Center, in a video and a story about oral cancer for the 2019 NYU Oral Cancer Walk in October 2019.

WCBS RADIO broadcast an interview with Dr. Schmidt on the day of the 2019 NYU Oral Cancer Walk in October 2019.

CONCORD MONITOR featured a story on NYU Dentistry’s cavity-prevention program in rural areas which monitors the effectiveness of two cavity-prevention techniques: a “simple” treatment of silver diamine fluoride and fluoride varnish, and a “complex” treatment of traditional sealants and a fluoride varnish.

THE NEW YORK TIMES WIRECUTTER interviewed Dr. Paulo Coelho, professor of biomaterials, for a story about the best reusable straws.

SELF MAGAZINE interviewed Dr. Michael Ferguson, clinical associate professor of prosthodontics, for an article on the safest and most effective ways to whiten teeth.

THE TODAY SHOW interviewed Dr. Lee Gause, adjunct instructor of cariology and comprehensive care, about whitening products that may damage teeth.

NPR interviewed Dr. Ken Allen, clinical associate professor of cariology and comprehensive care, about whether extreme trauma and high sugar intake can cause a young person to develop 10 cavities over the course of one summer.

U.S. NEWS & WORLD REPORT interviewed Dr. Rima B. Sehl, associate professor of cariology and comprehensive care, for an article titled “How Might My Oral and Dental Health Change as I Age?”

DOCTOR RADIO on Sirius XM broadcast its 10th consecutive weeklong series on oral health, “Start Your Summer with a Smile,” from July 15-19, 2019. The live, call-in show, hosted by Dr. Moursi featured a range of topics and experts, including oral surgery with Dr. Marci Levine, clinical assistant professor of oral and maxillofacial surgery; pediatric dentistry with Dr. Lauren Feldman, clinical assistant professor of pediatric dentistry and director of the advanced education program in pediatric dentistry; prosthodontics with Dr. Leila Jahangiri, Ira E. Klein Professor and chair of the Department of Prosthodontics; periodontics with Dr. Edward El Chaar, clinical associate professor of periodontology and implant dentistry and director of the postgraduate program in periodontics; and Dr. Mark Bronsky, an orthodontist in private practice in Manhattan. Each show attracted an estimated 250,000 listeners.

DOCTOR RADIO also featured interviews with Dr. Vera Tang, clinical assistant professor and vice chair of the Ashman Department of Periodontology and Implant Dentistry, on making dental health and better brushing/flossing habits a priority, on the importance of oral healthcare, and on how to know if implant dentistry is right for you; Dr. Joana Forsea, clinical associate professor of periodontology and implant dentistry with Dr. Edward El Chaar, clinical associate professor of periodontology and implant dentistry; and Dr. André Ritter, professor and chair of the Department of Cariology and Comprehensive Care, about healthy teeth and gums.

WCAX in Plattsburgh, New York, featured a story on the free dental clinic conducted by the NYU Dentistry-Henry Schein Cares Global Student Outreach Program in September. The story also ran in the PRESS-REPUBLICAN in Plattsburgh.
On May 20, 2019, the Class of 2019, including more than 500 candidates for the Doctor of Dental Surgery degree, Advanced Education Program certificates, MS degrees in biomaterials and clinical research, AAS and BS degrees in dental hygiene, and Dental Assisting Program certificates saw their dreams come true as they received their degrees and certificates before an audience of more than 4,500 people in The Hulu Theater at Madison Square Garden.

A highlight of the occasion was the participation of three members of the Class of 1969, who were celebrating the 50th anniversary of their graduation from the College.

For the first time, the David B. Kriser Medal, the highest honor awarded by the College of Dentistry, was presented to two recipients: Mr. Marco Damiani, CEO of AHRC, New York City, and Mr. Larry McReynolds, executive director of the Family Health Centers at NYU Langone and senior vice president of community health at NYU Langone Health.

As executive vice president of YAI Network, executive vice president of Cerebral Palsy Foundations of New York State, CEO of Metro Community Health Centers, and in his current...
position as CEO of AHRC New York City, Mr. Damiani has dedicated himself to finding innovative ways for people with intellectual and/or developmental disabilities to build full, healthy lives as defined by each person and supported by dedicated families, staff, and community partners.

As executive vice president and executive director of Lutheran Family Health Centers, president of NYU Lutheran Family Health Centers, and in his current position as executive director of the Family Health Centers at NYU Langone and senior vice president of community health at NYU Langone Health, Mr. McReynolds has remained steadfast in his commitment to ensuring that everyone in New York City has access to high-quality, community-based healthcare services, regardless of the ability to pay.

In addition to recognizing these distinctions, the Kriser Medal also honored Mr. Damiani and Mr. McReynolds for their wisdom, counsel, and guidance throughout every phase of the planning and design of the NYU Dentistry Oral Health Center for People with Disabilities.

This year’s Graduation Ceremony also featured the presentation of the Harry Strusser Memorial Award to Dr. Jay Grossman, ’88, founder and CEO of Homeless Not Toothless, a nonprofit organization dedicated to providing desperately needed, free, quality dental care for the homeless, foster youth, veterans, and other underserved groups in the greater Los Angeles community.

Class Representative Alda Ngo spoke on behalf of the AAS program in dental hygiene, and Michelle Smith spoke on behalf of the BS program in dental hygiene. Dr. Vishnu Reddy spoke on behalf of the DDS program.

Alumni Association President Dr. Amin Ayoub, ’92, brought greetings from the Alumni Association.

Following the presentation of degrees and certificates, Dr. Shan K. Bagby, Brigadier General and Deputy Chief of Staff, MEDCOM, officially commissioned six newly-minted DDS program graduates entering the US Armed Forces Dental Corps, marking the fourth consecutive year that members of the graduating class have been formally commissioned as part of the Graduation Ceremony.

“Getting to this day has taken more than hard work, dedication, and discipline,” Dean Bertolami told the graduates. “It has also taken a commitment to academic excellence, a strong public service orientation, and a growing global perspective, all of which have made this class so special. We wish our graduates great success and happiness in the years ahead.”
Saturday Academy Aims to Diversify Dentistry

The field of dentistry has a diversity problem. Despite calls for a more diverse workforce, only 15.2 percent of dental school applicants in 2016 were underrepresented minorities, according to the American Dental Education Association.

Having more dentists from diverse backgrounds benefits both patients and peers. Dentists who are underrepresented minorities are more likely to serve communities in need, and therefore, address disparities in dental care. Studies have also found that a diverse learning environment improves the learning experience for all students through exposure to different ideas and perspectives.

But building the pipeline for more diverse dentists starts well before students apply to dental school. Early exposure to the field is essential, as students need to take science courses in college that can put them on the path to applying to dental school — making high school an ideal time to engage future dentists.

In 2012, two students at NYU College of Dentistry — who are now both full-time faculty members — set out to create a pipeline program for underrepresented and low-income high school students to boost their interest in the health professions, especially dentistry. The program is called Saturday Academy, and a recent paper describing a pilot study of the program, published in the September 2019 issue of the Journal of Dental Education, shows that their efforts are working.

“The results of our pilot study suggest that Saturday Academy is a successful example of a pipeline program to increase the future representation of underrepresented minorities in the dental profession by addressing barriers to pursuing a career in the health professions,” said Lorel Burns, DDS, who co-founded Saturday Academy as a dental student and is currently an assistant professor of endodontics at NYU College of Dentistry.

Spending Saturdays at NYU Dentistry

NYU College of Dentistry has hosted Saturday Academy each fall since 2013, with students gathering at NYU two Saturdays a month. High school students are recruited to apply from schools across New York City; the majority of participants are in their junior year.

The purpose of Saturday Academy is twofold: 1) to mentor and coach underrepresented minority and low-income high school students through the college application process, and 2) to expose them to the field of dentistry as a viable career option through both instruction and hands-on learning.

Dental students volunteer each year to lead the program, enabling participants to build relationships with the next generation of dentists.

Each session is split into learning about one facet of college preparedness and a hands-on activity about dentistry. College preparedness topics include the
SAT and ACT, Common Application, personal statements, and financial aid. Parents are encouraged to attend the session on financial aid.

In the hands-on labs, students learn how to take impressions of teeth, use stone models made with impressions to create mouthguards and wax-ups, and remove plaque and fill cavities on plastic models of teeth.

“While we aimed to create a program that was both informative and engaging for high school students, we also made an effort to address perceived barriers to dental school that influence the dentistry pipeline, including financial resources, family engagement, and mentoring,” said Cheryline Pezzullo, DDS, who co-founded Saturday Academy as a student and is currently a clinical instructor in cariology and comprehensive care at NYU College of Dentistry.

The Program’s Impact

The Saturday Academy founders and faculty advisors have surveyed each cohort of participants after completion of the program to measure its success. In the Journal of Dental Education, Dr. Burns, Dr. Pezzullo, and Eugenia Mejia, PhD, assistant dean for admissions and enrollment management at NYU College of Dentistry, report on their findings from the first five years of Saturday Academy (2013–2017).

Fifty-five of the more than 80 students who have completed Saturday Academy completed surveys about the program. All respondents reported graduating from high school and were attending college, with 93 percent enrolled in four-year colleges or universities and 7 percent in community college.

When asked if they were interested in the health professions, 71 percent said yes, and 47 percent indicated that they want to pursue dentistry as a career. Nearly all (96 percent) of those wanting to become dentists attributed their interest to their experience at Saturday Academy.

“The results of this pilot study show that Saturday Academy has been effective in reaching underrepresented minority and low-income high school students to achieve its mission: increased understanding of the college application process and increased interest in the health professions, particularly dentistry, among participants,” said Dr. Mejia.

Recently, a Saturday Academy alumna was the first from the program to be accepted to dental school, and while she received multiple acceptances, she has chosen to attend NYU College of Dentistry, where she will begin her studies in fall 2020.
Mentors Matter

A conversation with

Akneia Peartree
Dental Assisting Certificate Program ’18
Angelita Leon and Akneia Peartree

A
kneia Peartree, ’18, a graduate of the first Dental Assisting Certificate Program (DACP) class, remembers becoming interested in oral health when she was 11 years old. It happened while she was attending a camp run by the Fresh Air Fund, the not-for-profit agency that provides free summer vacations in the country to New York City children from low-income communities. A female volunteer who worked as a dental hygienist had taken Akneia, who goes by the nickname “Anaya,” to have her teeth cleaned. The young Anaya was also allowed to “shadow” some of the oral health care providers in the clinic.

“The experience really left an impression on me,” says Anaya. “Ever since I was a young girl, I have been interested in brushing my teeth and maintaining good oral health. People would always compliment me on my smile, and they still do today.”

Now in its third year, the overall goal of the Dental Assisting Certificate Program is to provide highly motivated, un- or underemployed men and women with marketable job skills. The highly selective, six-month tuition-free program is offered twice a year.

“To be selected for the program was a blessing, a dream come true,” says Anaya. “I never thought I would actually be attending a top dental school in New York City, and also attending for free.”

Anaya, who is 22 years old, grew up in Williamsburg, Brooklyn. The “baby” of the family, she is the youngest of 10 siblings who were raised by a single mother in low-income housing. At age 16, Anaya was paired with Shauna Denkensohn, a Fresh Air Fund volunteer, who served as her mentor, especially on the scholastic front, guiding Anaya through high school by helping her strengthen her study skills, and, most important, helping her discover the range of her abilities. The two remain close today.

“When I first met Anaya, no one had ever encouraged her academically,” says Ms. Denkensohn. “I remember helping her study one day. I told her, ‘You’re smart’. Anaya responded, ‘No one has ever told me that!’ I realized that the best way I could serve Anaya was by helping her believe in her potential.”

Ms. Denkensohn also recalls that when the two first met, Anaya had expressed an interest in one day working in the dental field. Coincidentally, Ms. Denkensohn, whose husband, Michael P. Denkensohn (Stern ’73), serves on New York University’s Board of Trustees, had heard about the Dental Assisting Certificate Program through her and her husband’s interactions with Dean Bertolami. Ms. Denkensohn encouraged Anaya to apply to the program, setting her on the path to her current career.

“Ms. Denkensohn is the one who gave me the confidence and strength to apply to the program, telling me that I could do this.”

The Dental Assisting Certificate Program’s curriculum is comprised of all core courses in short modules taught by faculty from the College’s Department of Dental Hygiene and Dental Assisting, alongside dental faculty and DDS students in the group practices and specialty care clinics.

“Dental assisting is one of the fastest growing health care careers in New York City and much of the country,” says program coordinator Angelita Leon. “An 18% increase in employment opportunities is forecast for both full-time and part-time dental assistants. It has been so exciting to watch this diverse population of dental assisting students go out into the world as compassionate, critical thinking, health care professionals.”

Anaya is now working as a full-time dental assistant in the new NYU Dentistry Oral Health Center for People with Disabilities. (See related stories beginning on page 4.) The center is designed specifically to serve people throughout the New York metropolitan area whose disabilities prevent them from receiving care in a conventional dental setting.

“The clinic opened in February 2019, and I’m super excited to be part of it,” says Anaya, who had been working as a dental assistant at the Department of Veterans Affairs New York Harbor Health Care System. “I really enjoy helping patients feel comfortable during procedures and putting smiles on their faces.”

“The Dental Assisting Certificate Program is a great stepping stone,” says Professor Leon. “From here our graduates may decide to continue their studies, become licensed, go into dental hygiene, or they can remain in dental assisting which is rewarding in and of itself.”

Looking to the future, Anaya plans to become a dental hygienist. She hopes that her story will inspire others. She eventually wants to mentor underserved youth herself. “Kids need to know that there are people like my mentor Shauna Denkensohn and the faculty at the College of Dentistry who want to open doors for them,” says Anaya. “I want these kids to know that opportunities are out there. I also want them to know never to sell yourself short and never think you’re not smart enough. You’ll never know how much you’re capable of until you try.”
As a result of a recent partnership between the Administration for Children’s Services (ACS) and NYU Dentistry, more than 200 New York City children in foster care have been provided with critically needed dental screenings. As part of the partnership, dental students from NYU Dentistry visit children at the Nicholas Scoppetta Children’s Center twice per week and perform full dental examinations of their teeth, mouth and gums, looking for signs of caries or other dental disease.

“Today’s ACS is committed to enhancing the lives of children in foster care and the partnership we have with NYU Dentistry is just one more way that we’re doing that work,” said ACS Commissioner David A. Hansell. “Already, more than 200 children in foster care have benefited from this dental program, putting them on the path to a brighter future.”

Children who need cleanings, fillings, braces or other procedures are scheduled for expedited follow-up visits at NYU Dentistry, just a few blocks from the Children’s Center. Most commonly, NYU dental students identify youth with poor oral hygiene and then educate them on the proper technique for brushing and how long they should brush. If children need further treatment like a root canal or an extraction, NYU Dentistry and ACS work collaboratively to ensure that they are treated promptly.

“NYU Dentistry is especially gratified by the support that our partners at ACS have provided, which allows us to contribute to improving the health of these children. This is extremely meaningful to our students and will positively impact their community interactions throughout their careers,” said Andrew Schenkel DMD, MS, director of community-based dental education at NYU Dentistry. “We look forward to providing care to the next 200 children and beyond.”

Children in poverty experience twice the caries rate compared to other children and they are four times more likely to be untreated for these issues. Studies conducted at the NYU College of Dentistry have demonstrated that when children lose the family structure that is needed to help manage their diet, brushing, and routine dental care, it affects their oral health, including leading to an increase in tooth decay.
NYU Dentistry will offer an accelerated degree track within its dental hygiene program for advanced students, creating a path for dentists with international dental degrees who want to pursue careers in dental hygiene in the United States. Students will earn an Associate of Applied Science (AAS) degree in dental hygiene in the 12-month program.

Dental hygiene is a growing and rewarding occupation: according to the Bureau of Labor Statistics, the field is expected to add 23,700 jobs in the next decade, with an average salary of nearly $75,000.

The advanced standing dental hygiene track at NYU Dentistry, the first of its kind in the country, responds to a growing interest from internationally trained dentists looking for a viable career path in the U.S. The program provides a rigorous, accelerated curriculum that accounts for their prior education but ensures that they complete the coursework, labs, and clinical experience necessary to become a dental hygienist.

“We’ve heard from many dentists with international degrees who are passionate about oral health and want to care for patients here in the U.S., but can’t devote another two to three years to additional dental education to be licensed as a dentist. This new accelerated track in the dental hygiene program enables them to get back to seeing patients more quickly as critical members of the oral health care team,” said Dianne Sefo, RDH, MEd, interim chair of the Department of Dental Hygiene and Dental Assisting and clinical associate professor of dental hygiene at NYU College of Dentistry. “We are pleased to offer these dentists the opportunity to build on their previous knowledge and training and to focus on the preventive aspects of dentistry,” added Lisa Stefanou, RDH, MPH, director of the Dental Hygiene Program and co-developer of the advanced standing track.

NYU offers the only dental hygiene programs housed within a dental college in New York State. This gives students the opportunity to learn in integrated clinical settings alongside dental students, as well as with faculty members from dental hygiene, dentistry, and dental specialty areas in state-of-the-art facilities that attract the largest, most diverse patient population in the nation. Community-based rotations further enable students to gain valuable clinical experience while helping to educate patients about the importance of oral health and promoting healthy habits.

The advanced standing track is a new pathway within NYU’s overall dental hygiene program, which is accredited by the American Dental Association Commission on Dental Accreditation. Graduates of the program are qualified to take the clinical board examinations and the dental hygiene national boards, which are requirements for state licensure. While most dental hygiene programs take two to three years to complete, NYU Dentistry has been a pioneer in accelerated dental hygiene education; the 12-month advanced standing track builds on the success of the NYU Dentistry’s 17-month AAS fast track.
Four Classic Greek Texts Added to Rare Book Library Holdings

by Andrew I. Spielman, DMD, PhD
Professor of Basic Science and Craniofacial Biology
Director of the Rare Book Library and Historical Archives

The College’s Rare Book Library has acquired four new books containing medieval Latin translations of classic Greek works by Hippocrates (two books), Galen (one book) and Celsus (one book). The Hippocrates and Galen books were purchased from three antiquarian booksellers in Modena, Italy, Budapest, Hungary, and Baden Baden, respectively. The fourth (Celsus) was given to the library as a gift by Dr. Andrew Spielman.

Magni Hippocratis Coaca Præsagia
Translated and edited by Jacques Houllier. Published in Lyon, France, in 1576 by Guillaume Rouille

What we believe to be the work of Hippocrates of Cos (~460 BC Larseisa, 377 BC), is in fact a collection of ancient Greek medical lore written by at least 19 different authors, probably none of whom were Hippocrates. The collection contains medical lore that was refined across several centuries (5th century BC through 1st century AD), as a result of the influence of physicians from the School of Cos, Cneidos, and Alexandria. These works collectively are termed the Corpus Hippocraticus and include about 70 books. Almost none survived in its original form. Over the first millennium they were translated into Arabic, Syriac, Aramaic, and, in the middle of the 16th century, into Latin. The invention of the printing press in the middle of the 15th century facilitated the republication of classic works emanating from the ancient world, including those by Hippocrates. The first Latin translation of his work appeared in 1525. Subsequent translations and editions of the Corpus Hippocraticus were improvements upon previous versions. The volume we have acquired, containing The Coan Prenotions, was published in 1576 by James Hollerius Stempani (Jacques Houllier, ~1502–1562), a French physician.

Magni Hippocratis Medicorum Opera Omnia
Translated and edited by Anutio Foesio. Published in Frankfurt, Germany, in 1596 by Andreas Wechel

Our volume is the second edition of the 1595 version of Hippocrates’ Complete Medical Foundations. The book is divided into eight sections. The Hippocratic oath (Ius iurandum), Hippocratic law, a section dedicated to physicians, the nature of man, aphorism, and a section on teeth, are relevant to the dental profession.

This latter section (De dentibus), although practical for the time of Hippocrates, contains some dubious suggestions/predictions of limited medical value for today’s reader. The section connects tooth eruption in babies, oral ulcerations, and the color and consistency of urine and stool. The book provides a glimpse into the knowledge of ancient physicians and reveals how much progress has been made in the
2000 years since Hippocrates lived.

The 1596 edition was preceded by several lesser translations in Latin (1525, Rome), (1538 and 1546, Basel) that tried to correct errors. The 1595 edition was compiled by Anuce Foës (1528–1595), a physician from the city of Metz. His edition became the standard reference until the 19th century edition by French author Littré [1839–1861]. According to 19th century Hellenists and other scholars, “the 1595 edition remained the critical edition of choice until the nineteenth century” and Anutius Foesius (Anuce Foes) was considered by his contemporaries “the most learned, industrious, and able of Hippocratic commentators before Littré.”

**Ars Medica**

*Claudius Galenus (Galen, Galenos of Pergamon), Venice, Italy, 1549*  
*Edited and translated by Martin Akakia (Acakia)*

Galen was a Greek physician, surgeon, and philosopher who served several Roman Emperors, including Marcus Aurelius, Commodus, and Septimius Severus. Galen’s work includes the first natural as opposed to the supernatural theory of disease. He summarized and promoted Hippocrates’ humoral theory of disease. Although he identified arteries as containing blood, he had an erroneous idea about the circulation. His blood circulation theory involved the conversion of the “natural spirit” produced by nutrients in the liver, where all the blood was generated, into “vital spirit” in the heart and lungs from the movement to the brain, where it was turned into “animal spirit” that made the body move (“anima = move”).

His work, “Ars Medica,” was translated into Latin and annotated by Dr. Martin Akakia (Acakia), a prominent professor of medicine of Catalan origin. In 1538, Akakia published a trio of Latin translations of Galen’s “De rationes curandi,” accompanied by the “Commentary” and followed in 1548 by “Ars Medica Qua Ars Parva,” the book in our collection. The full title of the latter is Galen’s “Art of Medicine, or the Small Art, with commentary of a teacher, doctor, an interpreter and a critique of the infinite number of errors that needed purging.” The work was first published in Lyon. Our copy is the second edition, published in 1549 in Venice. Placing Galen in the appropriate context, translating, and correcting his errors could be done either by writing a new treatise (as Vesalius did) or by making corrections to the original translation (as our volume does).

**De Medicina**

* Aurelius Cornelius Celsus (c. 25 BC – c. 50 AD). Amsterdam, Netherlands, 1687  
*Edited by Theodor Jansson van Almeloveen*

Aurelius Cornelius Celsus was a Roman physician, philosopher, and author of De Medicina, one of the books that survived from what is supposed to have been a much larger collection of works on agriculture, rhetoric, military art, etc. He was supposedly active during the reign of Augustus, Tiberius, and Claudius. That would make him active about 100 years before Galen.

The book we have in our collection is one of 45 editions published in a period of 300 years (1478–1785). The 1687 edition has an introduction by Dr. Johann Antonides van der Linden (1609–1664), a Dutch physician, botanist, and librarian, and a friend of the famous Dutch anatomist, Jonas Tulp, depicted by Rembrandt in one of his paintings, “The Anatomy Lesson of Dr. Tulp.”

De Medicina contains succinct and clear medical advice, including the first description of the four cardinal signs of inflammation: tumor (swelling), rubor (redness), calor (warmth), dolor (pain). On page 139, Chapter X, section 10 of this volume, we can read the following: “Notae vero inflammationis sunt quatuor, rubor et tumor, cum calore, et dolore.” (Now there are four diagnostic signs of inflammation, redness, and swelling, with heat and pain”).

In another section, Celsus questioned the effectiveness of bloodletting in the case of an abscess that manages to drain by itself: “Quod si in pure quoque aquaque, quae inter cutem est, ita respondet, quanto magis necesseest in sanguine respondeat?” “Therefore if it succeeds in the evacuation of pus from an abscess, or in paracentesis, how much more necessary is it when applied to the extraction of blood?” He supported the idea of draining an abscess and letting nature take effect, a considerable departure from the role of supernatural powers in healing patients.
Dr. Stuart Hirsch Steps Down

Dr. Stuart Hirsch stepped down as vice dean for international initiatives and continuing dental education on December 31, 2019, after more than 45 years of distinguished service.

A 1971 graduate of NYU Dentistry, Dr. Hirsch joined the college in 1973 as an assistant professor of preventive dentistry and community health and advanced rapidly through a series of academic and administrative roles, which, looked at as a whole, offer a window onto the evolving academic and administrative landscape of the college over nearly half a century.

Highlights of his academic career include his service as professor of operative dentistry, professor of restorative and prosthodontic sciences and implants, professor of implant dentistry in the Division of Reconstructive and Comprehensive Care, professor of cariology and operative dentistry in the Division of Diagnostics, Infectious Disease, and Health Promotion, professor of cariology and comprehensive care, and professor of periodontology and implant dentistry.

Dr. Hirsch's administrative positions have included director of the dental auxiliary utilization programs, chairman of the Department of Operative Dentistry, interim chair of the Ashman Department of Periodontology and Implant Dentistry, assistant dean for allied health programs, associate dean for clinical affairs, associate dean for development and international affairs, vice dean for international initiatives and development, vice dean for international initiatives, development, and student affairs, and vice dean for international initiatives and continuing dental education.

Throughout the years, he has demonstrated the kind of high level creativity, vision, and leadership skills that have played a pivotal role in advancing the college's academic and institutional momentum. One of the many areas in which he has distinguished himself is global outreach, where, for the past 20 years, he has led an outreach program which he created to bring quality, sustainable, culturally appropriate dental services to communities in great need, while ensuring student opportunities for service, teaching, and research. Today that program has become the largest voluntary, university-based, dental outreach program in the world. In 2015, Dr. Hirsch received ADEA's William J. Gies Award for Outstanding Achievement by a Dental Educator in recognition of the global outreach program he built.

For all that Dr. Hirsch has done for the college, and for the great honor that he has brought to his alma mater, we owe him a debt of gratitude and offer him our very best wishes for health and happiness in the years ahead.

Dr. Chad Gehani
Installed as ADA President

Dr. Chad P. Gehani, adjunct clinical associate professor in the Dr. I.N. and Sally Quartararo Department of Endodontics, was installed as the 156th president of the American Dental Association at the ADA Annual meeting in September in San Francisco. The Queens endodontist reached the pinnacle of his involvement in the ADA 19 years after he first appeared in the ADA House as a delegate from the Queens County Dental Society. In 2014, NYSDA selected him to serve as its Second District trustee. And in 2018, he was chosen ADA president-elect.

Dr. Nicola Partridge
Named a Fellow of the American Association for the Advancement of Science

Dr. Nicola Partridge, professor and former chair of the Department of Basic Science and Craniofacial Biology, has been elected to the rank of American Association for the Advancement of Science (AAAS) Fellow. Election as a fellow is an honor bestowed upon AAAS members by their peers in recognition of efforts on behalf of the advancement of science or its applications that are scientifically and socially distinguished. Dr. Partridge is a national and international authority in the area of molecular endocrinology and an expert in bone and mineral research, including osteoporosis research.
Dr. Analia Veitz-Keenan Honored with ADA/AADR Evidence-based Dentistry Award

Dr. Analia Veitz-Keenan, clinical professor of oral and maxillofacial pathology, radiology and medicine and director of evidence-based dentistry in the Department of Epidemiology & Health Promotion, received the 2019 ADA/AADR Evidence-based Dentistry (EBD) Accomplished Faculty Award at the annual ADA meeting in San Francisco in September. The award is presented to educators and clinicians who have made significant contributions to implementing and advancing evidence-based dentistry. This marks the second consecutive year in which the prestigious EBD Award has gone to an NYU Dentistry faculty member, last year’s award having gone to Dr. Richard Niederman, professor and chair of the Department of Epidemiology and Health Promotion.

Dr. A. Ross Kerr Receives AAOM Diamond Pin Award

Dr. A. Ross Kerr, clinical professor of oral and maxillofacial pathology, radiology and medicine, has received the Diamond Pin Award presented by the American Academy of Oral Medicine. The award represents the highest honor in oral medicine in the United States.

Dr. Leila Jahangiri Receives 2019 American Academy of Prosthodontics Distinguished Service Award

Dr. Leila Jahangiri, Ira E. Klein Professor and chair of the Department of Prosthodontics, has been honored by the New York Section of the American Academy of Prosthodontics (ACP) with the 2019 Distinguished Service Award in recognition of outstanding and substantial contributions and commitment to the specialty and the ACP. The award recognizes Dr. Jahangiri specifically for mentoring predoctoral students to become prosthodontists.

Dr. Ashok Soni Receives 2019 Austin Sniffen Medal of Honor

The 2019 Austin Sniffen Medal of Honor, presented by the Ninth District Dental Association, has been awarded to Dr. Ashok Soni, associate professor and associate chair of the Department of Prosthodontics. The award recognizes individuals who have contributed outstanding time, energy, ability, and service for the benefit of the Ninth District Dental Association, and have contributed to the elevation of the dental profession, the good of the public, the professional literature, and research.

Dr. Eugenia Mejia Appointed to Membership on Multiple Major Professional Committees

Dr. Eugenia Mejia, assistant dean for admissions and enrollment management, has been appointed to serve on the ADEA Diversity and Inclusion Advisory Committee, the ADA’s Council on Dental Education and Licensure Dental Admission Testing Committee, the NYS Career and Technical Education Healthcare Commission, and the NYU Global Officers Inclusion Committee.
A one-day conference exploring research on the safety and promise of e-cigarettes as an alternative to tobacco products gathered researchers, policymakers, and health professionals to discuss this important public health issue at NYU’s School of Law in October 2018.

E-cigarettes — a diverse group of products that heat liquid, usually including nicotine, to be inhaled or vaped — have grown increasingly popular in recent years, with millions of American users. A rapidly changing e-cigarette marketplace has raised health and regulatory questions about the future of e-cigarettes.

In 2018, the National Academies of Sciences, Engineering, and Medicine released a report concluding that while e-cigarettes are not without health risks, they are less harmful than smoking cigarettes because they contain fewer and lower levels of toxins. However, the long-term public health effects of e-cigarettes are unclear. It found that while vaping is less harmful than smoking e-cigarettes and e-cigarettes can help save smokers’ lives if they switch, recent increases in e-cigarette use by youth pose a challenge on how best to balance saving the lives of smokers against fears of youth initiation.

An October 2018 study by researchers at the Stanford University School of Medicine that was published in the *Journal of the American Medical Association (JAMA)* found that youth and adolescents using new types of e-cigarettes, such as Juul, had a lack of knowledge about the products and their potentially addictive nicotine content.

Speakers expressed a variety of viewpoints at the event, “E-cigarettes: The Tectonic Shift in Nicotine and Tobacco Consumption: Opportunity or Threat to Saving Lives.”

Keynote speaker Mitch Zeller, director of the U.S. Food and Drug Administration’s Center for Tobacco Products, discussed the FDA’s comprehensive regulatory plan on nicotine and tobacco, the “continuum of risk” along which more and less harmful nicotine and tobacco products fall, making products less addictive, and recent efforts to address youth e-cigarette use. “Our responsibility is to assess the net impact on the population,” said Director Zeller. “Kids should not be initiating on any of these products.”

At the same time, the FDA isn’t targeting adults in its ad campaigns, he said. While e-cigarettes shouldn’t serve as an “on-ramp” for teens, they also shouldn’t be discredited as an “off-ramp” for adults trying to quit their tobacco habit. Every year, tobacco use causes about 480,000 preventable deaths in the U.S.

Iowa Attorney General Tom Miller said at the event that “the benefit of e-cigarettes is absolutely enormous.” Attorney General Miller, who calls himself a harm-reduction proponent, cited data from the Centers for Disease Control and Prevention that adult smoking has fallen to a record low. Just 13.9% of U.S. adults smoked in 2017, down from 15.8% in 2016.

The event also included panel discussions with leading voices on tobacco and health, including Ken Warner of the University of Michigan School of Public Health, Matthew Myers of the Campaign for Tobacco-free Kids, and researchers from NYU and around the world. One of the panel discussions, “Controversies in Tobacco Control,” moderated by Dr. Michael O’Connor, executive vice dean for administration, development, finance, clinical, and students services, included a discussion of the effect of e-cigarette aerosol mixtures on oral health. The panel featured Dr. Deepak Saxena, professor of basic science and craniofacial biology.
Incorporating oral health care into universal health coverage (UHC) and examining the challenges health systems face, the influence of the sugar industry worldwide and highlighting the importance of public-private partnerships were central topics of discussion at the September 22, 2019, United Nations (UN) side event on oral health, jointly organized by the NYU College of Dentistry’s World Health Organization (WHO) Collaborating Center and The Lancet.

The event preceded the UN General Assembly’s first High-Level Meeting on Universal Health Coverage on September 23, and followed The Lancet’s publication of a series on oral health earlier this summer. It was cosponsored by the governments of Egypt, Japan, and Thailand, as well as the World Economic Forum, and supported by the Henry Schein Cares Foundation.

“Oral health is largely ignored in conversations about global health and UHC, but The Lancet’s Series on Oral Health and our recent event have been critical in creating visibility and urgency for oral health,” said Richard Niederman, DMD, chair of the Department of Epidemiology and Health Promotion at NYU Dentistry and director of the WHO Collaborating Center for Quality-improvement, Evidence-based Dentistry. “As my colleague Habib Benzian said at the event, ‘The voice of The Lancet carries weight’, and this helps us to mobilize change across sectors and around the world to implement policies and practices that can improve oral health.”

The event also addressed the importance of forging innovative and collaborative partnerships not only in the dental community, but also across sectors — the medical community, academia, governments, civil society, and the private sector — to solve complex global health challenges. Having advocated the prior year for oral health to have a stronger place on the global noncommunicable diseases (NCDs) agenda, presenters emphasized the unique opportunity for public-private partnerships to advance the global oral health movement.

“We are faced with a critical moment of opportunity to come together, synergize our efforts, and propel action,” said Stanley M. Bergman, Chairman of the Board and Chief Executive Officer of Henry Schein. “To achieve the impact we seek, we need to form collaborative partnerships across sectors, provide a platform for engagement, and come together as champions for access to oral health care across disciplines and sectors. Only then will we be able to achieve substantially improved global access to preventive oral care, a reduced burden of NCDs, and ultimately, a healthier world.”

In July, The Lancet — one of the world’s leading medical journals — published its first-ever Series on Oral Health with a collection of papers describing why oral health has been neglected and advocating for urgent reform and public health action. Speaking at the September 22 event, Jocelyn Clark, PhD, executive editor of The Lancet.
Lancet, described the medical community’s conflicting reactions to the series, both questioning why a medical journal was taking on oral health and wondering why there are not more medical journals covering oral health due to its public health relevance and impact.

Dr. Clark, who commissioned and edited The Lancet Series on Oral Health, introduced five of the series’ coauthors, who spoke at the event about their research and contributions to the series.

Robert Weyant, DMD, DrPH, of the University of Pittsburgh School of Dental Medicine, discussed the global burden of oral diseases, which are among the most prevalent diseases around the world. He noted that oral diseases are “socially patterned,” with the heaviest burden of disease falling on the most vulnerable members of society.

Cristin Kearns, DDS, MBA, of the University of California, San Francisco, highlighted the importance of common risk factors related to a number of non-communicable diseases, and sugar intake in particular. She discussed the influence of the sugar industry on science and policy processes, calling for reforms and strong conflict of interest policies to shield public health and dental research from harmful industry interference.

Speaking about the challenges, limitations, and opportunities for health system responses in oral health, Paul Allison, BDS, PhD, of McGill University, said, “We need to think about how to bring oral health care back into overall health care in terms of education and health systems.” He also stated that dental health care systems are falsely incentivizing a disease-centered approach rather than prevention.

Stefan Listl, MD, PhD, of Radboud University in the Netherlands discussed the economic impact of oral diseases, noting that dental diseases are the third most expensive to treat after diabetes and cardiovascular disease.

Finally, Habib Benzian, DDS, MSc, DPH, PhD, of NYU’s Colleges of Dentistry and Global Public Health, shared five key policy recommendations of the series to improve global oral health:

1. Better data for decision-making;
2. Stronger policies to address determinants of oral disease and noncommunicable diseases — for example, taxing unhealthy products;
3. Tackling inequalities through inclusive universal access to essential oral health care for all;
4. A modernized workforce, including trained mid-level providers who are part of a larger team with dentists, and a focus on prevention;
5. Global advocacy to raise the profile and priority of oral health with decision-makers.

“Universal health coverage provides a window of opportunity for the oral health community and can give us new momentum,” said Dr. Benzian, who also serves as the associate director of global health and policy for NYU Dentistry’s WHO Collaborating Center. “No one organization or sector can enact these recommendations alone, underscoring the need for collaboration and the important roles that governments, the private sector, academia, and others can play. Change happens incrementally, but we have to start somewhere.”

Representatives of the governments of Japan and Thailand discussed their countries’ approaches to advancing access to oral health care as part of universal health coverage, and the World Economic Forum’s representative highlighted the crucial importance of public-private partnerships and multi-sectoral cooperation to achieve UHC.

The event concluded with two panels comprising speakers representing different sectors and key oral health stakeholders, including academia, corporate, research, professional, and civil society organizations. The panelists discussed opportunities and challenges for partnerships and multi-sectoral collaboration in oral health, including the important role of corporations in the context of advancing UHC and access to essential oral health care. Experts on the final panel also focused on commercial influences on public health and offered cautionary tales of how the sugar industry has interfered with policies and public health, similar to tactics from the tobacco industry, along with recommendations for preventing such interference.

In his recorded closing remarks, The Lancet’s Editor-in-Chief, Richard Horton, MD, emphasized that the neglect of oral health is a collective failure of the entire global health community. He pledged the journal’s full support to fight for better recognition and priority for global oral health.
More than 3,000 people in four different countries — 2,049 children and 1,076 adults — received free dental care during the 2018–2019 school year, thanks to the NYU Dentistry/Henry Schein Cares Global Student Outreach Program. This year marks the 10th anniversary of the collaboration between NYU Dentistry and Henry Schein Cares, the global corporate social responsibility program of Henry Schein, Inc.

NYU Dentistry’s outreach program provides free dental services to populations facing barriers to oral health, including a lack of local dental providers, economic hardship, and inadequate health insurance coverage. Traveling to communities in interdisciplinary teams of general dentists and dental specialists, NYU Dentistry students receive hands-on clinical instruction and are exposed to public health issues under the guidance of faculty, alumni, local partners, and community leaders.

“The NYU Dentistry/Henry Schein Cares Global Student Outreach Program is designed with two goals in mind: delivering and sustaining oral health improvements in host communities and creating exceptional service-learning experiences for our students. Through our outreach, we are fulfilling a critical health need, conducting meaningful public health research, and transforming the way future oral health care providers view their roles in society,” said Stuart Hirsch, DDS, former vice dean for international initiatives and continuing dental education at NYU Dentistry.

Henry Schein donates the oral health supplies and materials for each outreach program. The teams use these products to provide routine and urgent dental services, including screenings, and preventive and restorative treatment for children and adults at no cost to the patient.

“We are pleased to support NYU Dentistry in its efforts to provide care to remote and underserved populations around the world, offer crucial learning opportunities for its students, and build the capacity of local community partners to provide care,” said Henry Schein Chairman and CEO Stanley Bergman. “NYU Dentistry was Henry Schein’s founding partner for the Global Student Outreach Program 10 years ago, and the positive impact our teams have made together speaks to what is possible through public-private partnerships. We thank NYU Dentistry for its work this academic year, and look forward to what we are able to accomplish together in the years ahead.”

**Reaching Underserved Communities Near and Far**

Barriers to oral health exist both in the United States and abroad. During the 2018–2019 academic year, NYU Dentistry’s outreach program took teams to three domestic locations (Clinton County and Dutchess County in New York, and Machias, Maine) and four international locations (Phnom Penh, Cambodia; Cuenca, Ecuador; Surkhet, Nepal; and Pokhara, Nepal).

Fall 2018 marked the first time that NYU Dentistry hosted a weeklong clinic in Clinton County in northeast New York, on the border of Canada. Health insurance company United Healthcare recognized that many of its members in the North Country had not seen a dentist in the past year, so partnered with NYU Dentistry to fund a weeklong
For the second year, the NYU Dentistry/Henry Schein Cares Global Student Outreach Program conducted a program in Surkhet, a remote village in western Nepal near the border with India. Surkhet is the home of the Kopila Valley School and Children’s Home, founded in 2015 by CNN Hero of the Year Maggie Doyne.

Building Sustainable Models of Care
As part of its outreach efforts, the NYU Dentistry/Henry Schein Cares Global Student Outreach Program works to implement sustainable oral health prevention, including identifying and training local members of the community who can continue efforts on an ongoing basis. For instance, in Cambodia, NYU Dentistry partners with University of Puthisastra’s Faculty of Dentistry, which is already successfully implementing oral health education, screening, and preventive care such as sealants and silver diamine fluoride (SDF). During the November 2018 outreach, NYU Dentistry helped with urgent dental treatment needs such as restorations, extractions, and root canals.

In addition, NYU Dentistry has started to transition out of providing clinical care in Kathmandu, Nepal, empowering local partners to take ownership of the program through classroom tooth brushing and referring children to a local dental college as a permanent dental home.

“We have been coming to Kathmandu since 2013, and have measured a marked improvement in the children’s oral health,” said Dr. Hirsch. “It is time for the sustainability to be entirely in the community’s control in the coming years.”

“NYU Dentistry was Henry Schein’s founding partner for the Global Student Outreach Program 10 years ago, and the positive impact our teams have made together speaks to what is possible through public-private partnerships.

We thank NYU Dentistry for its work this academic year, and look forward to what we are able to accomplish together in the years ahead.”

— Mr. Stanley Bergman

Transforming Future Dental Professionals
Each year, nearly 200 NYU dental, dental hygiene, and postgraduate students participate in outreach programs. These intensive, community-based clinical experiences give students hands-on training and one-on-one clinical instruction from supervising faculty.

But beyond learning the skills to maintain healthy smiles, students also describe having transformative experiences, rethinking their roles as future health care providers and gaining a deeper understanding of barriers to health care in different settings.

“I have had the opportunity of entering communities and learning about the daily challenges others face that I simply take for granted. Lack of nutritious foods, access to a dental clinic, fluoridated water, and ability to afford toothpaste are just some of the obstacles people endure, keeping them from better oral health and a full smile,” reflected Nicole Haydt, ’18, who as a dental student traveled to Cambodia and Nepal with the NYU Dentistry/Henry Schein Global Student Outreach Program.

“Serving globally has allowed me to visualize a greater purpose for how I want to live my life, and work with a team to provide care for those most in need,” added Dr. Haydt.

“The cultures and communities in which we served are varied and complex, as are the reasons why those who need dental care the most aren’t receiving it,” said Dr. Catherine Lee, ’18, who participated in outreach trips to Ecuador and Maine as a dental student.

“My dental global public health training at NYU has profoundly impacted how I think about my career in dentistry and has strengthened my sense of responsibility not only locally, but also to the global community.”
The more of these outreach programs I attend, the greater my passion for public health dentistry grows.”
— Kathryn Rothas, Class of 2019

You guys did amazing helping me get my mouth back to normal! I didn’t feel the normal judgement I usually get when I’ve gone to the dentist. Thank you again so much!”
— A patient from the Clinton County Outreach

The more of these outreach programs I attend, the greater my passion for public health dentistry grows.”
— Kathryn Rothas, Class of 2019
This outreach also confirmed my desire to pursue pediatric dentistry and my continual interest in outreaches, whether global or domestic. This outreach provided me the opportunity to be outside my comfort zone and learn about perspectives that are different from mine in various ways. I am walking away from Cambodia a better practitioner and also a better individual, one who seeks to aid the underserved and become informed concerning global issues.”

— Rebecca Renelus, Class of 2020
Global Outreach in [Surkhet] Nepal gave me so much more than a robust clinical experience. It was an opportunity to immerse myself in a beautiful culture, speak with empowering individuals who are dedicated to improving their community, witness the impact of education and prevention, learn from children who have little but more gratitude than the whole world, and become a family with 11 amazing women who share the same passion!

— Olivia Nguyen, Class of 2019

Health and well-being are a necessity for people to enjoy life to the fullest. I look to help people rise above their circumstances and grow towards a healthier and happier life. I hope to work in public health policy and community health in the near future to make good on my promise to better my fellow human beings' lives.

— Benjamin Estrada, Class of 2019
Working alongside a team of smart, compassionate people with the same mission of understanding and bettering the lives of others is what makes every clinic day worth it. I have had the opportunity of entering communities and learning about the daily challenges others face that I simply take for granted. Lack of nutritious foods, access to a dental clinic, fluoridated water, and ability to afford toothpaste are just some of the obstacles people endure, keeping them from better oral health and a full smile. Serving globally has allowed me to visualize a greater purpose for how I want to live my life, and work with a team to provide care for those most in need.”

— Nicole Haydt, Class of 2019

This has been an amazing experience, and one that will forever remain in my heart. On the third day of clinic, I was part of the Oral Surgery team under the excellent mentorship of Dr. Glickman and Dr. Malik, where I learned how to comfortably and independently suture and extract extensively decayed molars, root tips, and even 3rd molars. The 1:1 faculty guidance has made me much stronger and more confident in not only my clinical work, but my diagnostic abilities as well. The community of Machias was so incredibly hospitable to us, ensuring we were taken care of in every way possible and so grateful for the work we were able to provide, it couldn’t have been done without them.”

— Aiza Humayun, Class of 2020
MS. TAMISHA ABRAHAMS, on being appointed a dental assistant for the Department of Epidemiology & Health Promotion.

MS. ROJI AMATYA, on being appointed a dental assistant for the Department of Epidemiology & Health Promotion.

MS. GLENNY BAEZ, on being appointed a dental hygienist for the Department of Epidemiology & Health Promotion.

MS. SIDNEY BANSON, on being appointed a patient service representative for clinic operations.

MS. SONIA BARKER, on being appointed a sterilization technician for the central sterilization unit.

MS. MERVATE BARSOUM, on being appointed a dental assistant for the Department of Prosthodontics.

MS. ANNA BLAS, on being appointed a sterilization technician for the central sterilization unit.

DR. MARK BORNFELD, adjunct clinical instructor of cariology and comprehensive care, on being named a Fellow of the American Academy of Oral Medicine.

MR. CARLOS CALDERON, on being appointed a dental assistant for the Department of Cariology and Comprehensive Care.

DR. CHRISTINE CHU, clinical assistant professor of prosthodontics, on receiving diplomate status in the American Board of Prosthodontics and being named a Fellow of the American College of Prosthodontists.

MS. MARY ANN CLAXTON, on being appointed a dental hygienist for the Bluestone Center for Clinical Research.

DR. ASMA ALMAIDHAN, clinical assistant professor in the Department of Orthodontics, on receiving funding from ADEA to create an educational gaming mobile application.

MS. MAYA ARDON, director of student affairs, on being awarded a 2018-2019 NYU Distinguished Administrator Award, the University’s highest administrative honor.

DR. KENNETH L. ALLEN, clinical associate professor of cariology and comprehensive care, on presenting an abstract titled “Preparing the Next Generation: Building an Interprofessional Oral Health Workforce” at the 2019 ADEA/ADEE Shaping the Future of Dental Education Conference.

DR. KIM ATTANASI, clinical assistant professor of dental hygiene, on being installed as president of the New Jersey Dental Hygienists’ Association Conference for 2020, and on receiving an American Dental Hygienists’ Association (ADHA) Presidential Citation in recognition of exemplary contributions to the dental hygiene profession.

MR. WOODLEY BEAUZIL, on being appointed a supply assistant for the central sterilization unit.
DR. HABIB BENZIAN, research professor in the Department of Epidemiology & Health Promotion, on presenting “Strengthening Global Oral Health Policy and Action Opportunities and Way Forward” at the World Health Organization headquarters in Geneva, Switzerland.

DR. JOHN CALAMIA, professor of cariology and comprehensive care, on reviewing a manuscript entitled “The utilization of snap-on provisionals for dental veneers: From an analog to a digital approach” for Journal of Esthetic and Restorative Dentistry.

MS. SHIRLEY BIRENZ, clinical assistant professor of dental hygiene, on presenting an abstract titled “Evaluating the Impact of Course Design Choices on Student Achievement” at the 2019 ADEA/ADEE Shaping the Future of Dental Education Conference. Professor Birenz’s coauthor was MS. LILLIAN Moran, senior educational technologist. Added kudos to Professor Birenz on receiving an award from the New Jersey Dental Hygienists’ Association for advancing the profession of dental hygiene.

DR. LOREL BURNS, clinical assistant professor of endodontics, on being named the 2019 Endodontic Educator Fellow by the Foundation for Endodontics.

MS. NICOLE BURRIS on being appointed a clinic manager for the Office of Clinic Operations.

DR. MIJIN CHOI, clinical associate professor of prosthodontics, on serving as secretary and treasurer for the Academy of Prosthodontics, and treasurer for the Greater New York Academy of Prosthodontics.

MS. NAYDIA BUTCHER on being appointed revenue cycle analyst for the Office of Clinical Administration and Revenue Cycle Management.

MS. ANA CHERTOK on being appointed a clinic manager for the Department of Pediatric Dentistry.

MS. NAYDIA BUTCHER on being appointed revenue cycle analyst for the Office of Clinical Administration and Revenue Cycle Management.

MS. DENISE CLEMENT, formerly a dental assistant, on being promoted to lead dental assistant in the Department of Pediatric Dentistry.
DR. ALI ALPER COMUT,
associate professor of prosthodontics, on being elected president of the American College of Prosthodontists, New York section.

MS. MARIA DE LEON,
formerly a supply assistant, on being promoted to senior supply assistant for the central sterilization unit.

MS. JULIANA COOLS,
program coordinator for the graduate program in clinical research in the Department of Epidemiology & Health Promotion, on receiving a 2018-2019 New York University Give-A-Violet Award.

DR. YVONNE DE PAIVA BUISCHI,
clinical associate professor of periodontology and implant dentistry, on authoring the editorial, “Global Exploration: East Africa” for the International Journal of Periodontics & Restorative Dentistry.

DR. YASMI O. CRYSTAL,
adjunct clinical professor of pediatric dentistry, on coauthoring, “Evidence-Based Dentistry Update on Silver Diamine Fluoride” for Dental Clinics of North America with coauthor DR. RICHARD NIEDERMAN, professor and chair of the Department of Epidemiology & Health Promotion.

DR. ANGELA DE BARTOLO,
clinical assistant professor of cariology and comprehensive care, on being elected President of the New York Academy of Oral Rehabilitation, being named a 2019 Outstanding Volunteer for the Second District Dental Society, and being named an editorial board member for SM Journal of Clinical Trials.

MS. ROHAMA DONIAROV
on being appointed a patient service representative.

DR. ANANDA DASANAYAKE,
professor of epidemiology & health promotion, on mentoring a group of NYU College of Global Health students in Zero Hunger Cooking Challenge 2019, on presenting the keynote address at the Chulalongkorn University Research Day, and on presenting a guest lecture at Tianjin Medical School. Additional congratulations on serving as an IADR abstract reviewer.

DR. ANNA DI GREGORIO,
associate professor of basic science and craniofacial biology, on authoring the editorial, “Tunicates: From humble sea squirt to proud model organism” for Developmental Biology, and on serving as guest editor for a special issue on tunicate biology for Developmental Biology.

DR. LUCRETIA DEPAOLA-CEFOLA,
clinical instructor in cariology and comprehensive care, on being named a Fellow of the American College of Dentists, and on presenting an abstract titled “A Collaborative Strategy for Achievement: The Student Success Network” at the 2019 ADEA/ADEE Shaping the Future of Dental Education Conference.

MS. ROHAMA DONIAROV
Ms. Marina Dunayevsky on being appointed a clinic manager for the NYU Dentistry Faculty Practice.

Dr. Natalia Elson, clinical assistant professor of cariology and comprehensive care, on presenting the keynote address at the 2019 International Dental Forum in London, and on coauthoring a chapter titled “Minimally Invasive Dentistry Approach Benefits of Using Laser” for the textbook Top 10 Contributions on Dental Science.

Ms. Bianca Drew on being appointed a patient advocate.

Dr. Lauren Feldman, clinical assistant professor of pediatric dentistry and director of the Advanced Education Program in Pediatric Dentistry, on coauthoring a new online oral health course developed by the American Academy of Pediatrics for pediatricians and other non-dental healthcare providers, “Oral Findings: Identification and Management Course,” and on being cited in an NYU news article on summer podcast recommendations.

Dr. Edgard El Chaar, clinical associate professor of periodontology and implant dentistry and director of the Advanced Education Program in Periodontics, on coauthoring an article titled “Osseointegration of Superhydrophobic Implants Placed in Defect Grafted Bones” for the International Journal of Oral & Maxillofacial Implants, and on coauthoring an article titled “Crestal Bone and Keratinized Tissue Around 3.0-mm Laser-Microtextured Dental Implants After 1 Year in Function: A Case Series” for the Journal of Periodontics & Restorative Dentistry. Dr. El Chaar’s coauthors included Dr. Steven P. Engebretson, associate professor of periodontology and implant dentistry. Additional kudos to Dr. El Chaar on presenting a keynote address at the 11th International Congress of Implants Connected to Nature in Romania, and on coauthoring an article titled “Treatment of Atrophic Ridges with Titanium Mesh: A Retrospective Study Using 100% Mineralized Allograft and Comparing Dental Stone Versus 3D-Printed Models” for the Journal of Periodontics & Restorative Dentistry, with Dr. Katerina Georgantza, assistant professor of periodontology and implant dentistry, and Dr. Thierry E. Abitbol, adjunct clinical assistant professor of periodontology and implant dentistry.

Dr. Jonathan L. Ferencz, adjunct professor of prosthodontics, on authoring the e-book, Fundamentals of CAD/CAM Dentistry.

Dr. Laurie R. Fleisher, clinical assistant professor of cariology and comprehensive care and of endodontics, on authoring “The Scarred Face of Beauty” for NYSDA News. Dr. Fleisher’s coauthor was Dr. William J. Maloney, clinical associate professor of cariology and comprehensive care.

Ms. Winnie Furnari, adjunct professor of dental hygiene, on being recognized as the ADHA Institute of Oral Health 2019 Liaison of the Year.

Ms. Alex Czapinska, adjunct clinical instructor in the Department of Dental Hygiene and Dental Assisting, on being installed as treasurer of the New Jersey Dental Hygienists’ Association for 2020.

Dr. John Mark Eddy, senior research scientist and director of community-based research for the Family Translational Research Group, on co-editing Handbook on Children with Incarcerated Parents, published by Springer.

Mr. Stanley Ejechi, formerly a central sterilization technician, on being promoted to lead central sterilization technician for the central sterilization unit.

Mr. Troy Fulton on being appointed a supply assistant for the Department of Epidemiology & Health Promotion sterilization unit.

Mr. Edwin Ferrer on being appointed a dental assistant for the Department of Epidemiology & Health Promotion sterilization unit.
DR. PETER GERSHENSON, clinical assistant professor of cariology and comprehensive care, on being named a Fellow of the American College of Dentists.

MS. HALEY GIBBS on being appointed an administrative aide for the Department of Epidemiology & Health Promotion.

DR. THOMAS S. GIUGLIANO, clinical assistant professor of Prosthodontics and assistant director of the Jonathan and Maxine Ferencz Advanced Education Program in Prosthodontics, on authoring “Digital Dentures: Keep Your Mind and Your Options Open” for IntraDentistry and on being awarded Diplomate status by the International Congress of Oral Implantologists.

DR. DAVID L. GLOTZER, clinical professor of cariology and comprehensive care, on coauthoring “Dentists: Critical Aspects of Their Own and Their Community’s Disaster Preparedness Plan” for the American Journal of Disaster Medicine.

MR. RICHARD HENRY on being appointed manager of the central sterilization unit.

DR. SHULAMITE HUANG, research instructor in the Department of Epidemiology & Health Promotion, on authoring “Spillovers from the Patient Protection and Affordable Care Act to Employer-sponsored Dental Insurance Enrollment” for the Journal of the American Dental Association (JADA), and on coauthoring, “An Economic Evaluation of a Comprehensive School-based Caries Prevention Program” for JDR Clinical and Translational Research with DR. RYAN RUFF, associate professor of epidemiology and health promotion; and DR. RICHARD NIEDERMAN, professor and chair of the Department of Epidemiology & Health Promotion. Additional kudos for coauthoring “Economic Evaluations of School Sealant Programs and the Consent Conundrum” for the Journal of Dental Research with DR. NIEDERMAN.

MS. JESSICA JACKSON, development associate in the Office of Development and Alumni Affairs, on earning an MPA from NYU’s Robert F. Wagner Graduate School of Public Service.


MS. PAMELA GRABOSO on being appointed a dental hygienist for the Department of Epidemiology & Health Promotion.

MS. NATHACHA GAUDIN on being appointed a patient service representative for the Department of Oral and Maxillofacial Surgery.

MS. ERICA GIL on being appointed a patient service representative for the Department of Oral and Maxillofacial Surgery.

MS. CLAUDIA GOMEZ on being appointed a dental hygienist for the Department of Epidemiology & Health Promotion.

MR. ZHIMING HE, formerly associate research scientist, on being promoted to research scientist in the Department of Basic Science and Craniofacial Biology.

DR. BIN HU, formerly associate research scientist, on being appointed research scientist in the Department of Biomaterials.
MS. ANNE D. JAYNE on being appointed a dental hygienist for the NYU Dentistry Faculty Practice.

DR. RONALD KOSINSKI, clinical associate professor of pediatric dentistry and clinical director of the NYU Dentistry Oral Health Center for People with Disabilities, for participating in the NYU Healthcare Innovations Panel.

DR. ANGELA KAMER, associate professor of periodontology and implant dentistry, on speaking at the “What is Alzheimer’s Disease: Understandings and Frontiers” symposium at NYU Langone Health, and on commenting on an article published on Medscape titled “Gum Disease Strongly Implicated in Alzheimer’s.”

DR. WAYNE KYE, clinical associate professor of periodontology and implant dentistry, on being reelected to serve a second term as chair of the New York State Board of Dentistry for 2020 and vice chair of the East Caucus at the American Association of Dental Boards Annual Meeting.

MS. ROSHNEY KAUR on being appointed a revenue cycle analyst for the Office of Clinical Administration and Clinical Revenue Cycle Management.

DR. KENNETH LIAO, adjunct clinical associate professor of endodontics, on presenting a keynote address at the Tzu Chi International Medical Association 24th Annual Convention.

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CONGRATULATIONS TO...

DR. KENNETH MAGID, adjunct clinical associate professor of cariology and comprehensive care, on being named a Fellow of the American College of Dentists.


DR. MAUREEN McANDREW, clinical professor of cariology and comprehensive care, on coauthoring “A Survey of Faculty Development in U.S. and Canadian Dental Schools: Types of Activities and Institutional Entity with Responsibility” with DR. LINDSEY ATIYEH, ’17. Added kudos to Dr. McAndrew on coauthoring “A Long-Term Follow-Up Study of Former Dental School Teaching Assistants: Are They Teaching After Graduation?” coauthored with DR. OKSANA NAD, ’19, PG Perio’22. Both articles appeared in the Journal of Dental Education.

DR. EUGENIA MEJIA, assistant dean for admissions and enrollment management, on presenting “Developing a Meaningful Mentor–Mentee Collaboration” and “Creating Awareness in Academic Dentistry: A Platform for the Future” at the 2019 ADEA annual meeting.

MRS. V ANESSA MANCUSO CORTINAS, ’20 on receiving a 2019 Colgate-Palmolive National Fellowship Scholarship, which recognizes underrepresented minority dental students who have demonstrated commitment to leadership and serving medically underserved communities.

DR. FABIOLA MILORD, clinical assistant professor of cariology and comprehensive care, on receiving the 2019 Nassau County Dental Society Humanitarian Award, and on being selected as the 2019 Scrubs and Stilettos Women’s Dental Conference honoree.

MR. D AVID MINAYA on being appointed academic scheduling administrator for the Office of Student Affairs and Academic Support Services.

MS. RUTH MARSILIANI, adjunct clinical instructor of dental hygiene, on co-authoring a chapter entitled “Myofunctional Pathology” for the book Sleep Disorders in Pediatric Dentistry: Clinical Guide on Diagnosis and Management.

MS. MARLENE MARTINEZ on being appointed a dental assistant for the Department of Epidemiology & Health Promotion.

MS. DIANNA MEI on being appointed a dental radiographer for the Office of Patient Centered Care Services.
DR. ELLIOTT MOSKOWITZ, adjunct clinical professor of orthodontics, on being appointed editor-in-chief of Seminars in Orthodontics.

DR. AMR MOURSI, professor and chair of the Department of Pediatric Dentistry, on editing the textbook, Clinical Cases in Pediatric Dentistry, 2nd edition with coeditor DR. AMY TRUESDALE, clinical assistant professor of pediatric dentistry.

DR. PETER MYCHAJLIW, clinical assistant professor of cariology and comprehensive care, on being inducted as a lifetime member of the Omicron Kappa Upsilon dental honor society.

MS. JOANNA NAVEDO, junior research scientist at the Bluestone Center for Clinical Research, on receiving a BS degree in dental hygiene from NYU Dentistry.

MS. VANESSA MORISSET on being appointed a supply assistant for the central sterilization unit.

MS. MARIEL NUNEZ on being appointed a dental assistant for the Department of Epidemiology & Health Promotion.

MR. WILMER D. PALMA DIAZ SOTO on being appointed a dental assistant for the NYU Dentistry Oral Health Center for People with Disabilities.

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MS. MARIEL NUNEZ on being appointed a dental assistant for the Department of Epidemiology & Health Promotion.
CONGRATULATIONS TO...

MR. LEIGHTON PITTER
on being appointed a clinic manager for the
Department of Oral and Maxillofacial Surgery

MS. AKNEIA PEARTREE
on being appointed a dental assistant for the
NYU Dentistry Oral Health Center for People with Disabilities.

MS. MARGARITA PEREZ,
administrative aide in the Ashman Department of Periodontology and Implant Dentistry, on receiving
a BS degree in dental hygiene from NYU Dentistry.

MS. WHITNEY PETERS
on being appointed a clinic manager for the
Ashman Department of Periodontology and Implant Dentistry.

MS. AMANDA PIERRE-PIERRE,
formerly a supply assistant, on being promoted to patient service representative for the Office of Clinic Operations.

MS. JAKAI REID
on being appointed a clinic manager for the
Department of Oral and Maxillofacial Surgery.

MS. AMELIA PIZARRO,
formerly a customer service representative, on being promoted to patient service representative for the NYU Dentistry Oral Health Center for People with Disabilities

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Department of Oral and Maxillofacial Surgery.

MS. AMELIA PIZARRO,
formerly a customer service representative, on being promoted to patient service representative for the NYU Dentistry Oral Health Center for People with Disabilities

MS. CYNTHIA RAMIREZ,
formerly a patient service representative, on being promoted to administrative aide for the Department of Oral and Maxillofacial Pathology, Radiology and Medicine.

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MS. CYNTHIA RAMIREZ,
formerly a patient service representative, on being promoted to administrative aide for the Department of Oral and Maxillofacial Pathology, Radiology and Medicine.

MR. JULIO PENA
on being appointed a senior systems engineer for Technology and Informatics Services.

MS. INEZ PEREZ
on being appointed a dental hygienist for the Department of Epidemiology & Health Promotion.

MR. ALEXANDER PINTO, ’21,
on being awarded a renewable $5,000 scholarship by the National Hispanic Health Foundation (NHHF).

MR. INEZ PEREZ
on being appointed a dental hygienist for the Department of Epidemiology & Health Promotion.

MS. NATASHA PETERS
on being appointed a sterilization technician for the central sterilization unit.

MS. AMANDA PIERRE-PIERRE,
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MS. NATASHA PETERS
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MR. ALEXANDER PINTO, ’21,
on being awarded a renewable $5,000 scholarship by the National Hispanic Health Foundation (NHHF).
DR. ANDRÉ RITTER, professor and chair of the Department of Cariology and Comprehensive Care, on editing the textbook, *Sturdevant’s Art and Science of Operative Dentistry, 7th edition.*

DR. RYAN RUFF, associate professor of epidemiology and health promotion, on coauthoring, “Comparative effectiveness of school-based caries prevention: A prospective cohort study” in BMC Oral Health with DR. RICHARD NIEDERMAN, professor and chair of the Department of Epidemiology & Health Promotion. The article was selected as one of five BMC Oral Health Highlights of 2018.

DR. MIRIAM R. ROBBINS, adjunct associate professor of oral and maxillofacial pathology, radiology and medicine, on authoring a chapter titled “Pharmacologic Management of Patients with Neurologic Disorders” for Contemporary *Dental Pharmacology: Evidence-Based Considerations,* published by Springer, and on receiving the Dr. Lawrence J. Chasko Distinguished Service Award from the Special Care Dentistry Association.

DR. PAUL ROSENBERG, professor of endodontics, on presenting a lecture titled “Endodontic Controversies” to a joint meeting of the American Association of Endodontists and the Canadian Association of Endodontists held in Montreal, Canada, and on coauthoring the chapter “Treatment Planning and Case Selection” for the textbook *Ingle’s Endodontics, 7th Edition.* Dr. Rosenberg’s coauthors were DR. MATTHEW MALEK, clinical assistant professor of endodontics, and DR. KATSUSHI OKAZAKI, clinical assistant professor of endodontics. Added kudos to Dr. Rosenberg for presenting the webinar, “Endodontic Pain: Predictors and Preventive Strategies” for the American Association of Endodontists.

DR. RAID SADDA, clinical associate professor of oral and maxillofacial surgery, on being named a Fellow of the International Congress of Oral Implantologists (ICOI); on authoring “Prevention and Management of Life-threatening Complications During Implant Surgery” for the electronic journal of the New York Academy of General Dentistry; and on presenting three full-day lectures to the Academy of General Dentistry:
- “Dental Implant Surgical Complications and Failure: Etiology, Avoidance, and Management”;
- “Surgical Extraction of Impacted Mandibular Third Molars: Prevention and Management of Nerve Damage”; and
- “Immediate Management of Oral and Maxillofacial Gun-Shot Wounds and Explosive Blast Injuries”.

DR. JEAN-PIERRE SAINT-JEANNET, professor of basic science and craniofacial biology, on being appointed associate editor of the *Journal of Genetics and Development.*

DR. MARTIN C. PRAGER, clinical instructor in the Department of Cariology and Comprehensive Care, on coauthoring “Assessment of Digital Workflow in Predoctoral Education and Patient Care in North American Dental Schools” for the *Journal of Dental Education.* Dr. Prager’s coauthor was MS. HANNAH LISS, ’20.

MS. MICHELLE PUELLO on being appointed a dental assistant for the Department of Epidemiology & Health Promotion.

MS. NAIMA QADIR on being appointed a dental hygienist for the Department of Epidemiology & Health Promotion.

MS. JUSTINE RIVERA on being appointed a patient service representative for the Office of Clinic Operations.

MS. FANTASIA ROBINSON on being appointed a dental assistant for the Department of Epidemiology & Health Promotion.

MS. JULIANA SAGBAY on being appointed a dental assistant for the NYU Dentistry Faculty Practice.
CONGRATULATIONS TO ...

DR. STUART SEGELNICK, adjunct clinical professor of periodontology and implant dentistry, on coediting the textbook, *Clinical Cases in Dental Hygiene* with DR. CHERYL M. WESTPHAL THEILE, professor emerita of dental hygiene, and DR. MEA A. WEINBERG, clinical professor of periodontology and implant dentistry, and on receiving the Newsletter Award from the International College of Dentists.

DR. CRISTIAN STEFAN, clinical professor of basic science and craniofacial biology, on being appointed a consulting editor for *Thieme Atlas of Anatomy: General Anatomy and Musculoskeletal System, Volume 3*.

DR. AMY TRUESDALE, clinical assistant professor of pediatric dentistry on editing the textbook, *Clinical Cases in Pediatric Dentistry, 2nd edition* with coeditor DR. AMR MOURSI.

MS. LAURA SERRANO on being appointed a dental assistant for the Department of Pediatric Dentistry.

MS. TERUSA SHAHZAD on being appointed a dental assistant for the Department of Epidemiology & Health Promotion.

MS. CARLA SILLAU on being appointed a dental assistant for the Department of Oral and Maxillofacial Surgery.

MS. PRIYANKA SINGH on being appointed clinic team manager for the Department of Epidemiology & Health Promotion.

DR. VERA TANG, clinical assistant professor of periodontology and implant dentistry, on being installed as president of the NYU Dentistry Alumni Association, on receiving the Commitment to Organized Dentistry Award from the American Student Dental Association, and on serving as president of the Northeastern Society of Periodontists.

DR. ASGEIR SIGURDSSON, Presley Elmer Elsworth Professor of Endodontics and chair of the Dr. I.N. and Sally Quarataro Department of Endodontics, on being elected president of the American Board of Endodontics, and presenting a keynote address at the 38th Australian Dental Congress.

DR. DENISE TROCHESSET, clinical professor and chair of the Department of Oral and Maxillofacial Pathology, Radiology and Medicine, on authoring the chapter “Oral Medicine and Orofacial Pathology” in the textbook *Clinical Cases in Pediatric Dentistry, 2nd edition*, edited by DR. AMR MOURSI, professor and chair of the Department of Pediatric Dentistry, and DR. AMY TRUESDALE, clinical assistant professor of pediatric dentistry.

MS. EVONN STAPLETON, formerly an administrative aide I in the Office of Administrative Services, on being promoted to administrative aide II in the Office of the Associate Dean for Clinical Affairs and Hospital Relations.

DR. AMY TRUESDALE, clinical assistant professor of pediatric dentistry on editing the textbook, *Clinical Cases in Pediatric Dentistry, 2nd edition* with coeditor DR. AMR MOURSI.

DR. ILSER TURKYILMAZ, clinical associate professor of prosthodontics, on authoring the editorial, “Challenges to Digital Dentistry in Dental Schools” for the *Journal of Contemporary Dental Practice*.

MS. BRENDA SHAH, ’20 on being elected a trustee of the American Student Dental Association.

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DR. ANALIA VEITZ-KEENAN, clinical professor of oral and maxillofacial pathology, radiology and medicine, on presenting an abstract titled “Adaptive Learning in the Dental Curriculum” at the 2019 ADEA/ADEE Shaping the Future of Dental Education Conference. The abstract was coauthored by MR. CRISTIÁN OPAZO, director of educational technology. Added kudos to Dr. Veitz-Keenan on presenting an abstract titled “Dentist as a Profession for Females: What Are the Motivations for this Career Choice?” at the ADEA Women’s Leadership Conference. The abstract was coauthored by DR. DEBRA M. FERRAIOLI, clinical assistant professor of oral and maxillofacial pathology, radiology and medicine; DR. LUCRETIA DEPAOLA-CEFOLA, clinical instructor in cariology and comprehensive care; and DR. DENISE A. TROCHESSET, clinical professor and chair of the Department of Oral and Maxillofacial Pathology, Radiology and Medicine. Added congratulations to Dr. Veitz-Keenan on being installed as secretary of the New York State Academy of General Dentistry and as Vice President of the IADR Evidence-based Dentistry (EBD) Network.

MR. JAVIER VELEZ on being appointed a clinic manager for the Department of Prosthodontics.

DR. NICHOLAS VERNICE, clinical instructor in cariology and comprehensive care, on receiving a citation by the Hempstead Town Supervisor for work performed in Puerto Rico in the aftermath of Hurricane Maria.

MS. ROMA VIRANI, director of dental insurance strategy & claim adjudication management, on presenting a lecture titled “What DO They Teach in Dental School” at the 2019 National Association of Dental Plans annual meeting.

MS. QUEEN WALKER, academic coordinator for the Department of Cariology and Comprehensive Care, on being profiled in NYU’s AMC Monthly.

MS. CRYSTAL WARREN on being appointed admissions officer for the dental hygiene programs.

DR. ROGER WARREN, adjunct clinical associate professor of periodontology and implant dentistry, on being elected vice president of the Northeast Society of Periodontists.

DR. RICHARD SLUTSKY, adjunct clinical instructor of cariology and comprehensive care, on being awarded certificates of lifetime membership in the American Dental Association, New York State Dental Association and the Ninth District Dental Association.

MR. JEFFREY SMITH, formerly a patient services representative, on being promoted to dental insurance analyst.

MS. AISHA SYED on being appointed a patient service representative for the Department of Prosthodontics.

MR. KEEGAN TEMANU, formerly a sterilization technician, on being promoted to distribution manager for the central sterilization unit.

MS. ANIVELYS TORRENEGRA on being appointed a supply assistant for the central sterilization unit.

DR. DEAN C. VAFAKIS, adjunct clinical associate professor of periodontology and implant dentistry, on presenting a keynote address at the American Association of Oral and Maxillofacial Surgeons (AAOMS) Dental Implant Conference.

MS. SHRUTI WARHANDPANDE, formerly junior research scientist in the Department of Biomaterials, on being appointed assistant research scientist in that department.
CONGRATULATIONS TO...

MS. ASUNCION WEIN, manager of postgraduate and graduate programs, on receiving a master’s degree in public health from the NYU College of Global Public Health.

MS. ALLISON WILSON, formerly a supply assistant, on being promoted to implant inventory assistant.

DR. CHERYL M. WESTPHAL THEILE, professor emerita of dental hygiene, DR. MEA A. WEINBERG, clinical professor of periodontology and implant dentistry, and DR. STUART L. SEGELNICK, adjunct clinical professor of periodontology and implant dentistry, on coediting the textbook, Clinical Cases in Dental Hygiene.

DR. LUKASZ WITEK, assistant professor of biomaterials, on coauthoring the chapter, “3D Printing and Adenosine Receptor Activation for Cranio-maxillofacial Regeneration” in the textbook Regenerative Strategies for Maxillary and Mandibular Reconstruction: A Practical Guide. Dr. Witek’s coauthors included DR. EDUARDO D. RODRIGUEZ, adjunct professor of oral and maxillofacial surgery, and DR. PAULO G. COELHO, professor of biomaterials. Additional kudos on coauthoring the chapter “Tissue-engineered Alloplastic Scaffolds for Reconstruction of Alveolar Defects” in the textbook Handbook of Tissue Engineering Scaffolds: Volume One with coauthors, including DR. COELHO. Congratulations also on presenting the following guest lectures:
- “Additive Manufacturing (3D Printing): From Start to Finish” and “3D Printing Customized Bioactive Ceramic Scaffolds for Hard Tissue Regeneration” at IADR Vancouver 2019
- “3D Printing Colloidal Gels for Bone Regeneration” at the Swedish Chemical Society
- “Engineering Personalized Resorbable Devices for Extensive Bone Regeneration” at JLABS Johnson and Johnson
- “3D Printing Strategies for Extensive Cranio-maxillofacial Reconstruction” at 2019 Design of Medical Devices Conference.

MS. RACHEL WHITTEMORE on being appointed clinical research coordinator for the Department of Epidemiology & Health Promotion.

MS. EMILY WOLSCHLAG on being appointed program coordinator of student life and engagement for the Office of Student Affairs and Academic Support Services.

MS. EVERNEESE WILLIAMS on being appointed administrative aid in the Office of the Associate Dean for Clinical Administration and Revenue Cycle Management.

MR. ADDAM ZAINO on being appointed an audio/visual technician for the Office of Student Affairs and Academic Support Services.

DR. THOMAS WIEDEMANN, clinical assistant professor of oral and maxillofacial surgery, on coauthoring “Compound Odontoma Associated with Transmigration of a Mandibular Canine” for the NYS Dental Journal. Dr. Wiedemann’s coauthors included DR. ROBERT GLICKMAN, professor and chair of the Department of Oral and Maxillofacial Surgery and associate dean for clinical affairs and hospital relations, and DR. NATASHA REISS, a student in the International Program in Implant Dentistry.

MS. ASUNCION WEIN, manager of postgraduate and graduate programs, on receiving a master’s degree in public health from the NYU College of Global Public Health.

MS. ALLISON WILSON, formerly a supply assistant, on being promoted to implant inventory assistant.

DR. CHERYL M. WESTPHAL THEILE, professor emerita of dental hygiene, DR. MEA A. WEINBERG, clinical professor of periodontology and implant dentistry, and DR. STUART L. SEGELNICK, adjunct clinical professor of periodontology and implant dentistry, on coediting the textbook, Clinical Cases in Dental Hygiene.

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MS. EVERNEESE WILLIAMS on being appointed administrative aid in the Office of the Associate Dean for Clinical Administration and Revenue Cycle Management.

MR. ADDAM ZAINO on being appointed an audio/visual technician for the Office of Student Affairs and Academic Support Services.
The following students on receiving awards at the 2019 American Academy of Cosmetic Dentistry (AACD) Poster Competition in San Diego:

- **DR. LYNDSEY THERIOT, ’19** (2nd place: Undergraduate Clinical Case Category);
- **DR. OKSANA NAD, ’19, PG Perio ’22** (3rd place: Undergraduate Clinical Case Category);
- **DR. ALAN MESKIN, ’19** (1st place: Undergraduate Materials Science Category);
- **DR. FABIO PEREZ RUBIO, International Program in Esthetics ’19, Interdisciplinary Fellow in Esthetics ’20** (1st place: PG/Advanced Standing Clinical Case Category);
- **DR. JULIANA GIL ANDRADE, International Program in Esthetics 2019** (2nd place: PG/Advanced Standing Clinical Case Category);
- **DR. DHANNNY MEDIANTI, International Program in Esthetics ’18, Interdisciplinary Fellow in Esthetics ’19** (1st place: Junior Faculty Clinical Case Category);
- **DR. BHAYNA GANGWAL, International Program in Esthetics ’18, Interdisciplinary Fellow in Esthetics ’19, Clinical Assistant Fellow ’20** (2nd place: Junior Faculty Clinical Case Category);
- **DR. RUTH SCHMUellan, CDE Full Mouth Rehabilitation Course** (3rd place: Junior Faculty Clinical Case Category);
- **DR. CLEMENT KAIrouZ, ’19** (Best Clinical Case in Esthetics HEAPS Award: Undergraduate Clinical Case category);
- **DR. WANHAI ZOU, International Program in Esthetics ’19** (Best Clinical Case in Esthetics HEAPS Award: PG/Advanced Standing Clinical Case category).

**DR. CHENGWU YANG**, research associate professor of epidemiology and health promotion, on coauthoring “Quality Appraisal of Child Oral Health-related Quality of Life Measures: A Scoping Review” for JDR Clinical and Translational Research with coauthors including **DR. YASMI O. CRYSTAL**, adjunct clinical professor of pediatric dentistry, **DR. RYAN RUFF**, associate professor of epidemiology and health promotion, **DR. ANALIA VEITZ-KEENAN**, clinical professor of oral and maxillofacial pathology, radiology and medicine, and **DR. RICHARD NIEDERMAN**, professor and chair of the Department of Epidemiology & Health Promotion.

**DR. YU ZHANG**, professor of biomaterials, on being elected president of the Dental Materials Group for the International Association for Dental Research (IADR).

**DR. CHENGWU YANG,** research associate professor of epidemiology and health promotion, on coauthoring “Quality Appraisal of Child Oral Health-related Quality of Life Measures: A Scoping Review” for JDR Clinical and Translational Research with coauthors including **DR. YASMI O. CRYSTAL**, adjunct clinical professor of pediatric dentistry, **DR. RYAN RUFF**, associate professor of epidemiology and health promotion, **DR. ANALIA VEITZ-KEENAN**, clinical professor of oral and maxillofacial pathology, radiology and medicine, and **DR. RICHARD NIEDERMAN**, professor and chair of the Department of Epidemiology & Health Promotion.

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GOLDEN CIRCLE REUNION:
Celebrating the Classes of ’69 and earlier
May 19, 2019

REUNION ’19:
March 9, 2019

View photo galleries from all alumni events at dental.nyu.edu/alumni.
Alumni in the Spotlight

'60s
DR. EDWARD GALKIN, Advanced Education Program in Periodontics, Class of 1965, on flying around the world on a 1976 Cessna 21- eight-seater, single engine airplane from October 26, 2018 to November 30, 2018, to raise funds for the Chicago-based Alzheimer’s Association in honor of a family member who has suffered with the disease.

'70s
DR. JEFFREY FEINGOLD, Class of 1971, on receiving a presidential appointment as a member of the U.S. Holocaust Memorial Council, the organization that guides the U.S. Holocaust Memorial Museum.

'80s
DR. MARK N. HOCHMAN, Advanced Education in Periodontics, Class of 1988; Advanced Education in Orthodontics, Class of 1998, on receiving the 2019 Stony Brook School of Dental Medicine Distinguished Alumnus Award.

'00s
DR. CLINT TIMMERMAN, Class of 2007, on being featured in one of 20 inspirational leadership videos produced by Miracle Corners of the World (MCW) to celebrate 20 years of MCW outreaches to Songea in southwestern Tanzania.

'10s
DR. JOSEPH PANTALEO, Class of 2011, on cofounding Tomorrow’s Smile Today, a non-profit organization made up of volunteers from various healthcare professions who work together to provide basic healthcare services and education to people within the United States and around the world who have limited or no access to health care.

Looking for a Highly Qualified Chairside Dental Assistant?

NYU-trained dental assistants are competent in understanding OSHA regulations and have been trained in the appropriate clinical and basic sciences, an electronic health record, digital and film radiology, and communications and patient management skills — and are available for immediate placement.

To receive resumés and set up an interview for a no-charge placement, please contact Angie Leon, NYU Dental Assisting Certificate Program coordinator, at al6@nyu.edu.

IN REMEMBRANCE

Dr. A. Milton Bell, Class of 1951
Dr. Sanford J. Bier, former clinical professor of periodontology and implant dentistry
Dr. Kenyon Cardoza, Class of 1960
Dr. Morton L. Divack, Class of 1945
Dr. Seymour Evans, Class of 1953
Dr. Houman Hivand, Class of 2004
Dr. Abraham H. Kedeshian, former clinical professor of endodontics
Dr. Morris H. Kotick, Class of 1961
Dr. Arthur F. Mahler, Class of 1953
Dr. Stephen A. Merrick, Class of 1959
Dr. Claudina Moger, Class of 1963
Dr. Joel I. Schwab, Class of 1962
Dr. Hamel Sevak, Class of 2018
Dr. Jerome Sorrel, former clinical professor of orthodontics
Dr. Edgar A. Tonna, former professor of basic science and craniofacial biology
Dr. David Weil, Class of 1970
Dr. Jeremy Wertman, Class of 2013
WE THANK OUR BENEFACTORS

ALUMNI, FACULTY, FRIENDS, CORPORATIONS, FOUNDATIONS, AND ORGANIZATIONS — FOR THEIR GENEROUS SUPPORT OF THE COLLEGE. WE ARE PLEASED TO RECOGNIZE YOUR GIFTS OF CASH, PLEDGE PAYMENTS, PLANNED GIFTS, GIFTS-IN-KIND, AND PLEDGES OVER $25,000, WHICH WERE MADE BETWEEN SEPTEMBER 1, 2017 AND AUGUST 31, 2018.

$100,000+
BioHorizons Implant Systems, Inc.
Peter & Inge Brasseler Foundation, Inc.
Paulo G. Coelho
Wen Meei Huang
Daniel Malamud
PC Bioengineering
Sirona Dental Systems, LLC
Straumann North America

$50,000–$99,999
Anonymous*
Rita Allen Foundation
Keller-Shatanoff Foundation
James and Judith Sarnelle
Lawrence J. Weiss

$25,000–$49,999
Leonid Agranat
American Heart Association, Inc.
Timothy G. Bromage
Peter Chen and Mai Le Chen
Colgate Palmolive Company
David L. Korris
Risa Korris

Mailin Mimi Lai and Yon Lai
Brooke S. Mossased Rezvani
Northeast Delta Dental Foundation, Inc.
Osteo Science Foundation
The San Francisco Foundation
Lawrence B. Schwab

Estate of Leonard V. Settembrini
David Sukoff and Alissa Raphaelson Sukoff
United Healthcare Community Plan
Mark and Barbara Wolf
Kathleen Elizabeth Isdith
Leonid Levit
Estate of Benjamin Nevin
Mary E. Northridge
Paul Olivera, III
Oral Health America
Perfect Finish Ortho Lab Inc.
Rory T. Perimenis
David A. Price
Alexander and Marina Rubinstein
Estate of Saul Shapiro
Angeir Sigurdsson
Bernard E. Small
Joseph Kenneth Spector
Eric Scott Studley
Louis Terracio and Marcia Welsh
Farhad Vahidi
Barry R. Wolinsky
Michael Zuroff

$10,000–$24,999
Anonymous*
American Academy of Oral and Maxillofacial Pathology
American Association of Endodontists
California Dental Association
Sang-Choon Cho
Colgate Speakers Bureau
Gerald and Georgia Curatola
Jonathan and Maxine Ferencz
Stuart J. Froum
Aleksander Iofin
Vasiliki Karolis and Demetra Karolis-Kounsiaiht
Yon H. Lai
David N. Levy
Harald A.B. Linke
Elliott M. Moskowitz
Larry Wesler

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* Represents all Anonymous donors
Dr. Milton Friedman, Class of 1955, Leaves $6.7 Million Bequest to NYU College of Dentistry.

Read more about about this remarkable story on page 56, “Friendship, Stewardship, and Love of Alma Mater.” Pictured here are Marsha Metrinko, Peter Quinn, and Lauren Siegel — all of whom played integral roles in making Dr. Friedman’s wishes a reality.